



**INTERNATIONAL FEDERATION  
OF ACCOUNTANTS**

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**Agenda Item  
2C**

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**Date:** September 9, 2010  
**Memo to:** Members of the IPSASB  
**From:** Andrew Lennard  
**Subject:** Conceptual Framework—Measurement

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**Objectives**

- To review a draft of the Consultation Paper on the measurement of assets and liabilities in financial statements and the Request for Comments; and
- To **approve** the Consultation Paper for publication; or alternatively
- To **provide direction** to the staff to enable preparation of a revised draft.

**Agenda Material**

- 2C.1 Draft of Consultation Paper, “Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities: Measurement of assets and liabilities in financial statements” (clean version)
- 2C.2 Draft Consultation Paper, marked-up to show changes from the draft discussed in Vienna in June.

**1 Background**

- 1.1 The draft of the Consultation Paper attached as Paper 2C.1 has been developed from that discussed by the Board at its June meeting in Vienna. Previous drafts were discussed by the Board in Washington (May 2009), Toronto (September 2009), by the Conceptual Framework Subcommittee in Paris (March 2010) and again by the Board in Toronto (April 2010).
- 1.2 The revisions reflect comments made by the Board at the June meeting, and also comments from the members of TBG Three and the Project Co-ordinator, and the IPSASB’s Plain English Consultant. The lead author would like to record his appreciation for all the comments received. Drafts have also been shared with the SSAP, although timetable constraints did not permit detailed or extensive comments.
- 1.3 The draft is in as nearly a final form as is practicable. However, further changes will be necessary to ensure consistency with other documents to be issued in the Conceptual Framework project and to conform in all respects with house style.

## **2 Changes since June Meeting**

- 2.1 The following paragraphs summarize the significant changes from the June draft.

### **Section 3 Market values**

- 2.2 Section 3 of the June draft contained separate sections dealing with (a) ‘Market values in a perfect market setting’ and (b) Fair value. This led to a clumsy transition from cases where market value works well to those where it does not. It was also questioned whether the discussion of Fair Value as in FAS 157, “Fair Value Measurements” and the IASB’s Exposure Draft was fair.
- 2.3 In an attempt to meet these points the section has been redrafted. Section 3 is now a single section, all about ‘market values’. This makes for an easier transition from those cases where market values are easy and relevant through those where one has to have recourse to estimates and ending with the specialized assets where the case for market values is weakest.
- 2.4 A possible approach to the ‘fair value’ project would be to summarise the proposals in the IASB’s Exposure Draft in some detail and explain (i) why they come to the same numbers as deprival value (with some necessary qualifications) and (ii) why an alternative conceptual underpinning, such as deprival value, might be preferred. This would require an extended treatment, and it would probably be difficult to persuade the reader that the conclusions justified the effort of reading it. It would also be difficult to ensure that a comparison of the IASB’s Exposure Draft, “Fair Value Measurement (ED2009/5)” with the Consultation Paper was entirely fair and relevant, as the Exposure Draft is directed at standards-level requirements, and is not intended as a contribution to the Framework. It thus has a different focus and objective from the Consultation Paper.
- 2.5 Instead, the draft minimizes the references to the IASB/FASB work. Footnotes, however make clear that ‘market value’ is not the same as ‘fair value’ and note that the IASB’s project envisages that replacement cost may be used as a means of deriving fair value in some cases.
- 2.6 References to a ‘perfect market’ have been deleted. The term ‘perfect market’ is a technical term in economics, which may unsettle the reader who is not quite clear what it means. There is no authoritative definition of the term, and any explanation is difficult because although economists agree on the general character of a perfect market, they conceptualize it in different ways. To replace the term, the draft now refers to ‘an ideal context’ which is introduced in paragraph 3.5. A footnote explains what is intended by ‘an ideal context’, in part by reference to ‘deep and liquid markets’. The Preliminary View at the end of the section also refers to ‘deep and liquid markets’.

### **Replacement cost and deprival value (Sections 4 and 5)**

- 2.7 The order of these sections has been reversed so that the discussion of replacement cost now comes before that on deprival value, which seems to be more logical.

## Appendices

- 2.8 The following changes have been made to the Appendices.
- 2.9 In the light of the discussion at the June meeting, the former Appendix A ‘Possible applications of measurement concepts in accounting standards’ has been deleted from the draft. (It was noted at the June meeting that this material might be considered for use in publicity or training material.)
- The Appendix on the effect of an entity’s own credit risk (now Appendix A) has been amplified by a new paragraph (A3) that explains how the issue impacts on the various measurement bases discussed in the paper. It was suggested in June that the Appendix might be integrated into the main text: however, as paragraph A3 suggests, the issue affects several measurement bases, and is therefore best discussed in one place.
  - The material on assets that may be sold for an alternative use, which formerly hung awkwardly at the end of the discussion of replacement cost, has been moved into Appendix B. This seems appropriate as, like the treatment of an entity’s own credit risk, it is a very specific issue which is on the borderline between the Conceptual Framework and accounting standards.

## Introductory material

- 2.10 To this draft has been added:
- A General Introduction to the IPSASB Conceptual Framework project (the same text as in the Introduction to the Phase 1 ED issued for out-of-session review); and
  - An Executive Summary.
- 2.11 The addition of the General Introduction has permitted some text to be deleted from the first section of the paper.

## Question for the IPSASB

- 1 Do IPSASB Members have any comments or direction on each of the changes summarized above?**

### **3 Preliminary views and Request for Comments**

- 3.1 Drafts of ‘Preliminary Views’ (‘PVs’) were presented at the Vienna meeting and attracted considerable comment. The staff was asked to redraft the views to achieve a better balance. There appeared also be a significant view around the table that it might be better not to present any PVs.
- 3.2 The draft Consultation Paper contains redrafted PVs. A draft of the Invitation to Comment, assuming that these PVS are retained is in the Appendix to this memorandum, labeled Format A. The Appendix also contains an alternative draft (Format B). This alternative assumes that no PVs are presented.
- 3.3 In some instances, for example, own credit risk, the IPSASB has previously decided that it would be inappropriate to form a PV before considering input from constituents. However, most of the issues could be raised either by soliciting comments on a PV or by the inclusion of a neutral question. It has been suggested, for example, that PVs might be expressed only on (i) the adoption of a mixed measurement model and (ii) the deprival value model.
- 3.4 In the view of the staff, it is important that the Request for Comment raises all the most important issues that the IPSASB will need to consider in developing an Exposure Draft (while avoiding placing an excessive burden on respondents). As well as helping to obtain input, it will encourage respondents to follow a similar structure in their responses which will greatly assist comparing and contrasting respondents’ views.

#### **Question for the IPSASB**

- 2 The IPSASB is asked to provide direction on the format, wording and content of the Preliminary Views and the Request for Comments.**

## APPENDIX

### REQUEST FOR COMMENTS

#### FORMAT A: (ASSUMING PRELIMINARY VIEWS ARE PRESENTED)

The IPSASB welcomes comments on all of the matters discussed in this Consultation Paper.

Comments are most useful when they include reasons for the views expressed and, where relevant, alternative proposals.

The IPSASB has developed Preliminary Views on five key issues. The IPSASB would particularly welcome comment on each of these Preliminary Views. (Paragraph numbers identify the location of each Preliminary View in the text.)

##### ***Preliminary View 1: No single measurement basis (following paragraph 1.5)***

The Framework should identify factors that are relevant in selecting a measurement basis for particular assets and liabilities in specific circumstances. It is expected that a number of different bases will continue to be used in GPFSSs.

##### ***Preliminary View 2: Historical cost (following paragraph 2.19)***

Historical cost is generally simple to apply and has a high degree of verifiability. It reflects the transactions actually undertaken by the entity, and may be seen as consistent with the role of government in collecting resources and using them for the benefit of society as a whole. However, it may be considered that, where price changes are significant, historical cost information does not provide the most relevant information about the cost of service provision or on the resources held by an entity.

##### ***Preliminary View 3: Market value (following paragraph 3.15)***

A market value may be an appropriate measurement basis for assets and liabilities that are traded on deep and liquid markets. It may also be appropriate to use estimates of market value in some cases. However, in the public sector there are few (if any) willing buyers and willing sellers for many assets and liabilities: in these circumstances market value is unlikely to be practicable or useful.

##### ***Preliminary View 4: Replacement cost (following paragraph 4.16)***

Replacement cost, where available, is likely to provide relevant information, particularly for assets that are held in order to provide services. In some cases, however, it may be more costly and complex than available alternatives.

***Preliminary View 5: The deprival value model (following paragraph 5.51)***

The deprival value model provides a rationale for selecting a measurement basis for assets and liabilities that is relevant in a particular case. However, because the deprival value model is concerned only with relevance, it is necessary to consider whether the measurement basis it suggests adequately reflects the other qualitative characteristics of financial information.

The IPSASB would also welcome comment on the following questions:

***Q1 The measurement bases considered***

The Consultation Paper discusses the following measurement bases: historical cost, market value, fair value and replacement cost. It also discusses the deprival value concept in the context of both assets and liabilities; the deprival value concept does not describe a single measurement basis, but rather a means by which a basis may be selected that is relevant to the circumstances. Value in use and net selling price are discussed in the context of the deprival value model.

Are there other measurement bases or concepts that should be considered in developing the Framework? If so, what are their advantages?

***Q2 Reflecting the entity's own credit risk in the measurement of liabilities (Appendix A)***

The IPSASB has not formed a preliminary view as to whether the measurement of liabilities should reflect an entity's own credit risk. Appendix A summarizes the main relevant considerations. What are your views? If you do not consider that the measurement of liabilities should reflect changes in an entity's own credit risk, how would you suggest the effect of credit risk implicit in the issue of a liability in a market transaction should be dealt with?

In your view, should the issue of an entity's own credit risk be addressed in the Framework or at the level of accounting standards?

***Q3 Assets that may be sold for an alternative use (Appendix B)***

If replacement cost is used as a measurement basis it is necessary to consider its application to assets that have alternative uses. This issue is discussed in Appendix B.

In your view, should replacement cost be applied in the case of assets that may be sold for an alternative use? In your view, should the issue be addressed in the Framework or at the level of accounting standards?

**FORMAT B:  
(ASSUMING PRELIMINARY VIEWS ARE NOT PRESENTED)**

The IPSASB welcomes comments on all of the matters discussed in this Consultation Paper.

Comments are most useful when they include reasons for the views expressed and, where relevant, alternative proposals.

The IPSASB would particularly welcome comment on the following questions:

***Q1 A mixed measurement approach***

The Consultation Paper envisages that a number of different bases will continue to be used in GPFs and suggests that the role of the Framework should be to identify factors that are relevant in selecting a measurement basis for particular assets and liabilities in specific circumstances.

Do you agree?

***Q2 The measurement bases considered***

The Consultation Paper discusses the following measurement bases: historical cost, market value, fair value and replacement cost. It also discusses the deprival value concept in the context of both assets and liabilities; the deprival value concept does not describe a single measurement basis, but rather a means by which a basis may be selected that is relevant to the circumstances. Value in use and net selling price are discussed in the context of the deprival value model.

Are there other measurement bases or concepts that should be considered in developing the Framework? If so, what are their advantages?

***Q2 The deprival value model***

The Consultation Paper contains, in Section 5, a discussion of the deprival value model, which provides a rationale for selecting a measurement basis that is relevant in particular circumstances. Where the deprival value model is applied, replacement cost (where recoverable) is used for assets, and liabilities are often stated at settlement amount.

In your view, does the deprival value model provide a useful means of selecting a measurement basis for assets and liabilities?

***Q3 Reflecting the entity's own credit risk in the measurement of liabilities  
(Appendix A)***

The IPSASB has not formed a preliminary view as to whether the measurement of liabilities should reflect an entity's own credit risk. Appendix A summarizes the main relevant considerations. What are your views? If you do not consider that the measurement of liabilities should reflect changes in an entity's own credit risk, how

would you suggest the effect of credit risk implicit in the issue of a liability in a market transaction should be dealt with?

In your view, should the issue of an entity's own credit risk be addressed in the Framework or at the level of accounting standards?

***Q4 Assets that may be sold for an alternative use (Appendix B)***

If replacement cost is used as a measurement basis it is necessary to consider its application to assets that have alternative uses. This issue is discussed in Appendix B.

In your view, should replacement cost be applied in the case of assets that may be sold for an alternative use? In your view, should the issue be addressed in the Framework or at the level of accounting standards?



**DRAFT CONSULTATION PAPER**

**CONCEPTUAL FRAMEWORK FOR GENERAL PURPOSE  
FINANCIAL REPORTING BY PUBLIC SECTOR ENTITIES:  
MEASUREMENT OF ASSETS AND LIABILITIES  
IN FINANCIAL STATEMENTS**

**General Introduction**

The Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities (the Conceptual Framework) will establish and make explicit the concepts that are to be applied in developing IPSASs and other documents that provide guidance on information included in general purpose financial reports (GPFRs).

IPSASs are developed to apply across countries and jurisdictions with different political systems, different forms of government and different institutional and administrative arrangements for the delivery of services to constituents. The IPSASB recognizes the diversity of forms of government, social and cultural traditions, and service delivery mechanisms that exist in the many jurisdictions that may adopt IPSASs and has developed this Conceptual Framework to respond to and embrace that diversity.

**The Accrual Basis of Accounting**

The IPSASB encourages public sector entities to adopt the accrual basis of accounting. This Exposure Draft deals with concepts that apply to general purpose financial reporting (hereafter referred to as financial reporting unless identified otherwise) under the accrual basis.

Under the accrual basis of accounting, transactions and other events are recognized in financial statements when they occur (and not only when cash or its equivalent is received or paid). Therefore, the transactions and events are recorded in the accounting records and recognized in the financial statements of the periods to which they relate.

Financial statements prepared on the accrual basis inform users of the financial statements of past transactions involving the payment and receipt of cash during the reporting period, obligations to pay cash or sacrifice other resources of the entity in the future and the economic resources of the entity at the reporting date. Therefore, they provide information about past transactions and other events that is more useful to users for accountability purposes and as input for decision making than is information provided by the cash or other bases of financial reporting.

The IPSASB recognizes that in many jurisdictions governments and other public sector entities currently adopt the cash basis of accounting (or a near-cash or modified-cash basis of accounting). The IPSASB will consider the concepts that underpin the cash basis of financial reporting after it has developed the Conceptual Framework for the accrual basis

## **Project Development**

The development of this Conceptual Framework is a collaborative project that the IPSASB is leading in conjunction with a number of national standards setters and similar organizations with a role in establishing financial reporting requirements for governments and other public sector entities in their jurisdictions.

Many of the IPSASs currently on issue are based on International Financial Reporting Standards (IFRSs) issued by the International Accounting Standards Board (IASB), to the extent that the requirements of those IFRSs are relevant to the public sector. The IPSASB's strategy and operational plan also includes maintaining the alignment of IPSASs with IFRSs where appropriate for the public sector. **(Staff Note – to be updated to reflect any further development of the IPSASB strategy and operational plan for 2010 and beyond.)**

The IASB is currently developing an improved Conceptual Framework for private sector business entities in a joint project with the Financial Accounting Standards Board (FASB) of the USA. Development of the IASB's Conceptual Framework is being closely monitored. However, development of the IPSASB's Conceptual Framework is not an IFRS convergence project, and the purpose of the IPSASB's project is not simply to interpret the application of the IASB Framework to the public sector. The purpose of the IPSASB's Conceptual Framework project is to develop concepts, definitions, and principles that respond to the objectives, environment and circumstances of governments and other public sector entities and, therefore, are appropriate to guide the development of IPSASs and other documents dealing with financial reporting by public sector entities.

The concepts underlying statistical financial reporting models, and the potential for convergence with them, will also be considered by the IPSASB in developing its Conceptual Framework. The IPSASB is committed to minimizing divergence from the statistical financial reporting models where appropriate.

## **Consultation Papers and Exposure Draft**

Although all the components of the Conceptual Framework are interconnected, the project is being developed in phases. The components of the Conceptual Framework have been grouped, and are being considered in the following sequence:

Phase 1 – the objectives of financial reporting, the scope of financial reporting, the qualitative characteristics of information included in GPFRs, and the reporting entity and group reporting entity;

Phase 2 – the definition and recognition of the “elements” that are reported in financial statements;

Phase 3 – consideration of the measurement basis (or bases) that may validly be adopted for the elements that are recognized in the financial statements; and

Phase 4 - consideration of the concepts that should be adopted in deciding how to present financial statements and other components of GPFRs.

The project initially involves the development and issue for comment of Consultation Papers to draw out key issues and explore the ways in which those issues could be dealt with. The Consultation Paper dealing with Phase 1<sup>1</sup> was issued in September 2008, Consultation Papers dealing with Phase 2 and Phase 3 are being issued at the same time as this Exposure Draft (ED) and a Consultation Paper dealing with Phase 4 is under development.

It is the IPSASB's current intention to issue EDs dealing with each of Phases 2, 3 and 4 of the Conceptual Framework after consideration of responses to the Consultation Papers dealing with those Phases. The process for developing the finalized Conceptual Framework will be determined in light of the responses received to Consultation Papers and EDs, and may include issue of an umbrella exposure draft of the full Conceptual Framework. **(Staff Note – to be updated as timing of issue of this exposure draft and Phase 2 and 3 Consultation Papers and any development in the process become clearer.)**

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<sup>1</sup> Consultation Paper “*Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities: The objectives of financial reporting; The scope of financial reporting; The qualitative characteristics of information included in general purpose financial reports; The reporting entity.*”

## Executive summary

This Consultation Paper forms part of the IPSASB's project to develop a Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities. It explores the measurement bases that may validly be adopted for the elements that are recognized in public sector general purpose financial statements (GPFSs). The term 'measurement basis' refers to the concept that is used in determining the amount at which an asset or liability is stated in the GPFSs. Examples of measurement bases are historical cost, market value and replacement cost.

It is envisaged that the IPSASB Framework will identify factors that should be considered in choosing the measurement basis to be required for particular assets and liabilities in specific circumstances, rather than identify a single measurement basis that is appropriate in all circumstances. .

Measurement bases may be classified according to whether they:

- reflect historical or current attributes of an asset or liability;
- represent an entry or an exit perspective; and
- reflect either a market or an entity specific perspective.

**Historical cost** represents an historical, entry perspective, entity-specific value. Compared to other measurement bases, it is generally simple to apply and has a high degree of verifiability, although, as with other measurement bases, there are important limitations on the extent to which it has these qualities. It may, however, not be as relevant as other measurement bases, particularly where price changes are significant.

**Market value** represents a current, market perspective, which may be either an entry or an exit value. Market values have many virtues for assets and liabilities that are traded on satisfactory markets. In some cases a market price may not be directly observable, but market information may be used to estimate market values. However, the relevance of market values is challenged for highly specialized assets, which are frequently encountered in the public sector.

**Replacement cost** represents a current, entry perspective, and is entity-specific. Where available, it is likely to provide relevant information, particularly for assets that are held in order to provide services. In some cases, however, it may be complex and costly to apply and rely on subjective judgments that limit the verifiability and comparability of the financial statements.

**The deprival value model** provides a means of selecting the most relevant measurement basis, which is that which would just compensate the entity for the loss of the asset. It concludes that this amount will normally be replacement cost (an entry value) except where the asset is not worth replacing: in that case an exit value, recoverable amount, defined as the higher of value in use and net selling price, should be used. The deprival value model may also be applied to liabilities (with some changes in terminology). Under the deprival value model, liabilities are stated at relief value, which is generally settlement amount, an exit value that is equivalent to the lower of cost of fulfillment and

cost of release. For liabilities that are entered into for consideration an entry value, assumption price, is used if higher than settlement amount.

Because the deprival value model indicates only the most relevant measurement basis, it is necessary to consider the extent to which that basis embodies qualitative characteristics other than relevance.

Appendices A and B provide a discussion of specific issues. Respondents are invited to express their views on these issues, including whether they should be dealt with in the Conceptual Framework or in the development of specific IPSASs. These issues are:

- the measurement of liabilities and an entity's own credit risk; and
- assets that may be sold for an alternative use.

## 1 Introduction

- 1.1 This Consultation Paper explores the measurement bases that may validly be adopted for the elements that are recognized in public sector general purpose financial statements (GPFSS). The term ‘measurement basis’ refers to the concept that is used in determining the amount at which an asset or liability is stated in the GPFSS.<sup>2</sup> Examples of measurement bases are historical cost, market value and net selling price.
- 1.2 It is desirable for the measurement bases used in GPFSSs to be consistent with those used for statistical purposes. To assist in comparing the content of this paper with the bases used for statistical purposes, relevant requirements of the Government Finance Statistics Manual 2001 (‘GFSM 2001’) are highlighted.<sup>3</sup>

### Objectives of this Paper

- 1.3 This Consultation Paper explores different measurement bases, their relationship to the objectives of GPFSSs and the qualitative characteristics. It deals only with the selection of measurement bases in the context of GPFSSs. Other measurement bases may be appropriate as supplementary disclosures or elsewhere in GPFSSs.
- 1.4 It is envisaged that the IPSASB Framework will identify factors that should be considered in choosing the measurement basis to be required for particular assets and liabilities in specific circumstances. It is not expected that the IPSASB Framework will identify a single measurement basis that is appropriate in all circumstances. Such a single approach might be thought to be ideal, as the relationship between various amounts reported in the GPFSSs would be clear: in particular, the amounts of different assets and liabilities could be added to provide meaningful totals. However, there is no single measurement basis that is appropriate in all circumstances. For example, in financial statements prepared on a historical cost basis, it is necessary to write down surplus or obsolete assets to net selling price; if financial statements are prepared on a market value basis, substitutes will be required for those assets and liabilities for which market values are unavailable. It is also necessary to select different measurement bases in different circumstances to achieve an appropriate balance, or trade-off, between the qualitative characteristics.
- 1.5 It is possible, however, to minimize the drawbacks of using different measurement bases. This requires that different measurement bases are selected only where this is justified by economic circumstances, and hence that assets are reported on the same basis where circumstances are similar. In addition, much of the most important information conveyed by GPFSSs relates to components rather

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<sup>2</sup> The term “measurement basis” is used in this Paper to mean the same as “measurement attribute”.

<sup>3</sup> The Task Force on Finance Statistics (TFSS) has indicated that it is expected that *The Public Sector Debt Statistics Guide* (planned for release in early 2011) will differ from GFSM 2001 only in minor ways. (See [www.tffs.org/method.htm](http://www.tffs.org/method.htm))

than aggregate amounts, and good presentation and disclosure can ensure that the measurement bases used and the amounts reported on each basis are clear.

***Preliminary View 1: No single measurement basis***

The Framework should identify factors that are relevant in selecting a measurement basis for particular assets and liabilities in specific circumstances. It is expected that a number of different bases will continue to be used in GPFSSs.

**Features of Measurement Bases**

1.6 The following highlights some of the respects in which various measurement bases differ from each other.

- Measurement bases are either **historical** or **current**. When a historical measurement basis is used, assets and liabilities are stated at the amount of an attribute at a past date: in contrast under a current measurement basis, the measurement reflects the economic and financial environment prevailing at the reporting date.<sup>4</sup>
- Measurement bases may use either **entry** or **exit** values. An entry basis reflects the consideration payable (or receivable) for the acquisition (or assumption) of an asset (or liability). An exit basis reflects the amount that will be derived from the asset either from its sale or from its use by the entity. In a diversified economy entry and exit values differ as entities typically acquire assets from specialized suppliers, and cannot sell the asset at the same price as the party from which the asset is acquired. (A familiar example is an individual's inability to sell a car at the price that s/he has recently paid the dealer.) If exit values are used in such a case a difference will arise—sometimes described as a 'day one' profit or loss—on the initial recognition of an asset. Related to the choice between entry and exit values is whether the measurement basis requires transaction costs to be treated as part of the entry or exit value of assets and liabilities.<sup>5</sup>
- Measurement bases may adopt either a **market** or an **entity-specific** perspective. A market perspective may be argued to promote comparability in that the same asset (or liability) can be expected to be reported at the same amount by different entities whereas measurement bases that take an entity-specific perspective will differ between different entities, although arguably they may be more relevant. In practice the distinction between market and entity-specific perspectives is not always clear-cut. It would seem, for example, that a market perspective can only be relevant where the entity has access to the market where the price is

<sup>4</sup> GFSM 2001 requires the use of current values (paragraph 7.22).

<sup>5</sup> GFSM 2001 requires the use of entry values for all assets, including transaction costs, except that the cost of transfer of financial assets are excluded (paragraph 7.22).

quoted. And although a cost price is in principle entity-specific, it will often reflect a transaction in a market setting.

- One objection to the use of values that use an entity-specific perspective is that they reflect the intentions or expectations of the entity or its management and so are subjective and lack verifiability and comparability. This is implicit, for example, in the definition of “entity-specific value” given in IPSAS 17 ‘Property, Plant and Equipment’.<sup>6</sup> However, as the term is used in this paper “entity-specific” refers to measurement bases that are bounded by the economic and current policy constraints that limit the possible uses of the asset by the reporting entity (and may reflect economic opportunities that would not be available to other parties), and not simply expectations and intentions.

- 1.7 Some find it helpful to relate the selection of a measurement basis to the choice of a concept of capital.<sup>7</sup> The surplus or deficit of an entity in an accounting period represents the difference between its capital at the beginning and end of a period. A change in net assets will be reflected in surplus or deficit to the extent that it represents a change in that capital, under the concept adopted.
- 1.8 If the measurement basis is selected so as to be appropriate for the selected concept of capital, the articulation of the financial statements is complete: the change in reported net assets equals the reported surplus or deficit for the year (subject to transactions with owners, in their capacity as owners). In such a case, the relationship between the amounts of items reported in the statement of financial position and those reported in the financial performance statement is transparent. Thus the selection of a measurement basis for financial reporting is generally consistent with a particular concept of capital. The discussion in the following sections explains the relationship of each measurement basis to an associated concept of capital.<sup>8</sup>

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<sup>6</sup> IPSAS 17 defines the term “entity-specific value,” as “the present value of the cash flows an entity expects to arise from the continuing use of an asset and from its disposal at the end of its useful life or expects to incur when settling a liability.” (Emphasis added.)

<sup>7</sup> In this context, ‘capital’ is taken to be equivalent to net assets, and is therefore after deduction of borrowings and all other liabilities.

<sup>8</sup> In some models of financial reporting it is necessary to distinguish between the concept of capital (used to guide the selection of measurement bases for assets and liabilities) and the concept of capital maintenance (which is used to determine the nature of the surplus or deficit for the accounting period). A common example of this is where a ‘real terms’ concept of capital maintenance, which requires that capital is maintained after allowing for the effect of general price increases, is used. As reflecting general price increases in the measurement of specific assets and liabilities does not provide useful information (as the prices of specific assets will not change by the same amount as general prices) a real terms adjustment is made in arriving at the surplus or deficit for the year. The cumulative amount of such adjustments is then reported as a component of equity, separate from accumulated surplus or deficit. In the context of commercial enterprises, a real terms system may be useful because it allows shareholders to compare the growth in the business with the change in wealth necessary to maintain their consumption. However, this seems to have little relevance in the public sector context.



- 1.9 Later sections of this paper discuss measurement bases that are often used in practice or advocated in theory. To enable an assessment of their suitability for use in GPFSs, bases that are relatively unfamiliar require a fuller discussion than those that are established. Thus the length of the treatment of each basis in this paper does not reflect any view as to its suitability.
- 1.10 Table 1 provides an overview of the principal measurement bases that are discussed in the following sections of this paper, and indicates whether they are historical or current; use an entry or exit perspective; reflect the perspective of the market or the entity; and their associated concept of capital.

**Table 1: Features of measurement bases**

Section	Measurement basis	Historical or current?	Entry or exit?	Market or entity-specific?	Capital concept
2	Historical cost	Historical	Entry	Entity-specific	Financial capital
3	Market value	Current	May be either	Market	Market value (ability to earn a market return)
4	Replacement cost	Current	Entry	Entity-specific	Operating capacity

- 1.11 Section 5 discusses the deprival value model. It does not prescribe a single measurement basis, but rather a means by which a choice may be made in particular circumstances between replacement cost and recoverable amount, which is defined in terms of value in use and net selling price<sup>9</sup>.

### **The objective of financial reporting and the qualitative characteristics**

- 1.12 The discussion in the remainder of this paper considers each basis in the context of the objective of financial reporting and the qualitative characteristics.
- 1.13 As is explained in CP#1, the objective of financial reporting by public sector entities is to provide information about the reporting entity that is useful to users of GPFRs for accountability purposes and as input for decision-making purposes (including resource allocation, political and social decisions). Amongst those identified by CP#1 as users of GPFRs are: recipients of services; providers of resources; and the legislature.
- 1.14 In order to provide a proper basis for the assessment of accountability it is important that assets are not understated (or liabilities overstated). A representationally faithful statement of the cost of providing services requires that the full value of assets that are consumed in service provision is included in that cost. It follows, from this, for example, that an asset should not be stated at a nil value, even if it is held for the purpose of distributing it free of charge to service

<sup>9</sup> 'Net selling price' is similar to the concept of 'fair value less costs to sell' used in IPSASs, except that it is more explicit that the selling price will be what the entity would expect to obtain rather than that which might prevail on a (possibly hypothetical) market.

recipients. On the other hand, accountability also requires that losses are reported promptly in the period in which they arise. In particular this means that assets are not stated at a higher amount than that which can be derived from their use in providing services, or from their sale.

- 1.15 CP#1 also explains that, to fulfill these objectives, information should possess the qualitative characteristics of relevance, faithful representation, understandability, timeliness, comparability and verifiability. Constraints on information included in GPFs are materiality, cost and the need to achieve an appropriate balance between the qualitative characteristics.

**Staff note: References to CP#1 above to be updated/amended as appropriate.**

## **2 Historical Cost**

- 2.1 Under the historical cost basis, assets are reported at the cost incurred on their acquisition. Transaction costs—that is, costs other than the purchase price incurred in connection with the acquisition of the asset—are generally included in cost for this purpose.
- 2.2 Like assets, liabilities are generally stated on the historical cost basis at the amount received in the transaction under which the obligation is assumed. (Strictly, consistency would require transaction costs to be deducted from that amount, but it is possible that practice on this varies.) However, where the time value of a liability is material (that is, where the length of time before payment falls due is significant), the amount of the future payment is discounted so that, at the time a liability is first recognized, it represents the present value of that liability at that time. (Where the liability is issued for cash, the net proceeds will be equal to the discounted amount.) The discount is amortized over the life of the liability, with the result that the liability is stated at the amount of the required payment when it falls due.
- 2.3 Historical cost clearly represents a historical, entry-value perspective. It is also entity-specific: assets are reported at the cost to the entity of their acquisition rather than the price at which it might be reasoned another party might pay.
- 2.4 Historical cost is a widely used basis of financial reporting, and therefore has the advantage of familiarity. Because historical cost is usually recorded where assets are acquired by purchase, it is often relatively objective and simple to apply. Particularly in the context of revenues and expenses, historical cost is easily understood.
- 2.5 Compared to the available alternatives, historical cost information generally has a high degree of verifiability. Where an asset is acquired in a single transaction for cash, the historical cost is completely verifiable. Because of the simplicity of historical cost, the information can probably be prepared more quickly than that prepared using other bases, and so its use contributes to timeliness, and minimizes cost. Information prepared on a historical cost basis is also understandable,

because it generally relates to actual transactions the entity undertakes . These advantages, however, do not apply without qualification in all cases.

- 2.6 In the public sector, assets are sometimes contributed, or provided on subsidized terms, or in exchange for other non-cash assets. In these cases, strict application of historical cost may not faithfully represent the value of the assets acquired, and it may therefore be necessary to choose an alternative measurement basis as a proxy for historical cost. Similarly liabilities do not always arise from transactions or events that specify the amount of the obligation (for example a liability to pay compensation for medical negligence): in these cases as well a departure from a strict application of the historical cost basis is necessary in order to provide a representationally faithful depiction of the liability.
- 2.7 The following are examples of other issues that arise in determining the amount to be recognized initially under historical cost when assets are not purchased in a single straightforward transaction:
- Transaction costs: In addition to the purchase price of an asset, other costs may be incurred in connection with its acquisition (for example, legal fees and taxes). It is necessary to determine which costs are sufficiently directly associated with the purchase to justify their inclusion in the assets' historical cost.
  - Assets constructed by the entity: Where an asset is constructed by the entity itself many costs (for example, labor, materials, energy and overheads) have to be allocated, and the subjectivity of this may be questioned. A particularly difficult issue is the treatment of borrowing costs.
  - Basket transactions: Where several assets are acquired in a single transaction the price paid must be allocated to the individual assets.
- 2.8 Other issues arise in subsequent accounting periods. For example:
- Depreciation: In the case of an asset that will be used for several accounting periods, the historical cost needs to be allocated to accounting periods. In a simple case for an asset with a relatively short useful life, and which may plausibly be assumed to yield equal service over its life, a simple straight-line allocation may be satisfactory, but in many cases a more sophisticated approach may be necessary, which will increase complexity and subjectivity.
  - Flow assumptions: Where many similar assets are held, flow assumptions such as first in first out ('FIFO') or average cost are generally employed when using historical cost. These essentially arbitrary conventions are necessary on practical grounds, and may improve the relevance of financial information, but are a departure from strict adherence to historical cost.
- 2.9 There are also some practical difficulties with historical cost measurement. Records of historical cost may not always be available, especially where assets have been owned for many years and were acquired before the introduction of

- accrual accounting. In these cases, if historical cost is to be used as the measurement basis, an estimate of historical cost will be required, for example by reference to price indices. The subjectivity of such estimates further detracts from the objectivity of historical cost measurement. Estimates of an asset's useful life need to be kept under constant review: failure to do so may result in an asset's being fully depreciated while still in use.
- 2.10 Although some of these issues also arise under other measurement bases, they are sometimes neglected in discussions of historical cost. However, they are particularly relevant to an assessment of the usefulness of historical cost, because they affect an assessment of its claimed objectivity and simplicity, and therefore a high degree of verifiability, understandability and low cost.
- 2.11 CP#1 notes that users of GPFSs require information on the amount and type of resources used in the provision of services, and whether the use of resources is consistent with approved budgets. Historical cost information may be particularly suitable for comparing costs incurred against budgets because budgets do not usually explicitly allow for changes in prices where they cannot be forecast reliably. The reported amounts will be readily recognizable by the budget holder, because the reported amounts represent the result of transactions, measured at their transaction prices.
- 2.12 It may be reasoned that historical cost provides a representationally faithful measure of the cost related to the use of assets specifically held for the provision of goods and services, because it reflects the actual cost of the resources used. This may be seen as consistent with the role of government in collecting resources from society and using those resources in the provision of goods and services for the benefit of society as a whole.
- 2.13 Historical cost information reflects a financial concept of capital: a surplus is reported if the revenue for the period exceeds the historical cost of the assets consumed in providing services in the period. In other words, if the historical cost of the assets consumed equals the amount of revenues, the financial statements will show a break even result.
- 2.14 However, under historical cost reporting, the cost of services provided is reported at prices prevailing at the time when the assets used to provide them were originally acquired. Thus gains and losses that are attributable to the price changes during the period in which assets are held ("holding gains and losses") are not recorded when they arise. Because information on the cost of services is reported in historical prices, it is not as relevant as information that reflects current prices to the assessment of the likely future resource needs, that is, whether the same service levels are likely to require increased or decreased resource levels in the future. This is because the cost of providing services in the future is more likely to resemble current costs than historical costs. Thus for long term financial viability it is important that an entity's revenue (including any subsidies receivable) should cover the current cost of service provision.
- 2.15 Information prepared on a historical cost basis does not always provide relevant information on the resources held by the entity at the reporting date. If prices

- have increased since an asset was acquired, its value to the entity may be greater than that represented by historical cost. This is sometimes a particularly significant issue in the public sector where assets may remain in use for decades or even centuries. The failure to reflect changes in prices may also be significant in for derivative financial instruments which often have a small value when acquired but have a large value at later dates.
- 2.16 Use of the historical cost basis does not secure the provision of information that is comparable. Assets that are identical (including in respect of their age and condition) may be reported at different amounts (either by two different entities or within the GPFs of a single entity) because prices prevailing at the dates of acquisition were different.
- 2.17 Where historical cost is used, it is necessary to consider whether assets are impaired and, if so, to write them down to recoverable amount. The concept of recoverable amount is discussed in paragraphs 5.6-5.11 below.
- 2.18 Similarly for liabilities, it is necessary to consider whether estimates or prices have changed since a liability was first assumed. Such changes may cause a liability to increase, and it is therefore necessary to increase the reported amount of the liability to reflect the amount that will be required to fulfill the obligation or obtain release from it.
- 2.19 As noted above, GFSM 2001 requires the use of current values, and therefore is not consistent with the use of historical cost.

***Preliminary View 2: Historical cost***

Historical cost is generally simple to apply and has a high degree of verifiability. It reflects the transactions actually undertaken by the entity, and may be seen as consistent with the role of government in collecting resources and using them for the benefit of society as a whole. However, it may be considered that, where price changes are significant, historical cost information does not provide the most relevant information about the cost of service provision or on the resources held by an entity.

### **3 Market Values**

- 3.1 This section discusses the use of market values as a measurement basis for financial reporting. In a market value system of accounting, assets and liabilities are stated at market prices prevailing on the reporting date: it is therefore a current measurement basis, and, of course, reflects a market, rather than an entity-specific, perspective.
- 3.2 The International Valuation Standards Council has defined “market value” as:
- The estimated amount for which a property should exchange on the date of the valuation between a willing buyer and a willing seller in an arm's length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently, and without compulsion. (Concepts Fundamental to Generally Accepted Valuation Principles (GAVP), paragraph 5.2)*

- 3.3 The definition suggests that “current exchange value” might be a more informative term than “market value”. The definition is equally applicable to buyers and sellers, and therefore does not specify whether market values represent an entry or an exit value. It also leaves open whether market prices should be adjusted to reflect transaction costs—that is, buying prices if an entry perspective is to be used and selling prices for an exit perspective.<sup>10</sup>
- 3.4 The concept of capital that is implicit in the use of market values is that of the ability to earn a market rate of return. If, for example, opening capital is CU10,000 and a market rate of return is 10%, the entity can expect to have a surplus of CU1,000 which can be applied to other purposes whilst retaining its capital unchanged. Its unchanged capital will still suffice to enable it to earn the market rate of return on CU10,000 (which, in the second period, may be more or less than 10%).

*Advantages of market values*

- 3.5 In an ideal context<sup>11</sup>, market value possess all of the qualitative characteristics, as is explained below:
- Relevance: The market value of an asset is a relevant measure of its utility to the entity. An asset cannot be worth less than market value, as that the entity can derive at least that amount by selling the asset. The value of an asset cannot be greater than its current market value, since the entity can, at the reporting date, obtain an identical asset at the prevailing market price. (See also paragraphs 3.6 and 3.7 below.)
  - Faithful representation: For the reasons discussed above, market values provide a faithful representation of the value of the asset.
  - Understandability: Market values are easy to understand.
  - Timeliness: Where market values are readily available, the GPFSs can be prepared quickly and with only simple calculations.
  - Comparability: Different entities owning similar assets should report them at the same market value, so the information is highly comparable. In principle, a market value measurement is not entity specific.
  - Verifiability: As market values are readily available in an ideal context, the information can be easily verified.
- 3.6 The relevance of market values is sometimes questioned where assets are held for the long-term. In such a case it might be argued that the short-term changes in

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<sup>10</sup> The IASB’s current project “Fair value measurements”, which will provide standards-level guidance on the concept of fair value, defines fair value as an exit value and prescribes that it is not adjusted for transaction costs

<sup>11</sup> The ‘ideal context’ assumes a deep and liquid market with many buyers and sellers who are well informed about the asset that is traded, and prices that are publicly available. In such a context, differences between entry and exit prices will not differ substantially and transaction costs will be small.

- value that are reported where a market value basis is used are not relevant to the entity's financial position and performance. An example is an equity investment that is held to finance pension obligations. It might be suggested that the investment is primarily held with a view to the receipt of dividends and long-term capital appreciation, which is required to provide benefits many years in the future: therefore a fall (or indeed a rise) in market values is of no relevance, especially if expectations of future returns are unchanged.
- 3.7 However, provided the entity is able to purchase a similar investment at the market price, that price represents the benefit, at the reporting date, of holding the asset. The entity could secure the same prospective future dividend receipts and capital appreciation at the market price, so it would not be representationally faithful to report the value of the asset at an amount other than market price. Another way of making the point is to observe that the value of an equity investment is the same for all market participants because it offers all of them the potential of future dividends and capital appreciation, and all can acquire it at the market price. Thus, where an asset is traded on a deep and liquid market its value will be the same to all holders who have access to that market, and the objection that market values are not relevant to an entity that intends to hold an asset for the long-term cannot be sustained.
- 3.8 If market values are used as a measurement basis, a surplus or deficit is recognized as market values of assets and liabilities change. Thus the surplus or deficit for a period represents the gains and losses that arise over the period during which assets and liabilities are held. In contrast to the historical cost basis no gain or loss is reported on the sale of an asset (or disposition of a liability). This may be seen as an advantage, as the existence of the market assures that the entity is able to realize the market value (and no more) at the reporting date: it is therefore unnecessary and potentially misleading to postpone recognition until a profit is "realized" on sale. However, a consequence is that it is more difficult for the financial statements to convey information about the effect of transactions in assets and liabilities if market values are used as the basis for financial reporting.

*Limitations on the use of market values*

- 3.9 Markets for some assets—for example, some securities, commodities and currencies—approach the ideal context assumed in the discussion of the qualitative characteristics above.<sup>12</sup> In such cases, market prices may provide a useful basis for financial reporting.
- 3.10 It may also be possible to use estimated market values for financial reporting where market prices for similar, but not identical, assets are available. For example, an unquoted investment might be valued by reference to prices for

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<sup>12</sup> GFSM 2001 notes that 'The ideal market on which to base a valuation is a market in which the identical assets are traded in considerable volume and their market prices are listed at regular intervals. Such prices are often available for financial claims, transportation equipment, crops, livestock and inventories.' (paragraph 7.23)

- similar quoted investments, adjusted to reflect any relevant differences, such as the lower liquidity associated with an unquoted investment. This would promote consistency with the valuation of other similar assets (e.g. quoted investments). However, estimated market values in some cases can only be derived from complex and subjective models, which reduce comparability and verifiability. Understandability is also diminished by the use of estimated rather than actual market values because the user may not appreciate the limitations of the models used to derive estimated values and the assumptions on which they rely.<sup>13</sup>
- 3.11 An essential feature of deep and liquid markets is the presence of a large number of market participants that would derive similar returns from a particular asset. Where assets are specialized, that is, their utility to the current owner are significantly different from that which they would afford any potential purchaser, they are not likely to be traded on deep markets, and the case for market values is much less strong. These circumstances are frequently encountered in the public sector, where an asset that is held by an entity to fulfill its public sector objectives would not be used in the same manner by any potential purchaser, who would have to modify the asset to make it suitable for another purpose. The market value would therefore reflect the cost of such modifications: the extent to which it would provide relevant and representationally faithful information on the economic position of the current owner is doubtful.
- 3.12 A prison, for example, might be constructed at a considerable cost but have a much lower value to any prospective purchaser because that value would reflect the cost of adapting the asset to an alternative use. Reporting such an asset at its low market price would not be relevant, as the entity is unlikely to dispose of an asset that it requires in order to fulfill its service objectives. Nor would such a market value be representationally faithful of the value of the asset to the public sector entity, which can obtain the services provided by the asset only by incurring a cost that is greater than that market price. Furthermore, reducing the carrying value of a newly constructed asset to its market price would result in a reported loss, which would not be a faithful representation of the financial performance of the entity.
- 3.13 It is possible to prescribe that, for specialized assets, the relevant market value is that which would be obtained in the case of a sale to a purchaser who can use the asset in the same manner as the current owner and, for example, owns any complementary assets. However, imagining a market participant that has the same opportunities as the reporting entity seems to be excessively hypothetical, given that many of the assets used by public sector entities in providing services—for example, dams and reservoirs—would not be provided by other

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<sup>13</sup> For example, it may not always be understood that, although a value has been adjusted to take into account the lack of liquidity of an asset, it cannot be assumed that the asset can readily be liquidated at the stated amount: A forced sale value would be lower than a willing buyer/willing seller exchange value.



entities.<sup>14</sup> As is discussed in the next section, replacement cost provides an alternative measurement basis that may be considered in such cases.<sup>15</sup>

#### *Liabilities and market values*

- 3.14 Conceptually, the advantages and disadvantages of a market value basis of measurement for liabilities are the same as those for assets. Market values may be appropriate, for example, for liabilities under derivative financial contracts that are traded on organized exchanges. However, in many cases, the ability to transfer a liability is restricted and the terms on which such a transfer might be made are unclear, and so market values are less plausible candidates.
- 3.15 Where a market value is used to measure a liability it is necessary to consider the treatment of the entity's own credit risk. This is discussed in Appendix A.

#### ***Preliminary View 3: Market value***

A market value may be an appropriate measurement basis for assets and liabilities that are traded on deep and liquid markets. It may also be appropriate to use estimates of market value in some cases. However, in the public sector there are few (if any) willing buyers and willing sellers for many assets and liabilities: in these circumstances market value is unlikely to be practicable or useful.

## **4 Replacement Cost**

- 4.1 Replacement cost is often advocated as a measurement basis for use in GPFS, usually as part of the deprival value model (see Section 5 below).<sup>16</sup> The replacement cost of an asset<sup>17</sup> may be defined as:

*“the most economic cost required for the entity to replace the service potential of an asset (including the amount that the entity will receive from its disposal at the end of its useful life) at the reporting date.”*

<sup>14</sup> Although the boundaries between the public sector and the private sector may vary over time, for example under Service Concession Arrangements, contemplation of possible arrangements under which another entity would take over responsibilities that are currently those of the public sector will in many cases be hypothetical. The value that might be ascribed to assets under possible Service Concession Arrangements may be materially affected by the terms of such conjectural arrangements.

<sup>15</sup> This discussion is consistent with the IASB's Exposure Draft (ED/2009/5) 'Fair Value Measurement' which notes that, for specialised assets that have a significant value when used together with other assets, but have little value if sold for scrap to another market participant who does not have complementary assets, 'It is unlikely in such a situation that a market price, if available, would capture the value the specialised asset contributes to the business.' The Exposure Draft suggests that in such cases an income approach or a replacement cost approach will need to be used. (See the Basis for Conclusions, at paragraph B62).

<sup>16</sup> GFSM 2001 states 'In general, fixed assets are most effectively valued when the current written-down replacement cost is used as a proxy for the current market value.' (paragraph 7.34). It also states 'Inventories of goods intended for resale are valued at their current replacement prices.' (paragraph 7.65)

<sup>17</sup> For liabilities the concept corresponding to replacement cost is 'assumption price' which is discussed in the context of the deprival value model in Section 5 below.

- 4.2 Because the definition refers to the cost “at the reporting date”, replacement cost, is a current value, that is, it reflects economic and financial conditions prevailing at the reporting date.
- 4.3 It follows from the definition of replacement cost that it includes all the costs that would necessarily be incurred in the replacement of the service potential of an asset. This would include transaction costs as well as the price that would be paid for a replacement asset.
- 4.4 Replacement cost may be distinguished from reproduction cost: the former refers to the cost of replacing service potential, whilst the latter is the cost of obtaining an identical asset. For example, the private offices of a government department may have elaborate fireplaces and plasterwork that no longer serve any economic purpose: the reproduction cost of such a building might be very high, but the replacement cost would be that of office accommodation offering the same accommodation but without those features. Use of replacement cost, however, does not always require an exhaustive search for alternative assets with the same service potential: in many cases the most economic replacement cost will be that of an asset that is similar in major respects to the asset that is actually held.
- 4.5 Because entities usually acquire their assets by the most economic means available, replacement cost reflects the procurement process that an entity generally follows. The concept of replacement cost is that of replacement in the ordinary course of operations, and not the extraordinary costs that might be incurred if an urgent necessity arose as a result of some unforeseeable event (such as a fire). Also, replacement cost reflects the particular circumstances of the entity, that is, it is an entity-specific measurement basis. For example, the replacement cost of a vehicle would be less for an entity that usually acquires a large number of vehicles in a single transaction and thus is regularly able to negotiate discounts than it would be for an entity that purchases its vehicles individually. Where the entity is a public sector entity and its replacement cost differs from that of a private sector entity, it is the public sector price that represents replacement cost.
- 4.6 Replacement cost is the cost of an asset that is of the same age and condition as the asset that is being valued. Thus, where replacement cost of a used asset is ascertained by reference to the cost of a new asset, an adjustment is necessary to reflect the reduced service potential of the asset that is owned.<sup>18</sup> Similarly, an estimate of replacement cost may be reduced to reflect the cost required to repair a damaged asset.
- 4.7 The relevant service potential is that which the entity is capable of using, having regard to the need to hold capacity to enable the entity to deal with contingencies that might arise. This results in the reduction of the replacement cost of an asset when the need for its service capacity falls. For example, if an entity owns a

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<sup>18</sup> IPSAS 21 uses the term “replacement cost” to refer to the cost to replace the asset's gross service potential, which is depreciated to reflect the used condition of an asset. In this paper, replacement cost is defined as the cost of the remaining service potential.

school that is adequate for 500 pupils but, perhaps because of demographic changes since the construction of the school, a school for 100 pupils would be adequate for current and reasonably foreseeable requirements, the replacement cost of the asset is that of a school for 100 pupils.

- 4.8 Some object to the use of replacement cost on the grounds that it reflects not the cost of the asset that is owned, but rather the hypothetical cost of an asset that is not owned. They suggest that replacement cost is not appropriate as it is not an attribute of the asset that is actually owned. However, it is not the physical asset that is being valued, but rather the services that the existing asset is capable of providing, that is, its service potential.
- 4.9 The relevance of replacement cost is particularly clear where assets have to be regularly replaced, for example where a stable volume of inventory needs to be held, and therefore consuming inventory necessarily entails its replacement, for which the current price will have to be paid. However, replacement cost is also relevant when assets will not be replaced, as depreciation of replacement cost represents a fair charge for the cost of an asset's services that are consumed within an accounting period. Thus the relevance of replacement cost is not (as is sometimes suggested) to ensure that the GPFs report the extent to which sufficient funds for replacement are retained within the entity to provide for replacement. Rather, its use enables management to use the GPFs to be accountable for the current cost of the services provided and to provide input for decision making purposes.

### **Replacement Cost and the Qualitative Characteristics**

- 4.10 The major advantage of replacement cost compared to other measurement bases is its relevance (for both accountability and decision making purposes). Replacement cost reflects economic conditions prevailing at the reporting date. It also reflects the economic position of the reporting entity since all (and only) the service potential that the asset affords to that entity is reflected in its carrying amount, and does not vary according to the value—or, in the case of specialized assets, lack of value—that the asset may have to another entity. Replacement cost is consistent with the going concern assumption<sup>19</sup> that the entity will continue in operation and will not reduce or terminate its activities. (Conversely, where the going concern assumption is inappropriate, replacement cost is unlikely to be relevant.)
- 4.11 In the case of assets that are held to provide services, replacement cost provides information that is relevant, because it reflects the cost of future service potential that is attributable to the asset.
- 4.12 Use of replacement cost is consistent with an operating capacity concept of capital maintenance: a surplus indicates the extent to which the revenue for the period exceeds the current cost of the assets consumed in providing services in that

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<sup>19</sup> *[Cross reference to discussion of going concern elsewhere in the Framework to be considered.]*

- period, assets that will need to be replaced if the same level of services are to be provided in future periods.
- 4.13 It is possible to combine historical cost and replacement cost information by reporting separately the extent to which changes in prices are reflected in the costs reported in the year. These amounts are sometimes referred to as “realized holding gains”. This permits the GPFSSs to report both (a) the costs based on actual transactions, which may be useful for an assessment of accountability, as well as (b) the costs based on current prices, which is useful to an assessment of future resource needs. The quantification of realized holding gains requires a flow assumption to be used, because it requires quantification of the historical cost of assets consumed: as noted above, flow assumptions are inevitably arbitrary.
- 4.14 In the case of fixed assets, it is important to distinguish changes that are the cost of the consumption of service potential (i.e. depreciation) from changes that are the result of changing prices.
- 4.15 It is apparent that in some cases calculation of replacement cost will be complex and subjective judgments will be required. This will prejudice the timeliness, comparability and verifiability of information prepared on a replacement cost basis, and will also make it more costly than some alternatives. However, calculations of replacement cost need not be carried out more frequently than is necessary to ensure that failure to obtain an up-to-date replacement cost does not have a significant effect on the financial statements. The period between valuations should be chosen to ensure that the cost is commensurate with the benefit of improved financial information.
- 4.16 A specific issue with replacement cost is its application to assets that may be sold for an alternative use. This issue, which may be better dealt with in the development of IPSASs rather than in the Conceptual Framework, is discussed in Appendix B.

***Preliminary View 4: Replacement cost***

Replacement cost, where available, is likely to provide relevant information, particularly for assets that are held in order to provide services. In some cases, however, it may be more costly and complex than available alternatives

## **5 The Deprival Value Model**

- 5.1 The deprival value model (which is sometimes referred to as the “value to the entity” model), is well established in the academic literature and has been recommended for use in public sector financial reporting, for example by the Byatt Committee in the UK and the Carpenter Report in Australia.<sup>20</sup>

<sup>20</sup> Accounting for Economic Costs and Changing Prices: A Report to HM Treasury by an Advisory Group, London, 1986 (The Byatt Report). Steering Committee on National Performance Monitoring of Government Trading Enterprises Guidelines on Accounting Policy for Valuation of Assets of

- 5.2 The deprival value model is based on the qualitative characteristic of relevance. It does not prescribe a single measurement basis, but rather a means by which a specific basis may be selected as the most relevant in specific circumstances.
- 5.3 Because the deprival value model chooses between measurement bases solely on grounds of relevance, it is necessary to consider whether the measurement basis that it implies also adequately reflects the other qualitative characteristics. For example, consideration of the deprival value model might suggest in a particular case that value in use should be the preferred measurement basis, but if, in the circumstances of that case, value in use were completely unverifiable, an alternative measurement basis might be selected.
- 5.4 The deprival value model selects as the most relevant measurement basis that which reflects the extent to which the entity is “better off” because it holds the asset. This may be thought of as the answer to the following questions, all of which are equivalent:

*What amount would just compensate the entity for the loss of the asset?*

*What loss would the entity sustain if deprived of the asset?*

*How much would the entity rationally<sup>21</sup> pay to acquire the asset (if it did not already hold it)?*

- 5.5 If the entity were deprived of the asset it would lose at least the amount of benefit (or service potential) that it could derive from the asset: fair compensation for the loss would be at least that amount, and the entity would be willing to pay at least that amount to acquire the asset if it did not already own it. Thus this amount represents the lowest relevant measure of the asset. Because it represents the amount that the entity can recover from the asset, it is generally referred to as ‘recoverable amount’.<sup>22</sup>
- 5.6 The recoverable amount of an asset is the higher of:

*Value in use: the present value to the entity of the asset’s remaining service potential if it continues to be used, and the net amount that the entity will receive from its disposal at the end of its useful life; and*

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Government Trading Enterprises Using Current Valuation Methods, Melbourne, 1994. (The Carpenter Report)

<sup>21</sup> “Rationally” is used here in the sense in which it is conventionally used in the deprival value model to refer to the presumption that an entity selects the course of action that is consistent with the maximum economic return. For example, an entity would not, in this sense, rationally pay a higher price to acquire an asset if it could obtain an identical asset at a lower price. As explained in paragraph 1.14 above, it is important that the measurement of assets reflects their full financial value, even if this does not correspond with their intended use. The presumption of “rational” behaviour ensures that this is the case. It does not imply that adopting a course of action that is inconsistent with maximising a financial return is irrational or improper.

<sup>22</sup> IPSAS 21 “Impairment of non-cash generating assets” uses the term “recoverable service potential”.

*Net selling price: the net amount that the entity could obtain from sale of the asset at the reporting date.*<sup>23</sup>

Both value in use and net selling price are reduced to reflect the costs that would be incurred on sale of the asset.

- 5.7 The distinction between value in use and net selling price is useful in emphasizing the importance of considering the choice between assuming continued use of the asset for a period and immediate sale. However, as value in use includes the amount that the entity will receive from disposal of the asset at the end of its useful life, net selling price can be thought of as simply a limiting case of value in use, which applies where the value of the remaining in-use service potential is nil, and the best course is to sell the asset immediately.
- 5.8 The higher of value in use and net selling price is the recoverable amount irrespective of whether the entity intends to continue to use or sell the asset. If an entity chooses to deploy an asset in a way that does not recover the maximum amount, the consequence of that decision is reflected in the periods in which it is implemented and not anticipated by stating the asset at an amount that is lower than the amount that can be recovered. This is required by the accountability objective of financial statements, as explained in paragraph 1.14 above.
- 5.9 In some cases, an asset's value in use can be quantified by calculating the present value of the future cash inflows that the entity will derive from the asset assuming its continued use. In others it is possible to quantify the savings in the form of future cash outflows that the entity can avoid by continued use of the asset. The calculation of value in use should take account of the risk of variations in the amount and timing of cash flows, and the time value of money.
- 5.10 In practice, the calculation of value in use is often difficult. Assets that are employed in cash generating activities often provide cash flows jointly with other assets, and so value in use can be estimated only by calculating the present value of the cash flows of a group of assets and then allocating (inevitably with some arbitrariness) the total to individual assets. In the public sector, most assets contribute to the provision of subsidized or uncharged services rather than directly generating cash flows: such assets are referred to as 'non-cash generating assets'.
- 5.11 The recoverable amount of an asset cannot be lower than net selling price. In estimating that amount it is necessary to take account of the costs that would be incurred on the disposal of the asset, including legal costs, taxes and commissions that relate directly to the sale and the costs of bringing the asset into a location and condition suitable for sale.<sup>24</sup>

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<sup>23</sup> "Net selling price" is similar to the concept of "fair value less costs to sell" used in IPSASs. However, it is more explicit that the selling price will be that the entity would expect to obtain rather than that which might prevail on a (possibly hypothetical) market.

<sup>24</sup> Although the deprival value model suggests that, in most circumstances, net selling price is not the most relevant basis for use in the primary GPFSS, there is a case for disclosing information about net selling prices in the notes. Such prices are relevant for an assessment of the financial entity's financial

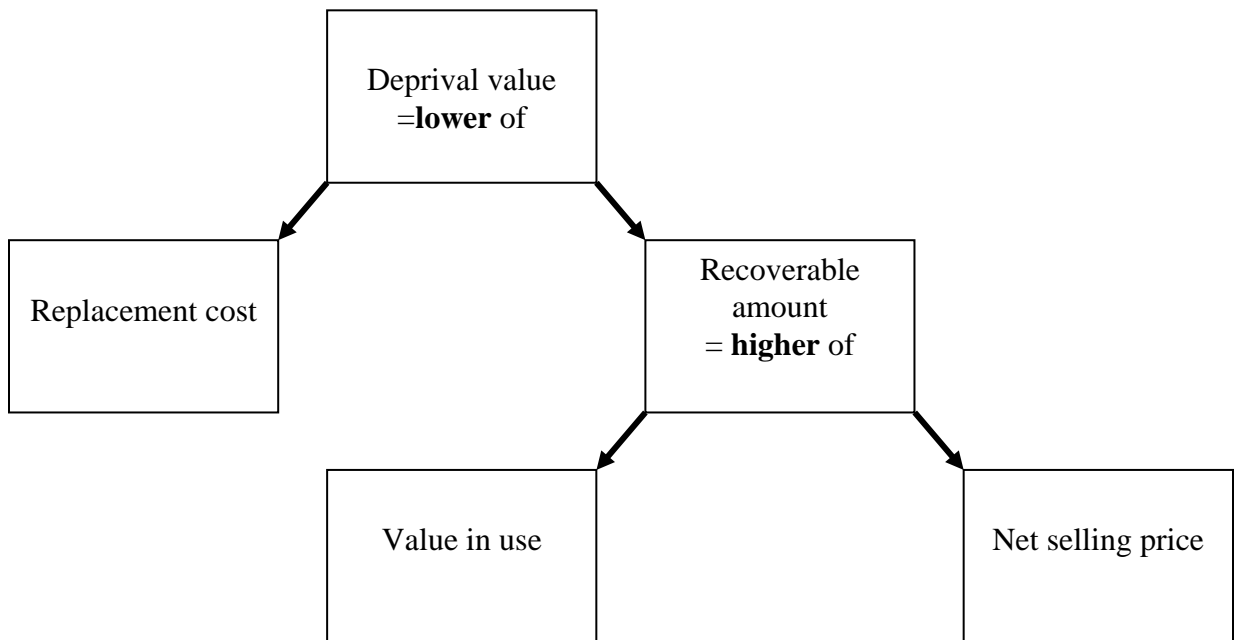
- 5.12 Recoverable amount, will, however, often be greater than the relevant measure of the asset, as it includes all the future contribution that the asset is expected to provide to the entity. For example, if an asset is acquired because it will enable cost savings to be achieved, those cost savings will typically exceed the cost of the asset, and it would not be relevant or representationally faithful to reflect them in the value of the asset.
- 5.13 The deprival value model therefore requires that the value of an asset cannot be stated at a higher amount than replacement cost.
- 5.14 If the entity were deprived of an asset that will provide benefits (or service potential) greater than its cost, it would replace it rather than lose that benefit. Fair compensation for the loss would be no more than replacement cost. Thus replacement cost represents the highest relevant measure of the asset.
- 5.15 In summary, under the deprival value model the measurement basis reflects the loss that the entity would sustain if deprived of the asset. This cannot be higher than the current cost of obtaining equivalent service potential (replacement cost), or lower than the amount that the entity can recover from the asset (recoverable amount). The choice of measurement base reflects the highest economic value that the entity can derive from the asset: replacement cost is selected where the asset is worth replacing, and net selling price is selected when it is not and the highest value will be obtained from immediate sale. Value in use is selected when an asset is not worth replacing but the value of its service potential is greater than that which would be derived from sale.

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flexibility, in that they show the amount that the entity can realize from the sale of existing resources to deploy in other activities and the value that a lender might attribute to the asset if it were to be pledged as security for borrowings.

- 5.16 Figure 1 provides a diagrammatic representation of the measurement bases for assets used in the deprival value model.

**Figure 1: The deprival value model for assets**



- 5.17 Replacement cost, value in use and net selling price are all current measurement bases. It follows that, where deprival value is used the financial statements are prepared on a current, rather than historical, basis.
- 5.18 Deprival value does not follow either an entry value or an exit value perspective in all cases. Rather, it selects an entry price (replacement cost) and an exit price (recoverable amount), depending on their relevance in specific circumstances.
- 5.19 Because the measurement basis that is applied depends on the entity's circumstances, the deprival value model can be said to use an entity-specific perspective rather than a market-based one. However, replacement cost and net selling price each refer implicitly to transactions in a market setting. And they should reflect the entity's economic constraints and opportunities rather than simply the expectations and intentions of the entity's management.
- 5.20 Because, under the deprival value model, replacement cost is used for assets to the extent it is recoverable, it is consistent with an operating capacity concept of capital. For assets stated at recoverable amount, the concept of capital is that implicit in the discount rate applied to future returns: the deficit or surplus will be the amount by which actual returns differ from those reflected in the recoverable amount. This suggests that, in principle, there may be a case for separately disclosing the results from assets stated at replacement cost and recoverable amount.



### Application of the Deprival Value Model to Liabilities: Relief Value

5.21 As with assets, measurement of liabilities requires selection of an appropriate measurement basis. Many of the considerations that arise are parallel, although some changes in terminology are needed: for example 'relief value' is used in place of 'deprival value'.

5.22 Application of the relief value model requires consideration of the following measurement bases:

- Assumption price: the price at which the entity would rationally be willing to assume the liability.
- Cost of Fulfillment: the cost of fulfilling the obligations represented by the liability. Where the obligation is financial, fulfillment will be making the required payments; where the obligation is to provide goods or services, fulfillment consists of providing those goods or services.
- Cost of release: the cost of obtaining release from the liability. Release may be obtained either by obtaining the consent of the party to whom the obligation is owed or by transferring the liability to a third party.

5.23 The above discussion of the application of the deprival value model to assets notes that a relevant measurement basis for assets:

- (a) cannot be lower than the maximum value that the entity can derive from the asset, but
- (b) cannot be greater than current replacement cost.

Because in many cases replacement cost will be lower than the maximum value that the entity can derive from the asset, it will be the appropriate basis.

5.24 For liabilities, the parallel principles are that a relevant measurement basis:

- (a) cannot be lower than the minimum burden that the liability represents to the entity, but
- (b) cannot be greater than the price at which the entity would rationally assume the liability, which is assumption price.

Because in many cases assumption price is higher than the minimum burden represented by the liability, it will be the appropriate basis.

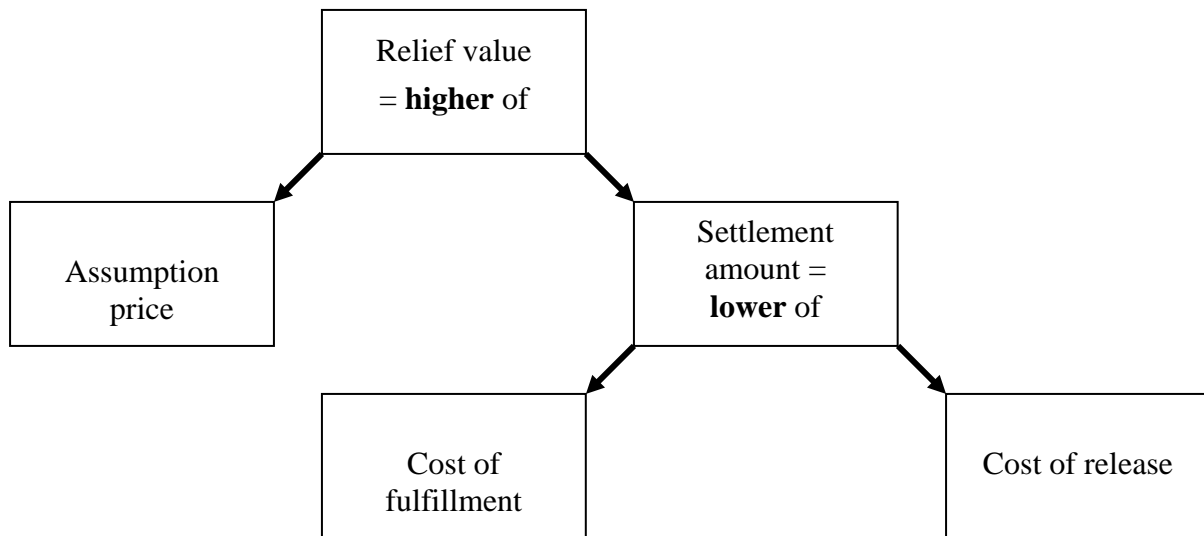
- 5.25 The concepts applicable to assets and liabilities may be arranged in parallel as set out in Table 2.

**Table 2: Concepts used in the deprival value model**

	<b>Assets</b>	<b>Liabilities</b>
<b>General concept</b>	<p>Deprival value:</p> <p>What amount would just compensate the entity for the loss of the asset?</p> <p><i>or, equivalently,</i></p> <p>What loss would the entity sustain if deprived of the asset?</p> <p><i>or, equivalently,</i></p> <p>What amount would the entity rationally pay to acquire the asset (if it did not already hold it)?</p>	<p>Relief value:</p> <p>What amount would the entity rationally pay to settle the liability?</p> <p><i>or, equivalently,</i></p> <p>What gain would the entity enjoy if were relieved of the liability?</p> <p><i>or, equivalently,</i></p> <p>What amount would the entity rationally accept to assume the liability (if it did not already have it)?</p>
<b>Entry or exit?</b>	Lower of entry and exit	Higher of entry and exit
<b>Entry value</b>	Replacement cost	Assumption price
<b>Exit value</b>	<p>Recoverable amount — higher of:</p> <p>Value in use</p> <p>Net selling price</p>	<p>Settlement amount —lower of:</p> <p>Cost of fulfillment</p> <p>Cost of release</p>

- 5.26 Figure 2 provides a diagrammatic representation of the measurement bases for liabilities used in the deprival value model.

**Figure 2: The deprival value model for liabilities**



*Settlement Amount*

- 5.27 In the context of assets, recoverable amount represents the future benefits (or service potential) that will be derived from an asset. Analogously, settlement amount is a quantification of the amount of the outflows required to settle a liability. Just as recoverable amount reflects the highest amount of an asset's benefits (value in use or net selling price), so settlement amount reflects the lowest cost of settlement, which will be either the cost of fulfillment or the cost of release. In both cases settlement amount includes all the costs that will be incurred including, for example, transaction costs.
- 5.28 For example, suppose a local government has undertaken to build retail outlets for a commercial property manager (perhaps as part of a major development of civic facilities), and the consideration is paid at the outset. As construction proceeds it becomes clear that the cost of construction is significantly higher than that initially anticipated. The cost of fulfillment is the cost of completing the retail outlets: the cost of release is the amount that would be required to obtain the consent of the other party to release the local government from its liability.
- 5.29 If a liability may be extinguished either by fulfilling at a cost of CU600, or by securing release at a cost of CU800, the cost of fulfillment is a more relevant measurement basis than the cost of release. Conversely, where seeking release is less costly than fulfillment (and assuming that seeking release is a feasible course of action for the entity), cost of release is a more relevant measure than cost of fulfillment. Just as with assets the choice between value in use and net selling price does not depend on the entity's intended use (as noted in paragraph 5.8

above), so for liabilities the settlement amount is (at least in principle) the lower of the cost of fulfillment and release, irrespective of the intentions of the entity.<sup>25</sup>

*Cost of Fulfillment*

- 5.30 The cost of fulfillment includes all costs that the entity will incur in fulfilling the obligations represented by the liability, assuming that it does so in the least costly manner. The costs include not only payments to the counterparty but also other costs that will arise from fulfilling the obligation.
- 5.31 Where the cost of fulfillment depends on uncertain future events, all possible outcomes are reflected in the estimated cost of fulfillment, which should aim to reflect all those possible outcomes in an unbiased manner.
- 5.32 Where fulfillment requires work to be done—for example where the liability is to rectify environmental damage—the relevant costs are those that the entity will incur. This may be the cost of doing the work itself, or of employing a contractor to do the work on behalf of the entity. However, the costs of employing a contractor are only relevant where employing a contractor is the least costly means of fulfilling the obligation.
- 5.33 The cost of fulfilling a liability is the value to the entity of resources that will be used in making fulfillment, and not necessarily their carrying amount.
- 5.34 Where fulfillment will be made by the entity itself, the fulfillment cost does not include any profit, because any such profit does not represent a use of the entity's resources. Where fulfillment amount is based on the charges of employing a contractor, the amount will implicitly include the profit required by the contractor, as the total amount charged by the contractor will be a demand on the entity's resources.<sup>26</sup>
- 5.35 Where fulfillment will not take place for an extended period, the costs need to be discounted to reflect the value of the liability at the reporting date. In some cases it is possible and appropriate to adjust the cash flows for risk before discounting at a risk-free rate. Alternatively, the discount rate is reduced to reflect the riskiness of the liability—the higher the risk, the lower the discount rate and hence the larger the liability at the reporting date. This is analogous to reflecting the riskiness of future returns in the discount rate used in a calculation of value in use.
- 5.36 It is questionable whether the cost of fulfillment should reflect the possibility that the entity may default on a liability. The issue of whether the measurement of a liability should reflect the entity's credit risk is discussed in Appendix A.

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<sup>25</sup> Judgement is sometimes required in practice to distinguish possible courses of action that are not feasible (and should therefore not be reflected in the selected basis of measurement) from those that, although feasible do not represent the manner of settlement that the entity intends to pursue.

<sup>26</sup> Analogously for assets, replacement cost would include the profit required by a supplier, but no profit would be included in the replacement cost for assets that the entity would replace by its own construction efforts.

*Cost of Release*

- 5.37 Cost of release refers to the amount that either (a) the creditor will accept in settlement of its claim; or (b) a third party would charge to accept the transfer of the liability. Where there is more than one way of securing release from the liability, the cost of release is that of the most economical.
- 5.38 Transferring a liability may be distinguished from entering into an agreement with another party that will fulfill the entity's obligation or bear all the costs stemming from a liability. For a liability to be transferred it is necessary that all of the creditor's rights against the entity are extinguished. If this is not the effect of an arrangement, the liability continues to exist and should continue to be reported. The arrangement may, however, result in a separate asset of the entity that represents its rights against the other party. For example, if an entity has an obligation under a lease to restore a property and pays a contractor to carry out the necessary work, payment gives rise to a right against the contractor, not a transfer of the liability (unless the lessor agrees to release the liability and obtains rights directly against the contractor).
- 5.39 For many liabilities it will be clear that transfer is not practically possible and cost of release will therefore be simply the amount that the creditor will accept in settlement of its claim. This is particularly the case in the public sector. This amount will be known if it is specified in the agreement with the creditor (for example, where a contract includes a specific cancellation clause). In some cases there may be evidence of the price at which liabilities may be transferred (for example in the case of some pension liabilities). In other cases cost of release will not be known, but adequate evidence may exist to show that it must be higher than cost of fulfillment (and therefore the settlement amount is cost of fulfillment).
- 5.40 Cost of release will usually be more than the cost of fulfillment. The party to which the obligation is owed will often attach a higher value to fulfillment than release and will therefore require a premium to accept immediate settlement. A third party will usually incur the same costs in fulfilling an obligation as the reporting entity and will only accept a transfer at a lower price if it has a competitive advantage. Thus the cases in which cost of release is the appropriate measurement basis may be expected to be relatively rare, but this may be the case, for example, where a contract has become onerous.
- 5.41 In considering whether cost of release is appropriate it is necessary to consider whether release in the envisaged manner is an option that is open to the entity in practice, having regard to any consequences of obtaining release, such as damage to the entity's reputation.

*Assumption Price*

- 5.42 Assumption price is the concept for liabilities that is analogous to replacement cost for assets. As is explained below, assumption price is most often relevant to exchange transactions carried out on arms-length terms, rather than non-exchange transactions.

- 5.43 In the context of an activity that is carried out with a view to profit, an entity will assume a liability only if the price it receives is greater than the cost of fulfillment or release (i.e. settlement amount). Once that amount has been paid, the entity has an obligation to its creditor.
- 5.44 Although typically the entity will expect to be able to fulfill its obligation and thereby extinguish its liability, it is an oversimplification to characterize the obligation as simply that of performing. More precisely, the entity's obligation is *either* to perform *or* to compensate the other party for any loss that might arise from the entity's failure to perform. (Compensation would at least include refunding the amount paid.) Thus stating the liability at fulfillment price would understate the liability, but assumption price provides a representationally faithful measure, reflecting the entity's accountability to its creditor for the amount that has been paid.<sup>27</sup>
- 5.45 Assumption price represents the amount that was accepted by the entity for assuming a liability: it is therefore usually reasonable to assume that it is the price that it would rationally accept for assuming a similar liability. It would charge a higher amount, if competitive pressures allowed it to do so, but it might be unwilling to accept a lower price.
- 5.46 Just as replacement cost is a current value so, conceptually, is assumption price. There are, however, serious practical problems in reflecting changes in prices in obligations that are stated at assumption price.
- 5.47 As noted in the Consultation Paper on Elements and Recognition, it is sometimes questioned whether items reported as "deferred outflows" are liabilities. It is possible that some such items can be seen as performance obligations that are measured at assumption price.
- 5.48 A consequence of stating performance obligations at the assumption price is that no profit is reported at the time the obligation is taken on. Profit is reported in the financial statements in the period of fulfillment (or release), as it is the difference between the revenue arising from satisfaction of the liability and the cost of settlement.
- 5.49 An entity may have a potential obligation to its customer that is larger than assumption price. If the entity has to seek release from a contract, the customer may be able to claim recompense for losses that it will sustain, as well as the return of any amounts paid. However, provided that the entity can settle the obligation by fulfillment, it can avoid such additional obligations and it is representationally faithful to report the obligation at assumption price. (This is analogous to the position where an asset will yield greater benefits than replacement cost where, as explained above, the deprival value model restricts the measurement to replacement cost.)

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<sup>27</sup> The IASB's recent Exposure Draft "Revenue from Contracts with Customers" (ED/2010/6) requires performance obligations when recognized to be measured at "the transaction price" which is equivalent to the "assumption price".

*Non-Exchange Transactions and Onerous Contracts*

- 5.50 Public sector entities may enter into non-exchange transactions that give rise to liabilities to transfer goods or provide services either for free or at a price that is not commensurate with the value of the goods and services to be provided. Similarly a contract, although originally entered into on arms-length terms, may become onerous when it becomes clear that settlement will now be more costly and exceeds the original assumption price. In such a case, the relief model suggests that the appropriate measurement basis for the liability is settlement amount: the liability should be restated to settlement amount and a loss should be recognized for the difference between that amount and the assumption price.
- 5.51 Because, as mentioned above, the settlement amount does not include an element for profit, no profit will be made when a liability measured at settlement amount is settled.

***Preliminary View 5: The deprival value model***

The deprival value model provides a rationale for selecting a measurement basis for assets and liabilities that is relevant in a particular case. However, because the deprival value model indicates only the most relevant measurement basis, it is necessary to consider the extent to which that basis embodies qualitative characteristics other than relevance.

## Appendix A

### The Measurement of Liabilities and an Entity's Own Credit Risk

- A1. Respondents' views are invited on the question of whether the amount at which a liability is stated in a public sector entity's financial statements should reflect the entity's own credit risk. This appendix summarizes the principal considerations on this issue.<sup>28</sup>
- A2. In the public sector context, some have argued that this issue is of limited significance. They have noted that the credit ratings of public sector entities are often high and subject to little change, as evidenced by the use of a rate paid on government bonds to approximate a risk-free rate. This argument may, however, be questioned in the light of recent market conditions.
- A3. The significance of the issue of an entity's own credit risk depends upon the measurement basis adopted.
- Where historical cost is used, the effect on an entity's own credit risk is reflected in the consideration received and therefore in the amount reported at initial recognition. No adjustment is generally made for changes in an entity's credit risk.
  - If market values are used, the effect of an entity's own credit risk is reflected at initial recognition and the effect of any changes is recognized in all subsequent periods.
  - Where liabilities are measured at the cost of fulfillment, and fulfillment will not take place for an extended period, it can be argued that incurring interest, at a rate that reflects the entity's own credit risk, is a necessary part of the cost of fulfillment.
  - Where liabilities are measured at assumption price or cost of release, it may be argued that an entity's own credit risk would be relevant to a current value.<sup>29</sup>

Any measurement basis could, however, be modified by specifying that it excludes the effect of an entity's own credit risk.

### The Case for Reflecting an Entity's Own Credit Risk

- A4. One of the arguments for current values is that they are generally more relevant than historical values because they reflect economic and financial conditions prevailing at the reporting date. An entity's own credit risk is one of the factors that affect the current value of its liabilities, and so the relevance of the amount of

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<sup>28</sup> Technically, credit risk relates to specific liabilities rather than the entity as a whole: an entity may have several liabilities whose credit risk differs because the terms (including the security pledged) differ. However, for simplicity, reference is made only to the credit risk of an entity in this Appendix.

<sup>29</sup> As noted in paragraph 5.46 there are serious practical problems in using a current assumption price.



the liability is enhanced if it is stated at an amount that reflects the entity's own credit risk.

- A5. An entity might issue a liability in an arm's-length transaction that requires it to pay CU100 in two years' time in return for consideration of CU91. The amount of the discount (CU9) reflects the appropriate charge for the time value of money, having regard to the entity's credit risk. One year later, the liability has a remaining maturity of one year, and the entity might expect (assuming no general changes in interest rates) to be able to issue a similar liability with that maturity for CU95. However, the amount that would be received will have changed if the entity's credit rating has changed: if it has deteriorated it would receive a lower amount, and if it has improved the amount would be greater. Unless the measure of the liability is updated to reflect changes in the entity's own credit risk, it is possible that it might have two identical liabilities (one issued a year ago and one newly issued) that are stated at different amounts. This is contrary to the qualitative characteristic of comparability, which requires that similar items are reported in a similar manner. This suggests that it is necessary to reflect changes in an entity's own credit risk if all relevant circumstances are to be captured in the reported amount.
- A6. Reflecting changes in an entity's own credit risk has implications that seem paradoxical. If the entity's credit risk (and therefore, presumably, its financial condition) has deteriorated, the result of reflecting changes in that risk is that a gain is reported, as the liability is now reported at a lower amount: conversely a loss is reported if the credit risk improves.
- A7. Those who support reflecting an entity's own credit risk, however, do not see this as anomalous. They note that, as an entity's financial condition deteriorates, the value of its assets, as well as its liabilities, will fall. The gain on its liabilities will be offset by losses on its assets, although those losses may not be recognized in the financial statements (for example, if they relate to unrecognized assets such as some intangibles). Parallel considerations apply where the entity's financial condition improves.
- A8. Another rationalization for these gains and losses is that they represent transfers of value between an entity's owners and its creditors. It can be argued (building on the assumption that the total value of an entity is unaffected by its capital structure) that as the value of the debt changes due to changes in credit risk there is an equal and opposite increase in the value of ownership interest.<sup>30</sup> This might suggest that it is appropriate to report gains and losses as the credit risk of an entity changes. Some who hold this view maintain that, because these gains and losses relate to changes in the value of the ownership interest and do not affect the

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<sup>30</sup> Because public sector entities have no equity investors, some would consider that arguments that rely on transfer of wealth between creditors and owners have no application in the public sector context, because public sector entities do not have owners whose position parallels that of shareholders in the private sector.

entity itself, they should be reported as a change in ownership interest, rather than reflected in the surplus or deficit for the year.

- A9. This last view is similar (but not identical) to that taken in the IASB's recent Exposure Draft ED/2010/4 "Fair Value Option for Financial Liabilities" (May 2010). That Exposure Draft proposes that, for certain liabilities, the total change in fair value should be presented in profit or loss, and that the amount of that change attributable to changes in credit risk should be presented in other comprehensive income, with an offsetting entry in profit or loss.

### **The Case Against Reflecting an Entity's Own Credit Risk**

- A10. Others question whether including the effect of an entity's own credit risk in the measurement of liabilities provides relevant information. They believe that the counter-intuitive effects noted in paragraph A6 above are not representationally faithful of the entity's financial condition. They note that it is only in relatively rare circumstances that an entity is able to take advantage of a decline in its own credit risk by redeeming a liability for less than that which is contractually due, and this may be particularly the case in the public sector.
- A11. It may also be reasoned that the interest rate implicit in liabilities is greater than a risk-free rate only because of the possibility of default. From the perspective of the entity the possibility of default is irrelevant, and so an entity's own credit risk should not be reflected in its financial statements. To do so is inconsistent with the going concern assumption on which financial statements are based.
- A12. As noted above, when a liability is issued for a consideration, the entity's credit risk affects the amount that is received in exchange for its issue. Those who take the view that the carrying amount of a liability should not reflect changes in an entity's credit risk therefore have to consider what should be done when a liability is issued in a market transaction.
- Some would suggest that, consistent with the view that an entity's own credit risk is irrelevant in the preparation of its financial statements, the effect of the entity's own credit risk should be removed from the amount initially recognized. They would therefore adjust the amount of the liability to a risk-free basis, which would increase its reported amount: thus a loss would be reported when a liability is issued in a market transaction.
  - Others would agree that it is appropriate to reflect an entity's own credit risk in the initial recognition of a liability that is issued in a market transaction, but not to reflect subsequent changes. They would acknowledge that some non-comparability would result between liabilities issued at different times, and between liabilities issued in a market transaction and other liabilities. However, they would suggest that there is no superior solution available, especially given the difficulties of obtaining objective information on market perceptions of an entity's own credit risk.

**Appendix B**

**Assets that May be Sold for an Alternative Use**

- B1. Replacement cost (as defined in this paper) reflects the cost of the service potential that the entity is able to use. As a consequence replacement cost may understate the value of an asset if it has alternative uses that could be exploited by others. For example, if a government department is located in a building in a prime central business district but could function equally well at a less valuable remote location, replacement cost is the cost of a building in that remote location. Arguably, replacement cost would, in such a case, not provide a relevant measure of the value of the asset that is used in the entity's operations, because the entity could sell the present asset and obtain equivalent service potential at current replacement cost.
- B2. This may be distinguished from the case where it is necessary to carry out an activity in the current location, (which may be the case, for example, for a school or hospital). In such a case the full value of that asset relates to that activity, and not to an alternative use. This may be the case even if the market value of the asset is very high and the current activity yields little or no cash flow. Replacement cost, carefully applied, deals appropriately with such situations.
- B3. The strength of the evidence that the value could actually be obtained from sale is relevant. Possible sales for alternative uses will range from the probable to the speculative, or even to the fanciful. The value that might be obtained from an alternative use would also be reduced by the costs of relocation and disruption to activities that would be caused by a move to alternative premises. The approach to be adopted may also be affected by whether the asset is considered as a single unit or, for example, land and improvements are assessed separately.
- B.4 This suggests that incremental value relating to an alternative use might only be reflected where there is a high degree of evidence to support it, for example where the entity is planning disposal of the asset and has received professional advice in that connection.
- B.5 In other cases, apparent incremental value due to a possible alternative use may be best dealt with by supplementary disclosure either in the notes to the GPFSs or elsewhere in GPFRs.

**DRAFT CONSULTATION PAPER**  
**CONCEPTUAL FRAMEWORK FOR GENERAL PURPOSE**  
**FINANCIAL REPORTING BY PUBLIC SECTOR ENTITIES:**  
**MEASUREMENT OF ASSETS AND LIABILITIES**  
**IN FINANCIAL STATEMENTS**

**General Introduction**

The Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities (the Conceptual Framework) will establish and make explicit the concepts that are to be applied in developing IPSASs and other documents that provide guidance on information included in general purpose financial reports (GPFRs).

IPSASs are developed to apply across countries and jurisdictions with different political systems, different forms of government and different institutional and administrative arrangements for the delivery of services to constituents. The IPSASB recognizes the diversity of forms of government, social and cultural traditions, and service delivery mechanisms that exist in the many jurisdictions that may adopt IPSASs and has developed this Conceptual Framework to respond to and embrace that diversity.

**The Accrual Basis of Accounting**

The IPSASB encourages public sector entities to adopt the accrual basis of accounting. This Exposure Draft deals with concepts that apply to general purpose financial reporting (hereafter referred to as financial reporting unless identified otherwise) under the accrual basis.

Under the accrual basis of accounting, transactions and other events are recognized in financial statements when they occur (and not only when cash or its equivalent is received or paid). Therefore, the transactions and events are recorded in the accounting records and recognized in the financial statements of the periods to which they relate.

Financial statements prepared on the accrual basis inform users of the financial statements of past transactions involving the payment and receipt of cash during the reporting period, obligations to pay cash or sacrifice other resources of the entity in the future and the economic resources of the entity at the reporting date. Therefore, they provide information about past transactions and other events that is more useful to users for accountability purposes and as input for decision making than is information provided by the cash or other bases of financial reporting.

The IPSASB recognizes that in many jurisdictions governments and other public sector entities currently adopt the cash basis of accounting (or a near-cash or modified-cash basis of accounting). The IPSASB will consider the concepts that underpin the cash basis of financial reporting after it has developed the Conceptual Framework for the accrual basis

### Project Development

The development of this Conceptual Framework is a collaborative project that the IPSASB is leading in conjunction with a number of national standards setters and similar organizations with a role in establishing financial reporting requirements for governments and other public sector entities in their jurisdictions.

Many of the IPSASs currently on issue are based on International Financial Reporting Standards (IFRSs) issued by the International Accounting Standards Board (IASB), to the extent that the requirements of those IFRSs are relevant to the public sector. The IPSASB's strategy and operational plan also includes maintaining the alignment of IPSASs with IFRSs where appropriate for the public sector. (Staff Note – to be updated to reflect any further development of the IPSASB strategy and operational plan for 2010 and beyond.)

The IASB is currently developing an improved Conceptual Framework for private sector business entities in a joint project with the Financial Accounting Standards Board (FASB) of the USA. Development of the IASB's Conceptual Framework is being closely monitored. However, development of the IPSASB's Conceptual Framework is not an IFRS convergence project, and the purpose of the IPSASB's project is not simply to interpret the application of the IASB Framework to the public sector. The purpose of the IPSASB's Conceptual Framework project is to develop concepts, definitions, and principles that respond to the objectives, environment and circumstances of governments and other public sector entities and, therefore, are appropriate to guide the development of IPSASs and other documents dealing with financial reporting by public sector entities.

The concepts underlying statistical financial reporting models, and the potential for convergence with them, will also be considered by the IPSASB in developing its Conceptual Framework. The IPSASB is committed to minimizing divergence from the statistical financial reporting models where appropriate.

### Consultation Papers and Exposure Draft

Although all the components of the Conceptual Framework are interconnected, the project is being developed in phases. The components of the Conceptual Framework have been grouped, and are being considered in the following sequence:

Phase 1 – the objectives of financial reporting, the scope of financial reporting, the qualitative characteristics of information included in GPFRs, and the reporting entity and group reporting entity;

Phase 2 – the definition and recognition of the “elements” that are reported in financial statements;

Phase 3 – consideration of the measurement basis (or bases) that may validly be adopted for the elements that are recognized in the financial statements; and

Phase 4 - consideration of the concepts that should be adopted in deciding how to present financial statements and other components of GPFRs.

The project initially involves the development and issue for comment of Consultation Papers to draw out key issues and explore the ways in which those issues could be dealt with. The Consultation Paper dealing with Phase 1<sup>1</sup> was issued in September 2008. Consultation Papers dealing with Phase 2 and Phase 3 are being issued at the same time as this Exposure Draft (ED) and a Consultation Paper dealing with Phase 4 is under development.

It is the IPSASB's current intention to issue EDs dealing with each of Phases 2, 3 and 4 of the Conceptual Framework after consideration of responses to the Consultation Papers dealing with those Phases. The process for developing the finalized Conceptual Framework will be determined in light of the responses received to Consultation Papers and EDs, and may include issue of an umbrella exposure draft of the full Conceptual Framework. (Staff Note – to be updated as timing of issue of this exposure draft and Phase 2 and 3 Consultation Papers and any development in the process become clearer.)

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<sup>1</sup> Consultation Paper “*Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities: The objectives of financial reporting; The scope of financial reporting; The qualitative characteristics of information included in general purpose financial reports; The reporting entity.*”

## Executive summary

This Consultation Paper forms part of the IPSASB's project to develop a Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities. It explores the measurement bases that may validly be adopted for the elements that are recognized in public sector general purpose financial statements (GPFSs). The term 'measurement basis' refers to the concept that is used in determining the amount at which an asset or liability is stated in the GPFSs. Examples of measurement bases are historical cost, market value and replacement cost.

It is envisaged that the IPSASB Framework will identify factors that should be considered in choosing the measurement basis to be required for particular assets and liabilities in specific circumstances, rather than identify a single measurement basis that is appropriate in all circumstances. .

Measurement bases may be classified according to whether they:

- reflect historical or current attributes of an asset or liability;
- represent an entry or an exit perspective; and
- reflect either a market or an entity specific perspective.

**Historical cost** represents an historical, entry perspective, entity-specific value. Compared to other measurement bases, it is generally simple to apply and has a high degree of verifiability, although, as with other measurement bases, there are important limitations on the extent to which it has these qualities. It may, however, not be as relevant as other measurement bases, particularly where price changes are significant.

**Market value** represents a current, market perspective, which may be either an entry or an exit value. Market values have many virtues for assets and liabilities that are traded on satisfactory markets. In some cases a market price may not be directly observable, but market information may be used to estimate market values. However, the relevance of market values is challenged for highly specialized assets, which are frequently encountered in the public sector.

**Replacement cost** represents a current, entry perspective, and is entity-specific. Where available, it is likely to provide relevant information, particularly for assets that are held in order to provide services. In some cases, however, it may be complex and costly to apply and rely on subjective judgments that limit the verifiability and comparability of the financial statements.

**The deprival value model** provides a means of selecting the most relevant measurement basis, which is that which would just compensate the entity for the loss of the asset. It concludes that this amount will normally be replacement cost (an entry value) except where the asset is not worth replacing: in that case an exit value, recoverable amount, defined as the higher of value in use and net selling price, should be used. The deprival value model may also be applied to liabilities (with some changes in terminology). Under the deprival value model, liabilities are stated at relief value, which is generally settlement amount, an exit value that is equivalent to the lower of cost of fulfillment and

cost of release. For liabilities that are entered into for consideration an entry value, assumption price, is used if higher than settlement amount.

Because the deprival value model indicates only the most relevant measurement basis, it is necessary to consider the extent to which that basis embodies qualitative characteristics other than relevance.

Appendices A and B provide a discussion of specific issues. Respondents are invited to express their views on these issues, including whether they should be dealt with in the Conceptual Framework or in the development of specific IPSASs. These issues are:

- the measurement of liabilities and an entity's own credit risk; and
- assets that may be sold for an alternative use.



## 1 Introduction

- 1.1 ~~The IPSASB's Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities (the IPSASB Framework) will establish the concepts that are to be applied in developing IPSASs and other documents that provide guidance on information included in general purpose financial reports (GPFRs). The IPSASB Framework will underpin IPSASs that apply across countries and jurisdictions with different political systems and forms of government.~~
- 1.2 ~~Some IPSASs currently on issue are based on the concepts and definitions in IFRSs, and IPSASB has a continuing commitment to harmonize with IFRS where appropriate. IPSASB is therefore closely monitoring developments in the IASB Framework, and will draw on the work of the IASB where it is relevant to the public sector. However, the primary objective of the IPSASB's project is to develop a public sector conceptual framework that makes explicit the concepts, definitions, and principles that underpin the development of IPSASs and not simply to interpret the application of the IASB Framework to the public sector. At the time of issue of this Consultation Paper the IASB has not issued any proposals on measurement issues for its Framework.~~
- 1.31 This Consultation Paper ~~is the third in a series of papers being developed on the IPSASB Framework. It~~ explores the measurement bases that may validly be adopted for the elements that are recognized in public sector general purpose financial statements (GPFSs). The term 'measurement basis' refers to the concept that is used in determining the amount at which an asset or liability is stated in the GPFSs.<sup>2</sup> Examples of measurement bases are historical cost, fair-market value and net selling price.
- 1.42 It is desirable ~~that for~~ the measurement bases used in GPFSs ~~are to be~~ consistent with those used for statistical purposes. To assist in comparing the content of this paper with ~~those the bases~~ used for statistical purposes, relevant requirements of the Government Finance Statistics Manual 2001 ('GFSM 2001') are highlighted.<sup>3</sup>

### Objectives of this Paper

- 1.53 This Consultation Paper explores different measurement bases, their relationship to the objectives of GPFRs and the qualitative characteristics. ~~This Consultation Paper~~ It only deals only with the selection of measurement bases in the context of GPFSs. Other measurement bases may be appropriate as supplementary disclosures or elsewhere in GPFRs.
- 1.6 ~~The IPSASB Framework will not contain requirements for the measurement basis to be adopted in specific circumstances: this is dealt with in individual IPSASs~~

<sup>2</sup> The term ~~"measurement basis"~~ "basis" is used in this Paper to mean the same as ~~"measurement attribute"~~ "attribute".

<sup>3</sup> The Task Force on Finance Statistics (TFSS) has indicated that it is expected that *The Public Sector Debt Statistics Guide* (planned for release in early 2011) will differ from GFSM 2001 only in minor ways. (See [www.tffs.org/method.htm](http://www.tffs.org/method.htm))

~~which deal with specific transactions and events and are themselves subject to full due process. Appendix A to this paper illustrates some possible applications of the concepts in this paper in accounting standards.~~

- 1.74 It is envisaged that the IPSASB Framework will identify factors that should be considered in choosing the measurement basis to be required for particular assets and liabilities in specific circumstances. It is not expected that the IPSASB Framework will identify a single measurement basis that is appropriate in all circumstances. Such a single approach might be thought to be ideal, as the relationship between various amounts reported in the GPFSSs would be clear: in particular, the amounts of different assets and liabilities could be added to provide meaningful totals. However, there is no single measurement basis that is appropriate in all circumstances. For example, in financial statements prepared on an historical cost basis, it is necessary to write down surplus or obsolete assets to net selling price; if financial statements are prepared on a market values basis, substitutes will be required for those assets and liabilities for which market values are unavailable. It is also necessary to select different measurement bases in different circumstances to achieve an appropriate balance, or trade-off, between the qualitative characteristics.
- 1.85 It is possible, however, to minimize the drawbacks of using different measurement bases. This requires that different measurement bases are selected only where this is justified by economic circumstances, and hence that assets are reported on the same basis where circumstances are similar. In addition, much of the most important information conveyed by GPFSSs relates to components rather than aggregate amounts, and good presentation and disclosure can ensure that the measurement bases used and the amounts reported on each basis are clear.

**Preliminary View 1: No single measurement basis**

The Framework should identify factors that are relevant in selecting a measurement basis for particular assets and liabilities in specific circumstances. It is expected that a number of different bases will continue to be used in GPFSSs.

- ~~1.9 Where an asset is acquired in an arm's length exchange transaction, it is often the case that the exchange price corresponds to that of the measurement basis which will be used to measure the asset in subsequent reporting periods (for example, historical cost, replacement cost and market value). Where this is not the case, a difference will arise, which is sometimes described as a 'day one' profit or loss. The treatment of this difference is not addressed in this Consultation Paper. The Paper does, however, address the treatment of transaction costs under various measurement bases.~~

**Features of Measurement Bases**

- 1.106 The following highlights some of the respects in which various measurement bases differ from each other.
- Measurement bases are either **historical** or **current**. When a historical measurement basis is used, assets and liabilities are stated at the amount of an attribute at a past date: in contrast under a current measurement basis,

the measurement reflects the economic and financial environment prevailing at the reporting date.<sup>4</sup>

- Measurement bases may ~~be-use~~ either **entry** or **exit** values. An entry basis reflects the consideration payable (or receivable) for the acquisition (or assumption) of an asset (or liability). An exit basis reflects the amount that will be derived from the asset either from its sale or from its use by the entity. In a diversified economy entry and exit values differ as entities typically acquire assets from specialized suppliers, and ~~do not have the same ability to~~ cannot sell the asset at the same price as the party from which the asset is acquired. (A familiar example is an individual's inability to sell a ~~used~~ car at the price that s/he has recently paid the dealer.) If exit values are used in such a case a difference will arise—sometimes described as a 'day one' profit or loss—on the initial recognition of an asset. Related to the choice between entry and exit values is whether the measurement basis requires transaction costs to be treated as part of the entry or exit value of assets and liabilities.<sup>5</sup>
- Measurement bases may ~~represent-adopt~~ either a market values or an entity-specific valuesperspective. ~~Market values~~A market perspective may be argued to promote comparability in that the same asset (or liability) can be expected to be reported at the same amount by different entities whereas measurement bases that take an entity-specific perspective values may will differ between different entities, although arguably they may be more relevant. In practice the distinction between market ~~values~~ and entity-specific ~~values perspectives~~ is not always clear-cut. It would seem, for example, that a market ~~value perspective~~ can only be relevant where the entity has access to the market where the price is quoted. And although a cost price is in principle entity-specific, it will often reflect a transaction in a market setting.
- One objection to the use of values that use an 'entity-specific' ~~values perspective~~ is that they reflect the intentions or expectations of the entity or its management and so are subjective and lack verifiability and comparability. This is implicit, for example, in the definition of "entity-specific value—value" given in IPSAS 17 'Property, Plant and Equipment'.<sup>6</sup> However, as the term is used in this paper "entity-specific specific" refers to measurement bases that are bounded by the economic and ~~existing-current~~ policy constraints that limit the possible uses of the asset by the reporting entity (and may reflect economic opportunities that

<sup>4</sup> GFSM 2001 requires the use of current values (paragraph 7.22).

<sup>5</sup> GFSM 2001 requires the use of entry values for all assets, including transaction costs, except that the cost of transfer of financial assets are excluded (paragraph 7.22).

<sup>6</sup> IPSAS 17 defines the term "entity-specific value," as "the present value of the cash flows an entity expects to arise from the continuing use of an asset and from its disposal at the end of its useful life or expects to incur when settling a liability." (Emphasis added.)

would not be available to other parties), and not simply expectations and intentions.

- | 1.117 Some find it helpful to relate the selection of a measurement basis to the choice of a concept of capital.<sup>7</sup> The surplus or deficit of an entity in an accounting period represents the difference between its capital at the beginning and end of a period. A change in net assets will be reflected in surplus or deficit to the extent that it represents a change in that capital, under the concept adopted.
- | 1.128 If the measurement basis is selected so as to be appropriate for the selected concept of capital, the articulation of the financial statements is complete: the change in reported net assets equals the reported surplus or deficit for the year (subject to transactions with owners, in their capacity as owners). In such a case, the relationship between the amounts of items reported in the statement of financial position and those reported in the financial performance statement is transparent. Thus the selection of a measurement basis for financial reporting is generally consistent with a particular concept of capital. The discussion in the following sections explains the relationship of each measurement basis to an associated concept of capital.<sup>8</sup>

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<sup>7</sup> In this context, 'capital' is taken to be equivalent to net assets, and is therefore after deduction of borrowings and all other liabilities.

<sup>8</sup> In some models of financial reporting it is necessary to distinguish between the concept of capital (used to guide the selection of measurement bases for assets and liabilities) and the concept of capital maintenance (which is used to determine the nature of the surplus or deficit for the accounting period). A common example of this is where a 'real terms' concept of capital maintenance, which requires that capital is maintained after allowing for the effect of general price increases, is used. As reflecting general price increases in the measurement of specific assets and liabilities does not provide useful information (as the prices of specific assets will not change by the same amount as general prices) a real terms adjustment is made in arriving at the surplus or deficit for the year. The cumulative amount of such adjustments is then reported as a component of equity, separate from accumulated surplus or deficit. In the context of commercial enterprises, a real terms system may be useful because it allows shareholders to compare the growth in the business with the change in wealth necessary to maintain their consumption. However, this seems to have little relevance in the public sector context.

1.9 Later sections of this paper discuss measurement bases that are often used in practice or advocated in theory. To enable an assessment of their suitability for use in GPFSS, bases that are relatively unfamiliar require a fuller discussion than those that are established. Thus the length of the treatment of each basis in this paper does not reflect any view as to its suitability.

1.1310 Table 1 provides an overview of the principal measurement bases that are discussed in the following sections of this paper, and indicates whether they are historical or current; use an entry or exit perspective; reflect the perspective of the market or the entity; and their associated concept of capital. ~~These are the bases that are those that are most often used in practice or advocated in theory.~~

**Table 1: Features of measurement bases**

<u>Section</u>	<u>Measurement basis</u>	<u>Historical or current?</u>	<u>Entry or exit?</u>	<u>Market or entity-specific?</u>	<u>Capital concept</u>
2	Historical cost	Historical	Entry	Entity-specific	Financial capital
3	Market value	Current	May be either	Market	Market value (ability to earn a market return)
4	Replacement cost	Current	Entry	Entity-specific	Operating capacity

<b>Measurement basis</b>	<b>Historical or current?</b>	<b>Entry or exit?</b>	<b>Market or entity-specific?</b>	<b>Capital concept</b>
Historical cost (Section 2)	Historical	Entry	Entity-specific	Financial capital
Market value (Section 3(a))	Current	Ambiguous	Market	Market value (ability to earn a market return)
Fair value (Section 3(b))	Current	Exit	Market	Unclear
Replacement cost (Section 5)	Current	Entry	Entity-specific	Operating capacity

1.11 Section 5 discusses the deprival value model. It does not prescribe a single measurement basis, but rather a means by which a choice may be made in particular circumstances between replacement cost and recoverable amount, which is defined in terms of value in use and net selling price<sup>9</sup>.

1.14 ~~The discussion of each basis aims to be sufficient to enable an assessment to be made of its suitability for use in GPFSS in appropriate circumstances. This requires a fuller discussion of those bases which are relatively unfamiliar than~~

<sup>9</sup> 'Net selling price' is similar to the concept of 'fair value less costs to sell' used in IPSASs, except that it is more explicit that the selling price will be what the entity would expect to obtain rather than that which might prevail on a (possibly hypothetical) market.

~~those that are established. Thus the extent of the treatment of each basis does not reflect any view as to its suitability.~~

- ~~1.15 The deprival value model does not prescribe a single measurement basis, but rather a means by which a choice may be made between replacement cost and recoverable amount, which is defined in terms of value in use and net selling price. These are introduced in the discussion of deprival value in Section 4. Section 5 provides further discussion of the concept of replacement cost.~~

### The objective of financial reporting and the qualitative characteristics

- ~~1.16~~<sup>12</sup> The discussion in the remainder of this paper considers each basis in the context of the objective of financial reporting and the qualitative characteristics.
- ~~1.17~~<sup>13</sup> As is explained in CP#1, the objective of financial reporting by public sector entities is to provide information about the reporting entity that is useful to users of GPFRs for accountability purposes and as input for decision-making purposes (including resource allocation, political and social decisions). Amongst those identified by CP#1 as users of GPFRs are: recipients of services; providers of resources; and the legislature.
- ~~1.18~~<sup>14</sup> In order to provide a proper basis for the assessment of accountability it is important that assets are not understated (or liabilities overstated). A representationally faithful statement of the cost of providing services requires that the full value of assets that are consumed in service provision is included in that cost. It follows, from this, for example, that an asset should not be stated at a nil value, even if it is held for the purpose of distributing it free of charge to service recipients. On the other hand, accountability also requires that losses are reported promptly in the period in which they arise. In particular this means that assets are not stated at a higher amount than that which can be derived from their use in providing services, or from their sale.
- ~~1.19~~<sup>15</sup> CP#1 also explains that, ~~in order~~ to fulfill these objectives, information should possess the qualitative characteristics of relevance, faithful representation, understandability, timeliness, comparability and verifiability. Constraints on information included in financial statement~~GPFRs~~ are materiality, cost and the need to achieve an appropriate balance between the qualitative characteristics.

**Staff note: References to CP#1 above to be updated/amended as appropriate.**

## **2 Historical Cost**

- 2.1 Under the historical cost basis, assets are reported at the cost incurred on their acquisition. Transaction costs—that is, costs other than the purchase price incurred in connection with the acquisition of the asset—are generally included in cost for this purpose.
- 2.2 Like assets, liabilities are generally stated on the historical cost basis at the amount ~~of the obligation assumed~~received in the transaction under which they

- arise obligation is assumed. (Strictly, consistency would require transaction costs to be deducted from that amount, but it is possible that practice on this varies.)
- However, where the time value of a liability is material (that is, where the length of time before payment falls due is significant), the amount of the future payment is discounted so that, at the time a liability is first recognized, it represents the present value of that liability at that time. (Where the liability is issued for cash, the net proceeds will be equal to the discounted amount.) The discount is amortized over the life of the liability, with the result that the liability is stated at the amount of the required payment when it falls due.
- 2.3 Historical cost clearly represents a historical, entry-value perspective. It is also entity-specific: assets are reported at the cost to the entity of their acquisition transaction rather than the price at which it might be reasoned another party might pay.
- 2.4 Historical cost is the most widely used basis of financial reporting, and therefore has the advantage of familiarity. Because historical cost is usually recorded where assets are acquired by purchase, it is often relatively objective and simple to apply. Particularly in the context of revenues and expenses, historical cost is easily understood.
- 2.5 Compared to the available alternatives, historical cost information generally has a high degree of verifiability. Where an asset is acquired in a single transaction for cash, the historical cost is completely verifiable. Because of the simplicity of historical cost, the information can probably be prepared more quickly than that prepared using other bases, and so its use contributes to timeliness, and minimizes cost. Information prepared on a historical cost basis is also understandable, because it generally relates to actual transactions undertaken by the entity. These advantages, however, do not apply without qualification in all cases.
- 2.6 These advantages, however, do not apply without qualification in all cases. In the public sector, assets are sometimes acquired by donation, contributed, or provided on subsidized terms, or in exchange for other non-cash assets. In these cases, strict application of historical cost may not faithfully represent the value of the assets acquired, and it may therefore be necessary to choose an alternative measurement basis as a proxy for historical cost. Similarly liabilities do not always arise from transactions or events that specify the amount of the obligation (for example a liability to pay compensation for medical negligence): in these cases as well a departure from a strict application of the historical cost basis is necessary in order to provide a representationally faithful depiction of the liability.
- 2.7 The following are examples of other issues that arise in determining the amount to be recognized initially under historical cost when assets are not purchased in a single straightforward transaction:
- IE1. Transaction costs: In addition to the purchase price of an asset, other costs may be incurred in connection with its acquisition (for example, legal fees and taxes). It is necessary to determine which costs are sufficiently



directly associated with the purchase to justify their inclusion in the assets's historical cost ~~of the asset~~.

IE2. Assets constructed by the entity: ~~where~~ Where an asset is constructed by the entity itself many costs (for example, labor, materials, energy and ~~general~~ overheads) ~~will~~ have to be allocated, and the subjectivity of this may be questioned. A particularly difficult issue is the treatment of borrowing costs.

IE3. Basket transactions: ~~where~~ Where several assets are acquired in a single transaction the price paid must be allocated to the individual assets.

2.8 Other issues arise in subsequent accounting periods ~~under historical cost~~. For example:

IE4. Depreciation: ~~in~~ In the case of an asset that will be used for several accounting periods, the historical cost needs to be allocated to accounting periods. In a simple case for an asset with a relatively short useful life, and which may plausibly be ~~said~~ assumed to yield equal service over its life, a simple straight-line allocation may be satisfactory, but ~~there are in~~ many cases ~~where~~ a more sophisticated approach may be ~~required~~ necessary, which will increase complexity and subjectivity.

IE5. Flow assumptions: ~~where~~ Where many similar assets are held, flow assumptions such as first in first out ('FIFO') or average cost are generally employed ~~where when using~~ historical cost ~~is used~~. These essentially arbitrary conventions are necessary on practical grounds, and may improve the relevance of financial information, but are a departure from ~~a~~ strict adherence to historical cost.

2.9 There are also some practical difficulties with historical cost measurement. Records of historical cost may not always be available, especially where assets have been owned for many years and were acquired before the introduction of accrual accounting. In these cases, if historical cost is to be used as the measurement basis, an estimate of historical cost will be required, for example by reference to price indices. The subjectivity of such estimates further detracts from the objectivity of historical cost measurement. Estimates of an asset's useful life need to be kept under constant review: failure to do so may result in an asset's being fully depreciated whilst still in use.

2.910 Although some of these issues also arise under other measurement bases, they are sometimes neglected in discussions of historical cost. ~~These issues~~ However, they are particularly relevant to an assessment of the usefulness of historical cost, because they affect an assessment of its claimed objectivity and simplicity, and hence ~~therefore a~~ high degree of verifiability, understandability and low cost. ~~Although some of them also arise under other measurement bases, they are sometimes neglected in discussions of historical cost.~~

2.10 ~~Records of historical cost may not always be available, especially in the case of assets that have been owned for many years and were acquired before the introduction of accrual accounting. In these cases, if historical cost is to be used~~



- ~~as the measurement basis, an estimate of historical cost will be required, for example by reference to price indices. The subjectivity of such estimates further detracts from the objectivity of historical cost measurement.~~
- 2.11 CP#1 notes that users of GPFSs require information on the amount and type of resources used in the provision of services, and whether the use of resources is consistent with approved budgets. Historical cost information may be particularly suitable for comparing costs incurred against budgets because budgets do not usually explicitly allow for changes in prices where they cannot be forecast reliably. ~~because the reported amounts represent the result of transactions, measured at their transaction prices.~~ The reported amounts will ~~therefore be~~ readily recognizable by the budget holder, because the reported amounts represent the result of transactions, measured at their transaction prices. ~~and because budgets do not usually allow explicitly for changes in prices where they cannot be forecast reliably.~~
- 2.12 It may be reasoned that historical cost provides a representationally faithful measure of the cost related to the use of assets specifically held for the provision of goods and services, because it reflects the actual cost of the resources used. This may be seen as consistent with the role of government in collecting resources from society and using those resources in the provision of goods and services for the benefit of society as a whole.
- 2.13 Historical cost information reflects a financial concept of capital: a surplus is reported if the income-revenue for the period exceeds the historical cost of the assets consumed in providing services in the period. In other words, if the historical cost of ~~an entity's~~ the assets consumed equals the amount of revenues, the financial statements will show a break even result.
- 2.14 However, under historical cost reporting, the cost of services provided is reported at prices prevailing at the time when the assets used ~~in their provision to provide them~~ were originally acquired. Thus gains and losses that are attributable to the price changes during the period in which assets are held ~~“(“holding gains and losses”)~~ are not recorded when they arise. Because information on the cost of services is reported in historical prices, it is not as relevant as information that reflects current prices to the assessment of the likely future resource needs, that is, whether the same service levels are likely to require increased or decreased resource levels in the future. This is because the cost of providing services in the future is more likely to resemble current costs than historical costs. Thus for long term financial viability it is important that an entity's income-revenue (including any subsidies receivable) should cover the current cost of service provision.
- 2.15 Information prepared on ~~an~~ historical cost basis does not always provide relevant information on the resources held by the entity at the reporting date. If prices have increased since an asset was acquired, its value to the entity may be greater than that represented by historical cost. This is sometimes a particularly significant issue in the public sector where assets may remain in use for decades or even centuries. The failure to reflect changes in prices may also be significant in for derivative financial instruments which often have a small value when acquired but have a large value at later dates.

- 2.16 Use of the historical cost basis does not secure the provision of information that is comparable. Assets that are identical (including in respect of their age and condition) may be reported at different amounts (either by two different entities or within the GPFs of a single entity) because prices prevailing at the dates of acquisition were different.
- 2.17 Where historical cost is used, it is necessary to consider whether assets are impaired and, if so, to write them down to recoverable amount. The concept of recoverable amount is discussed in paragraphs 4.5-4.125.6-5.11 below.
- 2.18 Similarly for liabilities, it is necessary to consider whether estimates or prices have changed since a liability was first assumed. Such changes may cause a liability to ~~become onerous~~increase, and it is therefore necessary to increase~~÷ in such a case~~ the reported amount of the liability ~~is increased~~ to reflect the amount that will be required to fulfill the obligation or obtain release from it.
- 2.19 As noted above, GFSM 2001 requires the use of current values, and ~~thus~~ therefore is not consistent with the use of historical cost.

#### ~~Preliminary View 1~~

~~Historical cost is generally simply to apply and has a high degree of verifiability. However, it may not provide the most relevant information for decision making purposes or for an assessment of accountability as regards the cost of service provision or on the resources held by an entity where price changes are significant.~~

#### ~~Preliminary View 2: Historical cost~~

~~Historical cost is generally simple to apply and has a high degree of verifiability. It reflects the transactions actually undertaken by the entity, and may be seen as consistent with the role of government in collecting resources and using them for the benefit of society as a whole. However, it may be considered that, where price changes are significant, historical cost information does not provide the most relevant information about the cost of service provision or on the resources held by an entity.~~

### **3 Market Values ~~and Fair Value~~**

- 3.1 This section discusses the use of market values as a measurement basis for financial reporting. In a market value system of accounting, assets and liabilities are stated at ~~the amount of~~ market prices prevailing on the reporting date; it is therefore a current measurement basis, and, of course, reflects a market, rather than an entity-specific, perspective. ~~– In a market value system the considerations that apply to assets apply equally to liabilities.~~
- 3.2 The International Valuation Standards Council has defined “market value” as:

*The estimated amount for which a property should exchange on the date of the valuation between a willing buyer and a willing seller in an arm’s length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently, and without compulsion. (Concepts*

Fundamental to Generally Accepted Valuation Principles (GAVP), paragraph 5.2)

3.3 The definition suggests that “current exchange value” might be a more informative term than “market value”. The definition is equally applicable to buyers and sellers, and therefore does not specify whether market values represent an entry or an exit value. It also leaves open whether market prices should be adjusted to reflect transaction costs—that is, buying prices if an entry perspective is to be used and selling prices for an exit perspective.<sup>10</sup>

3.4 The concept of capital that is implicit in the use of market values is that of the ability to earn a market rate of return. If, for example, opening capital is CU10,000 and a market rate of return is 10%, the entity can expect to have a surplus of CU1,000 which can be applied to other purposes whilst retaining its capital unchanged. Its unchanged capital will still suffice to enable it to earn the market rate of return on CU10,000 (which, in the second period, may be more or less than 10%).

~~3.2—The advantages of market values are most easily appraised in the context of a perfect market: that is one where there are many market participants all of whom are fully informed about the assets that are traded and none of whom is able to influence the prices prevailing on the market. In a perfect market there are no barriers to entry and no difference between buying and selling prices, or other transaction costs. Because of this, a market value basis does not make a distinction between entry and exit prices.~~

~~3.3—After a consideration of the qualities of market values as a measurement basis in a perfect market setting, its use in more realistic contexts will be discussed. This discussion includes reference to the use of ‘fair value’ which is used in SFAS 157 ‘Fair Value Measurements’ (2006) and has been proposed by the IASB (Exposure Draft ‘Fair Value Measurement’ (2009).~~

**(a) Market Values in a Perfect Market Setting**

Advantages of market values

3.45 In an ideal context<sup>11</sup>, market value possess all of the qualitative characteristics, as is explained below:

~~It can be reasoned that, in a perfect market, market value is a measurement basis that possesses all of the qualitative characteristics of financial information, as is discussed below.~~

<sup>10</sup> The IASB’s current project “‘Fair value measurements’”, which will provide standards-level guidance on the concept of fair value, defines fair value as an exit value and prescribes that it is not adjusted for transaction costs.

<sup>11</sup> The ‘ideal context’ assumes a deep and liquid market with many buyers and sellers who are well informed about the asset that is traded, and prices that are publicly available. In such a context, differences between entry and exit prices will not differ substantially and transaction costs will be small.

- ~~IE1.~~• Relevance: ~~the~~The market value of an asset ~~(or liability)~~ is a relevant measure of its utility to the entity. An asset cannot be worth less than market value, as that the entity can derive at least that amount by selling the asset. The existence of the perfect market ensures that the entity can derive at least market value. It is also difficult to argue that tThe value of an asset cannot be greater than its current market value, since the entity can, at the reporting date, obtain an identical asset at the prevailing market price. (See also paragraphs 3.6 and 3.7 below.)
- ~~IE2.~~• Faithful representation: For the reasons discussed above, market values provide a faithful representation of the value of the asset.
- ~~IE3.~~• Understandability: ~~market~~Market values are easy to understand.
- ~~IE4.~~• Timeliness: ~~where~~Where market values are readily available, the GPFSs can be prepared quickly and with only simple calculations.
- ~~IE5.~~• Comparability: ~~different~~Different entities owning similar assets should report them at the same market value, so the information is highly comparable. In principle, a market value measurement is not entity specific.
- ~~IE6.~~• Verifiability: As if~~market values are readily available~~ in an ideal context, the information can be easily verified.
- 3.56 The relevance of market values is sometimes questioned where assets are held for the long-term. In such a case it might be argued that the short-term changes in value that are reported where a market value basis is used are not relevant to the entity's financial position and performance. An example is an equity investment that is held to finance pension obligations. It might be suggested that ~~it~~the investment is primarily held with a view to the receipt of dividends and long-term capital appreciation, which is required to provide benefits many years in the future: therefore a fall (or indeed a rise) in market values is of no relevance, especially if expectations of future returns are unchanged.
- 3.67 However, provided the entity is able to purchase a similar investment at the market price, that price represents the benefit, at the reporting date, of holding the asset. The entity could secure the same prospective future dividend receipts and capital appreciation at the market price, so it would not be representationally faithful to report the value of the asset at ~~a different an~~ amount other than market price. Another way of making the point is to observe that the value of an equity investment is the same ~~to for~~ all market participants ~~since because~~ it offers all of them the potential of future dividends and capital appreciation, and all can acquire it at the market price. Thus, where an asset is traded on a perfect deep and liquid market its value will be the same to all holders who have access to that market, and the objection that market values are not relevant to an entity that intends to hold an asset for the long-term ~~holdings~~ cannot be sustained.<sup>12</sup>

<sup>12</sup> The arguments here apply equally to debt instruments that are 'held to maturity'.

- 3.78 If market values are used as a measurement basis, a surplus or deficit is recognized as market values of assets and liabilities change. Thus the surplus or deficit for a period represents the gains and losses that arise when over the period during which assets and liabilities are held. –In contrast to the historical cost basis and no gain or loss is reported on the sale (or acquisition) of an asset (or disposition of a liability). The concept of realization is not used. This may be seen as an advantage in a perfect market context, as the existence of the market assures that the entity is able to realize the market value (and no more) at the reporting date: it is therefore unnecessary and potentially misleading to postpone recognition until a profit is “realized” on sale. –However, a consequence is that it is more difficult for the financial statements to convey information on about the effect of transactions in assets and liabilities if market values are used as the basis for financial reporting.

Limitations on the use of market values

- 3.8 ~~The concept of capital that is implicit in the use of market values is that of the ability to earn a market rate of return. If, for example, opening capital is CU10,000 and a market rate of return is 10%, the entity can expect to have a surplus of CU1,000 which can be applied to other purposes whilst retaining its capital unchanged. Its unchanged capital will still suffice to enable it to earn the market rate of return on CU10,000 (which, in the second period, may be more or less than 10%).~~
- 3.9 Markets for some assets—for example, some securities, commodities and currencies—approach the ideal context assumed in the discussion of the qualitative characteristics above.<sup>13</sup> In such cases, market prices may provide a useful basis for financial reporting. Although no perfect markets exist in practice, there are some—such as certain markets for securities, commodities and currencies—that approach that ideal, and in such cases market prices may provide a useful basis for financial reporting.
- 3.10 It may also be possible to use estimated market values for financial reporting where market prices for similar, but not identical, assets are available. For example, an unquoted equity investment might be valued by reference to prices for similar quoted investments, adjusted to reflect any relevant differences, such as the lower liquidity associated with an unquoted investment.<sup>14</sup> This would have the advantage of promoting promote consistency with the valuation of other similar assets (e.g.g. quoted investments),—). and this may outweigh the

<sup>13</sup> GRSM-GFSM 2001 notes that ‘The ideal market on which to base a valuation is a market in which the identical assets are traded in considerable volume and their market prices are listed at regular intervals. Such prices are often available for financial claims, transportation equipment, crops, livestock and inventories.’ (paragraph 7.23)

<sup>14</sup> GRSM 2001 notes that ‘The ideal market on which to base a valuation is a market in which the identical assets are traded in considerable volume and their market prices are listed at regular intervals. Such prices are often available for financial claims, transportation equipment, crops, livestock and inventories.’ (paragraph 7.23)

- ~~disadvantages of the~~ However, estimated market values in some cases can only be derived from complex and subjective models ~~complexity and possible subjectivity necessarily required by such valuation techniques, and the consequent loss of comparability~~ which reduce comparability and verifiability. Understandability is also diminished by the use of estimated rather than actual market values ~~as because the user may erroneously conclude that assets can be readily realized at the value at which they are stated, and may not appreciate the limitations of the models used to derive estimated values and the assumptions on which they rely.~~<sup>15</sup>
- 3.10 ~~11~~ An essential feature of deep and liquid markets is the presence of a large number of market participants that would derive similar returns from a particular asset. Where assets are specialized, that is, their utility to the current owner are significantly different from that which they would afford any potential purchaser, they are not likely to be traded on deep markets, and the case for market values is much less strong. These circumstances are frequently encountered in the public sector, where an asset that is held by an entity to fulfill its public sector objectives would not be used in the same manner by any potential purchaser, who would have to modify the asset to make it suitable for another purpose. The market value would therefore reflect the cost of such modifications: the extent to which it would provide relevant and representationally faithful information on the economic position of the current owner is doubtful.
- ~~For many kinds of assets, however, markets are from perfect. In particular, different entities may have different needs and possible uses for an asset. Because of this, the asset may be worth more to a particular entity (including the reporting entity) than its market value. In these cases, the extent to which market value provides relevant and representationally faithful information may be questioned. These circumstances are frequently encountered in the public sector.~~
- 3.11 ~~For example, an entity may acquire or construct an asset in order to exploit its service potential in fulfilling its public sector objectives, and it may be the case that any potential purchaser would pay an amount much smaller than its cost. The price that such a purchaser would pay would be reduced to reflect the cost of adapting the asset for an alternative use, and might be no more than the scrap value of the materials embodied in the asset.~~
- 3.12 A prison, for example, might be constructed at a considerable cost but have a much lower value to any prospective purchaser because that value would reflect the cost of adapting the asset to an alternative use. ~~In such cases, the choice between a buying (entry) price and a selling (exit) price is critical.~~ Reporting such an asset at its low selling-market price would not be relevant, as the entity is unlikely to dispose of an asset that it requires in order to fulfill its service objectives. Nor would such a market value be representationally faithful of the

<sup>15</sup> For example, it may not always be understood that, although a value has been adjusted to take into account the lack of liquidity of an asset, it cannot be assumed that the asset can readily be liquidated at the stated amount: A forced sale value would be lower than a willing buyer/willing seller exchange value.



value of the asset to the public sector entity, which can obtain the services provided by the asset only by incurring a cost that is greater than that selling market price. Furthermore, reducing the carrying value of a newly-constructed asset to its selling-market price would result in a reported loss, which ~~might be considered~~ would not to reflect fairly be a faithful representation of the financial performance of the entity.

3.13 It is possible to prescribe that, for specialized assets, the relevant market value is that which would be obtained in the case of a sale to a purchaser who can use the asset in the same manner as the current owner and, for example, owns any complementary assets. However, imagining a market participant that has the same opportunities as the reporting entity seems to be excessively hypothetical, given that many of the assets used by public sector entities in providing services—for example, dams and reservoirs—would not be provided by other entities.<sup>16</sup> As is discussed in the next section, replacement cost provides an alternative measurement basis that may be considered in such cases.<sup>17</sup>

#### Liabilities and market values

3.14 Conceptually, the advantages and disadvantages of a market value basis of measurement for liabilities are the same as those for assets. Market values may be appropriate, for example, for liabilities under derivative financial contracts that are traded on organized exchanges. However, in many cases, the ability to transfer a liability is restricted and the terms on which such a transfer might be made are unclear, and so market values are less plausible candidates.

3.15 Where a market value is used to measure a liability it is necessary to consider the treatment of the entity's own credit risk. This is discussed in Appendix A.

#### Preliminary View 2

~~A market value may be an appropriate measurement basis for assets and liabilities that are traded on markets that are sufficiently perfect. However, in the public sector the market for many assets and liabilities is imperfect, and market value is unlikely to be practicable or useful.~~

<sup>16</sup> Although the boundaries between the public sector and the private sector may vary over time, for example under Service Concession Arrangements, contemplation of possible arrangements under which another entity would take over responsibilities that are currently those of the public sector will in many cases be hypothetical. The value that might be ascribed to assets under possible Service Concession Arrangements may be materially affected by the terms of such conjectural arrangements.

<sup>17</sup> This discussion is consistent with the IASB's Exposure Draft (ED/2009/5) 'Fair Value Measurement' which notes that, for specialised assets that have a significant value when used together with other assets, but have little value if sold for scrap to another market participant who does not have complementary assets, 'It is unlikely in such a situation that a market price, if available, would capture the value the specialised asset contributes to the business.' The Exposure Draft suggests that in such cases an income approach or a replacement cost approach will need to be used. (See the Basis for Conclusions, at paragraph B62).

**Preliminary View 3: Market value**

A market value may be an appropriate measurement basis for assets and liabilities that are traded on deep and liquid markets. It may also be appropriate to use estimates of market value in some cases. However, in the public sector there are few (if any) willing buyers and willing sellers for many assets and liabilities: in these circumstances market value is unlikely to be practicable or useful.

~~3.13—Selling prices are, however, relevant for an assessment of the financial entity's financial flexibility. They provide information on an entity's command over goods in general: that is, the amount that the entity can realize from existing resources to deploy in other activities and the value that a lender might attribute to the asset if it were to be pledged as security for borrowings. (For this information to be complete, it would be necessary to deduct from the selling price transaction costs, that is, the costs that would be incurred in making the sale.) There is therefore a case for selling prices of assets to be disclosed in GPFRs. But in most cases, where disposal of the asset is not currently contemplated it would appear that other bases are more relevant for use in the statement of financial position.~~

**Preliminary View 2**

~~A market value may be an appropriate measurement basis for assets and liabilities that are traded on markets that are sufficiently perfect. However, in the public sector the market for many assets and liabilities is imperfect, and market value is unlikely to be practicable or useful.~~

**(b) Fair Value**

~~3.14—The IASB and the FASB have attempted to prescribe how market-based values may be used for financial reporting purposes for assets and liabilities that are not traded on perfect markets. The IASB's proposals are contained in an Exposure Draft 'Fair Value Measurement' (May 2009). The Exposure Draft is based on Statement of Financial Accounting Standards No 157 (FAS 157), "Fair Value Measurements" issued by the Financial Accounting Standards Board of the United States in 2006.~~

~~3.15—The Exposure Draft is not intended as a contribution to the IASB's conceptual framework, but proposes guidance for the application of 'fair value' in those circumstances where that is the measurement basis required by other accounting standards.~~

~~3.16—The Exposure Draft defines fair value as an exit value amount. The definition is:~~

~~*'Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.'*~~

~~3.17—The Basis for Conclusions to the Exposure Draft notes the concern that at an exit price might lead to low, possibly scrap, values for some assets that are valuable to the reporting entity. The Exposure Draft proposes that in such a case:~~

~~*'the in-use valuation premise would be appropriate: an exit price reflects the sale of the asset to a market participant that has, or can obtain, the*~~



*complementary assets and liabilities needed to use the specialized asset in its own operations. In effect, the market participant buyer steps into the shoes of the entity that holds those specialised assets.’ (paragraph BC61)*

- 3.18 ~~The Basis for Conclusions also notes that the fair value of an asset would not exceed its current replacement cost (considered from the perspective of the hypothetical market participant buyer).~~
- 3.19 ~~It is questionable, particularly in the public sector context, whether an exit value perspective is generally appropriate for operational assets with remaining service potential. Recourse to a market participant that has the same opportunities as the reporting entity seems to be excessively hypothetical, given that many of the assets used by public sector entities in providing services—for example, dams and reservoirs—would not be provided by other entities.<sup>18</sup>~~
- 3.20 ~~The concept of capital implicit in a fair value basis of measurement is difficult to discern. As noted above, it may be reasoned that selling prices provide information on an entity’s command over goods in general, but under fair value the selling price is not reduced by the costs necessarily involved in making the sale. It might be reasoned that fair value reflects market participants’ assessment of the amount, timing and certainty of future cash flows, and therefore where fair value is used the entity’s performance is benchmarked against that of other market participants. However, in imperfect markets, it can only safely be concluded that fair value represents an amount that is no greater than the value of the cash flows required by the marginal market participant.~~

### ***Preliminary View 3***

~~Fair value as defined in SFAS 157 is an exit value that is unlikely to be generally appropriate for operational assets with remaining service potential. Although it can be reasoned that ‘fair value’ may be taken to be the value that would be placed on the asset by a market participant with the same opportunities as the reporting entity, this may be excessively hypothetical in the public sector context.~~

## **4 Replacement Cost**

- ~~54.1~~ Replacement cost is often advocated as a ~~relevant~~ measurement basis for use in GPFS, usually as part of the deprival value model (~~see Section 4 above~~5 below).<sup>19</sup>

<sup>18</sup> Although the boundaries between the public sector and the private sector may vary over time, for example under Service Concession Arrangements, contemplation of possible arrangements under which another entity would take over responsibilities that are currently those of the public sector will in many cases be hypothetical. The value that might be ascribed to assets under possible Service Concession Arrangements may be materially affected by the terms of such conjectural arrangements.

<sup>19</sup> GFSM 2001 states ‘In general, fixed assets are most effectively valued when the current written-down replacement cost is used as a proxy for the current market value.’ (paragraph 7.34). It also states ‘Inventories of goods intended for resale are valued at their current replacement prices.’ (paragraph 7.65)

~~As noted in paragraph 4.13 above, t~~The replacement cost of an asset<sup>20</sup> may be defined as:

*“the most economic cost required for the entity to replace the service potential of an asset (including the amount that the entity will receive from its disposal at the end of its useful life) at the reporting date.”*

54.2 Because the definition refers to the cost “at the reporting date”, replacement cost, ~~is a current valueas that term is used here, is a current value~~, that is, it reflects economic and financial conditions prevailing at the reporting date.

4.3 ~~It follows from the definition of replacement cost that it includes all the costs that would necessarily be incurred in the replacement of the service potential of an asset. This would include transaction costs as well as the price that would be paid for a replacement asset.~~

54.34 Replacement cost may be distinguished from reproduction cost: the former refers to the cost of replacing service potential, whilst the latter is the cost of obtaining an identical asset. For example, the private offices of a government department may ~~have high ceilings have elaborate fireplaces and ornate~~ plasterwork ~~that no longer serve any economic purpose~~: the reproduction cost of such a building might be very high, but the replacement cost would be that of office accommodation offering the same accommodation but ~~which might lack~~without those features ~~as they have no economic value. It should not, however, be assumed that u~~Use of replacement cost, however, does not always ~~entails require~~ an exhaustive search for alternative assets with ~~equivalent the same~~ service potential: in many cases the most economic replacement cost will be that of an asset that is similar in major respects to the asset that is actually ~~owned~~held.

54.45 Because entities usually acquire their assets by the most economic means ~~that is~~ available, replacement cost reflects the procurement process that an entity generally follows. The concept of replacement cost is that of replacement in the ordinary course of operations, and not the extraordinary costs that might be incurred if an urgent necessity arose as a result of some unforeseeable event (such as a fire). Also, replacement cost reflects the particular circumstances of the entity, that is, it is an entity-specific measurement basis. For example, the replacement cost of a ~~specific kind of~~ vehicle ~~may would~~ be less for an entity that usually acquires a large quantities-number of vehicles in a single transaction and thus is regularly able to negotiate discounts than it would be for an entity that purchases its vehicles individually. Where the entity is a public sector entity and its replacement cost differs from that of a private sector entity, it is the public sector price that represents replacement cost.

54.56 Replacement cost is the cost of an asset that is of the same age and condition as ~~that whichthe asset that~~ is being valued. Thus, where replacement cost of a used asset is ascertained by reference to the cost of a new asset, an adjustment is

<sup>20</sup> For liabilities the concept corresponding to replacement cost is ‘assumption price’ which is discussed in the context of the deprival value model in Section 5 below.

necessary to reflect the reduced service potential of the asset that is owned.<sup>21</sup> Similarly, an estimate of replacement cost may be reduced to reflect the cost required to repair a damaged asset.

[54.67](#) The relevant service potential is that which the entity is capable of using, having regard to the need to hold capacity to enable the entity to deal with contingencies that might arise. This results in the reduction of the replacement cost of an asset when the need for its service capacity falls. For example, if an entity owns a school that is adequate for 500 pupils but, perhaps because of demographic changes since the construction of the school, a school for 100 pupils would be adequate for current and reasonably foreseeable requirements, the replacement cost of the asset is that of a school for 100 pupils.

[54.78](#) Some object to the use of replacement cost on the grounds that it reflects not the cost of the asset that is owned, but rather the hypothetical cost of an asset that is not owned. -They suggest that replacement cost is not appropriate as it is not an attribute of the asset that is actually owned. - However, it is not the physical asset that is being valued, but rather the services that the existing asset is capable of providing, [that is, its service potential](#).

[54.89](#) The relevance of replacement cost is particularly clear where assets have to be regularly replaced, for example where a stable volume of inventory needs to be held, and ~~so therefore~~ consuming inventory necessarily entails its replacement, for which the current price will have to be paid. However, replacement cost is also relevant when assets will not be replaced, as depreciation of replacement cost represents a fair charge for the cost of an asset's services that are consumed within an accounting period. Thus the relevance of replacement cost is not (as is sometimes suggested) to ensure that the GPFs report the extent to which sufficient funds for replacement are retained within the entity to provide for replacement. Rather, its use enables management to use the GPFs to be accountable for the current cost of the services provided and to provide input for decision making purposes.

~~[5.9](#) — It flows from the definition of replacement cost that it includes all the costs that would necessarily be incurred in replacement of the service potential of an asset. This would include transaction costs as well as the price that would be paid for a replacement asset.~~

### Replacement Cost and the Qualitative Characteristics

[54.10](#) The major advantage of replacement cost compared to other measurement bases is its relevance (for both accountability and decision making purposes). ~~Unlike historical cost, r~~Replacement cost reflects economic conditions prevailing at the reporting date. It also reflects the economic position of the reporting entity since all (and only) the service potential that the asset affords to that entity ~~will be is~~

<sup>21</sup> IPSAS 21 uses the term “~~replacement cost~~” to refer to the cost to replace the asset's gross service potential, which is depreciated to reflect the used condition of an asset. In this paper, replacement cost is defined as the cost of the remaining service potential.

reflected in its carrying amount, and does not vary according to the value—or, in the case of specialized assets, lack of value—that the asset may have to another entity. Replacement cost is consistent with the going concern assumption<sup>22</sup> that the entity will continue in operation and will not reduce or terminate its activities. (Conversely, where the going concern assumption is inappropriate, replacement cost is unlikely to be relevant.)

54.11 In the case of assets that are held ~~in order~~ to provide services, replacement cost provides information that is relevant, because it reflects the cost of future service potential that is attributable to the asset.

54.12 ~~As noted above, u~~Use of replacement cost is consistent with an operating capacity concept of capital maintenance: a surplus indicates the extent to which the ~~income revenue~~ for the period exceeds the current cost of the assets consumed in providing services in ~~the that~~ period, ~~which assets that~~ will need to be replaced if the same level of services are to provided in future periods.

54.13 It is possible to combine historical cost and replacement cost information by reporting separately the extent to which changes in prices are reflected in the costs reported in the year. These amounts are sometimes referred to as “~~“realized holding gains’ gains”~~”. This permits the GPFSS to report both (a) the costs based on actual transactions, which may be useful for an assessment of accountability, as well as (b) the costs based on current prices, which is useful to an assessment of future resource needs. The quantification of realized holding gains requires a flow assumption to be used, because it requires quantification of the historical cost of assets consumed: as noted above, flow assumptions are inevitably arbitrary.

54.14 In the case of fixed assets, it is important to distinguish changes that are the cost of the consumption of service potential (i.e. depreciation) from changes that are the result of changing prices.

54.15 It is apparent that in some cases calculation of replacement cost will be complex and subjective judgments will be required. This will prejudice the timeliness, comparability and verifiability of information prepared on a replacement cost basis, and will also make it more costly than some alternatives. However, calculations of replacement cost need not be carried out more frequently than is necessary to ensure that ~~the GPFSS are not materially misstated as a result of the failure to obtain an up-to-date replacement cost~~ does not have a significant effect on the financial statements. The period between valuations should ~~also~~ be chosen to ensure that the cost is commensurate with the benefit of improved financial information.

4.16 A specific issue with replacement cost is its application to assets that may be sold for an alternative use. This issue, which may be better dealt with in the development of IPSASs rather than in the Conceptual Framework, is discussed in Appendix B.

<sup>22</sup> [Cross reference to discussion of going concern elsewhere in the Framework to be considered.]

~~Preliminary View 5~~

~~Replacement cost, where available, is likely to provide relevant information, particularly for assets that are held in order to provide services. However, in some cases it may be complex and costly to apply and may rely on subjective judgments which will limit the verifiability and comparability of financial statements.~~

Preliminary View 4: Replacement cost

Replacement cost, where available, is likely to provide relevant information, particularly for assets that are held in order to provide services. In some cases, however, it may be more costly and complex than available alternatives

**45 The Deprival Value Model**

- 45.1 The deprival value model (which is sometimes referred to as the “value to the entity” model), is well established in the academic literature and has been recommended for use in public sector financial reporting, for example by the Byatt Committee in the UK and the Carpenter Report in Australia.<sup>23</sup>
- 45.2 The deprival value model is based on the qualitative characteristic of relevance. It does not prescribe a single measurement basis, but rather a means by which a specific basis may be selected as the most relevant in specific circumstances.
- 45.3 Because the deprival value model chooses between measurement bases solely on grounds of relevance, it is ~~also~~ necessary to consider whether the measurement basis that it implies also adequately reflects the other qualitative characteristics. For example, consideration of the deprival value model might suggest in a particular case that value in use should be the preferred measurement basis, but if, in the circumstances of that case, value in use were completely unverifiable, an alternative measurement basis might be selected.
- 45.4 The deprival value model selects as the most relevant measurement basis that which reflects the extent to which the entity is “better off” because it holds the asset. This may be thought of as the answer to the following questions, all of which are equivalent:

*What amount would just compensate the entity for the loss of the asset?*

*What loss would the entity sustain if deprived of the asset?*

<sup>23</sup> Accounting for Economic Costs and Changing Prices: A Report to HM Treasury by an Advisory Group, London, 1986 (The Byatt Report). Steering Committee on National Performance Monitoring of Government Trading Enterprises Guidelines on Accounting Policy for Valuation of Assets of Government Trading Enterprises Using Current Valuation Methods, Melbourne, 1994. (The Carpenter Report)

*How much would the entity rationally<sup>24</sup> pay to acquire the asset (if it did not already hold it)?*

45.5 If the entity were deprived of the asset it would lose at least the amount of benefit (or service potential) that it ~~is able to~~ could derive from the asset: fair compensation for the loss would be at least that amount, and the entity would be willing to pay at least that amount to acquire the asset if it did not already own it. Thus this amount represents the lowest relevant measure of the asset. Because it represents the amount that the entity can recover from the asset, it is generally referred to as 'recoverable amount'.<sup>25</sup>

45.6 The recoverable amount of an asset is the higher of:

*Value in use: the present value to the entity of the asset's remaining service potential if it continues to be used, and the net amount that the entity will receive from its disposal at the end of its useful life; and*

*Net selling price: the net amount that the entity ~~can~~ could obtain from sale of the asset at the reporting date.<sup>26</sup>*

Both value in use and net selling price are reduced to reflect the costs that would be incurred on sale of the asset.

45.7 The distinction between value in use and net selling price is useful in emphasizing the importance of considering the choice between assuming ~~continuing to use~~ of the asset for a period and immediate sale. However, as value in use includes the amount that the entity will receive from disposal of the asset at the end of its useful life, net selling price can be thought of as simply a limiting case of value in use, which applies where the value of the remaining in-use service potential is nil, and the best course is to sell the asset immediately.

45.8 The higher of value in use and net selling price is the recoverable amount irrespective of whether the entity intends to continue to use or sell the asset: ~~i. If~~ if an entity chooses to deploy an asset in a way that does not recover the maximum amount, the consequence of that decision is reflected in the periods in which it is implemented and not anticipated by stating the asset at an amount that is lower

<sup>24</sup> ~~“Rationally”~~ “Rationally” is used here in the sense in which it is conventionally used in the deprival value model to refer to the presumption that an entity selects the course of action that is consistent with the maximum ~~financial-economic~~ return. For example, an entity would not, in this sense, rationally pay a higher price to acquire an asset if it could obtain an identical asset at a lower price. As explained in paragraph 1.47-14 above, it is important that the measurement of assets reflects their full financial value, even if this does not correspond with their intended use. The presumption of ~~“rational”~~ “rational” behaviour ensures that this is the case. It does not imply that adopting a course of action that is inconsistent with maximising a financial return is irrational or improper.

<sup>25</sup> IPSAS 21 ~~“Impairment of non-cash generating assets”~~ “Impairment of non-cash generating assets” uses the term ~~“recoverable service potential”~~ “recoverable service potential”.

<sup>26</sup> “Net selling price” is similar to the concept of “fair value less costs to sell” used in IPSASs. However, it is more explicit that the selling price will be that the entity would expect to obtain rather than that which might prevail on a (possibly hypothetical) market.



- than the amount that can be recovered. This is required by the accountability objective of financial statements, as explained in paragraph 1.47-14 above.
- 45.9 In some cases, an asset's value in use can be quantified by calculating the present value of the future cash inflows that the entity will derive from the asset assuming its continued use. In others it is possible to quantify the savings in the form ~~of future~~ cash outflows that the entity can avoid by continued use of the asset ~~will enable the entity to avoid~~. The calculation of value in use should take account of the risk of variations in the amount and timing of cash flows, and the time value of money.
- 45.10 In practice, the calculation of value in use is often difficult. Assets that are employed in cash generating activities often provide cash flows jointly with other assets, and so value in use can be estimated only by calculating the present value of the cash flows of a group of assets and then allocating ~~the total~~ (inevitably with some arbitrariness) the total to individual assets. In the public sector, most assets contribute to the provision of subsidized or uncharged services rather than directly generating cash flows: such assets are referred to as 'non-cash generating assets'.
- 45.11 The recoverable amount of an asset cannot be lower than net selling price. In estimating that amount it is necessary to take account of the costs that would be incurred on the disposal of the asset, including legal costs, taxes and commissions that relate directly to the sale and the costs of bringing the asset into a location and condition suitable for sale.<sup>27</sup>
- 45.12 Recoverable amount, will, however, often ~~overstate~~ be greater than the ~~value~~ relevant measure of the ~~of an~~ asset, as it includes all the future contribution that the asset is expected to provide to the entity. For example, if an asset is acquired because it will enable cost savings to be achieved, those cost savings will typically exceed the cost of the asset, and ~~so it would not be a~~ relevant measure or representationally faithful to reflect them in the value of the asset.
- 45.13 The deprival value model therefore requires that the value of an asset cannot be stated at a higher amount than replacement cost. ~~Replacement cost is defined as:~~  
*~~"the most economic cost required for the entity to replace the service potential of an asset (including the amount that the entity will receive from its disposal at the end of its useful life) at the reporting date."~~*  
~~Replacement cost is discussed in more detail in section 5 below.~~
- 45.14 If the entity were deprived of an asset ~~which that~~ will provide benefits (or service potential) greater than its cost, it would replace it rather than lose that benefit.

<sup>27</sup> Although the deprival value model suggests that, in most circumstances, net selling price is not the most relevant basis for use in the primary GPFSS, there is a case for disclosing information about net selling prices in the notes. Such prices are relevant for an assessment of the financial entity's financial flexibility, in that they show the amount that the entity can realize from the sale of existing resources to deploy in other activities and the value that a lender might attribute to the asset if it were to be pledged as security for borrowings.

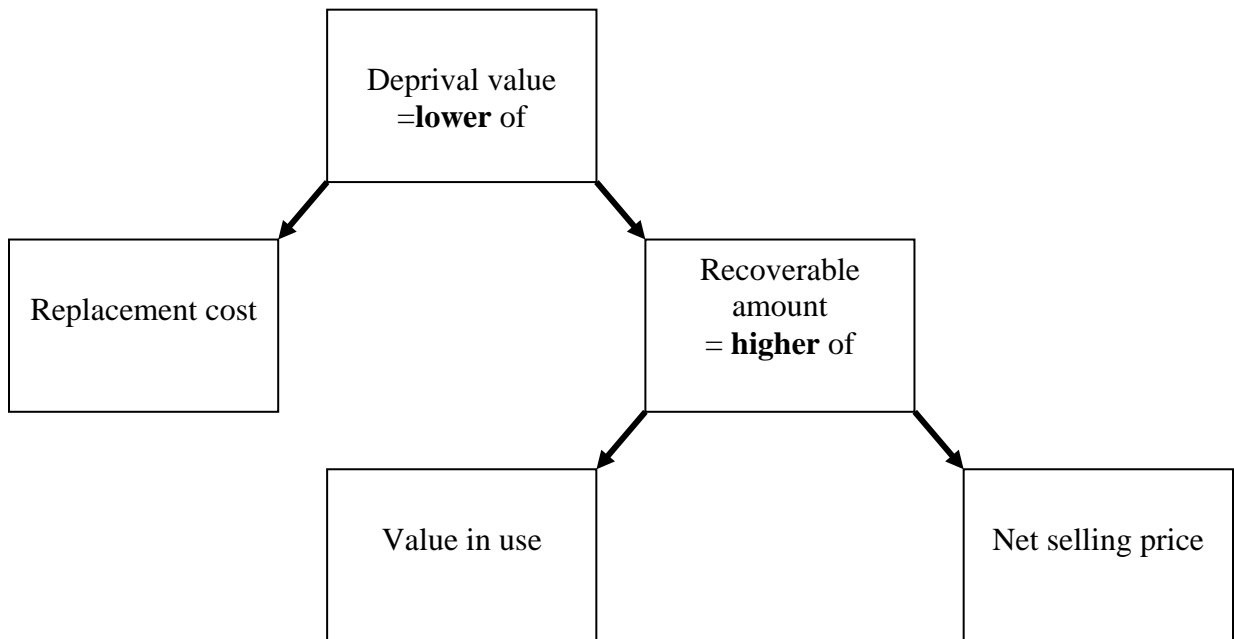
Fair compensation for the loss would be no more than replacement cost. Thus replacement cost represents the highest relevant measure of the asset.

- 45.15 In summary, under the deprival value model the measurement basis reflects the loss that the entity would sustain if deprived of the asset. This cannot be higher than the current cost of obtaining equivalent service potential (replacement cost), or lower than the amount that the entity can recover from the asset (recoverable amount). The choice of measurement base reflects the highest economic value that the entity ~~is able to~~ can derive from the asset: replacement cost is selected where the asset is worth replacing, and net selling price is selected when ~~the asset~~ it is not ~~worth replacing~~ and the highest value will be obtained from immediate sale. Value in use is selected when an asset is not worth replacing but the value of its service potential is greater than that which would be derived from sale.



- 45.16 [Figure 1 provides a diagrammatic representation of the measurement bases for assets used in the deprival value model.](#)~~The deprival value model as applied to assets may be portrayed diagrammatically as follows:~~

**Figure 1: The deprival value model for assets**



- 45.17 Replacement cost, value in use and net selling price are all current measurement bases. It follows that, where deprival value is used the financial statements are prepared on a current, rather than historical, basis.
- 45.18 Deprival value does not follow either an entry value or an exit value perspective in all cases. Rather, it selects an entry price (replacement cost) and an exit price (recoverable amount), depending on their relevance in specific circumstances.
- 45.19 Because the measurement basis that is applied ~~is dependent~~ [depends](#) on the entity's circumstances, the deprival value model can be said to ~~be use~~ [use](#) an entity-specific [perspective](#) rather than a market-based ~~approach~~ [one](#). However, replacement cost and net selling price each refer implicitly to transactions in a market setting. And they should reflect the entity's economic constraints and opportunities rather than simply the expectations and intentions of the entity's management.
- 45.20 Because, under the deprival value model, replacement cost is used for assets to the extent it is recoverable, it is consistent with an operating capacity concept of capital. For assets stated at recoverable amount, the concept of capital is that implicit in the discount rate applied to future returns: the deficit or surplus will be the amount by which actual returns differ from those reflected in the recoverable amount. This suggests that, in principle, there may be a case for separately

disclosing the results from assets stated at replacement cost and recoverable amount.

### Application of the Deprival Value Model to Liabilities: Relief Value

45.21 As with assets, measurement of liabilities requires selection of an appropriate measurement basis. Many of the considerations that arise are parallel, although some changes in terminology are needed: for example 'relief value' is used in place of 'deprival value'.

45.22 Application of the relief value model requires consideration of the following measurement bases:

- ~~(a)~~ — Assumption price: the price at which the entity would rationally be willing to assume the liability ~~(assumption price)~~.
- ~~(b)~~ — Cost of Fulfillment: the cost of fulfilling the obligations represented by the liability ~~(cost of fulfillment)~~. Where the obligation is financial, fulfillment will be making the required payments; where the obligation is to provide goods or services, fulfillment consists of providing those goods or services.
- ~~(c)~~ — Cost of release: the cost ~~at which~~ of obtaining release from the liability ~~could be obtained (cost of release)~~. Release may be obtained either by obtaining the consent of the party to whom the obligation is owed or by transferring the liability to a third party.

45.23 The above discussion ~~above~~ of the application of the deprival value model to assets notes that a relevant measurement basis for assets:

- (a) cannot be lower than the maximum value that the entity can derive from the asset, but
- (b) cannot be greater than current replacement cost.

Because in many cases replacement cost will be lower than the maximum value that the entity can derive from the asset, it will be the appropriate basis.

45.24 For liabilities, the parallel principles are that a relevant measurement basis:

- (a) cannot be lower than the minimum burden that the liability represents to the entity, but
- (b) cannot be greater than the price at which the entity would rationally assume the liability, which is assumption price.

Because in many cases assumption price is higher than the minimum burden represented by the liability, it will be the appropriate basis.

- 45.25 The concepts applicable to assets and liabilities may be arranged in parallel as follows set out in Table 2.:

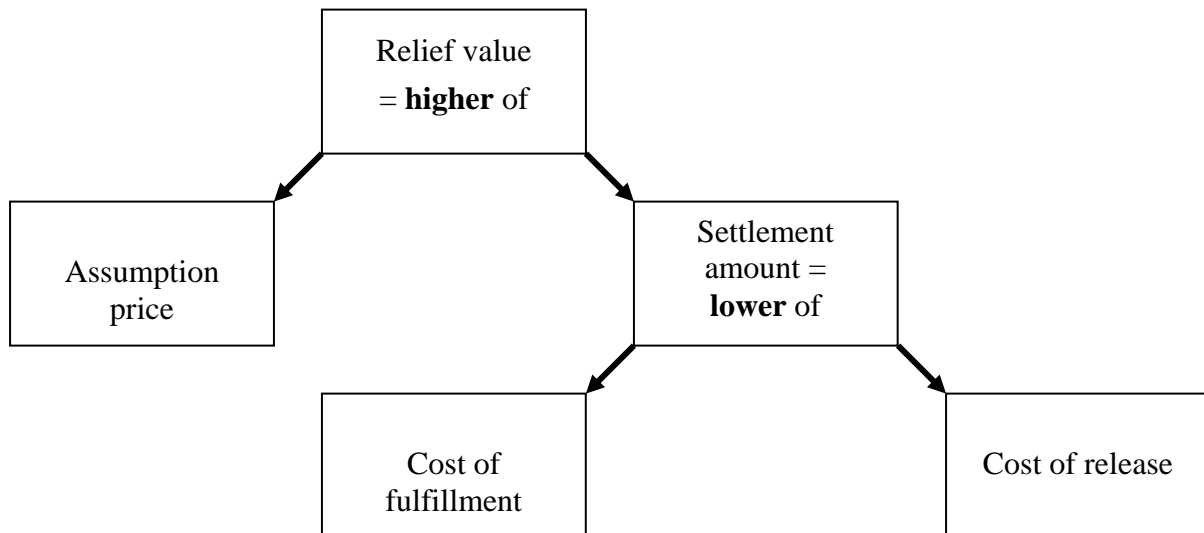
**Table 2: Concepts used in the deprival value model**

	Assets	Liabilities
<b>General concept</b>	<p>Deprival value:</p> <p>What amount would just compensate the entity for the loss of the asset?</p> <p><i>or, equivalently,</i></p> <p>What loss would the entity sustain if deprived of the asset?</p> <p><i>or, equivalently,</i></p> <p>What amount would the entity rationally pay to acquire the asset (if it did not already hold it)?</p>	<p>Relief value:</p> <p>What amount would the entity rationally pay to settle the liability?</p> <p><i>or, equivalently,</i></p> <p>What gain would the entity enjoy if were relieved of the liability?</p> <p><i>or, equivalently,</i></p> <p>What amount would the entity rationally accept to assume the liability (if it did not already have it)?</p>
<b>Entry or exit?</b>	Lower of entry and exit	Higher of entry and exit
<b>Entry value</b>	Replacement cost	Assumption price
<b>Exit value</b>	<p>Recoverable amount — higher of:</p> <p>Value in use</p> <p>Net selling price</p>	<p>Settlement amount —lower of:</p> <p>Cost of fulfillment</p> <p>Cost of release</p>

54.26 [Figure 2 provides a diagrammatic representation of the measurement bases for liabilities used in the deprival value model.](#)

**Figure 2: The deprival value model for liabilities**

~~The relationship between the measurement bases for liabilities may be portrayed diagrammatically as follows:~~



*Settlement Amount*

45.27 In the context of assets, recoverable amount ~~is a representation of~~ [represents](#) the future benefits (or service potential) that will be derived from an asset. Analogously, settlement amount is a quantification of the amount of the outflows required to settle a liability. Just as recoverable amount reflects the highest amount of an asset's benefits (value in use or net selling price), so settlement amount reflects the lowest cost of settlement, which will be either the cost of fulfillment or the cost of release. In both cases settlement amount includes all the costs that will be incurred including, for example, transaction costs.

4.5.28 For example, suppose a local government has undertaken to build retail outlets for a commercial property manager (perhaps as part of a major development of civic facilities), and the consideration is paid at the outset. As construction proceeds it becomes clear that the cost of construction is significantly higher than that [initially](#) anticipated. The cost of fulfillment is the cost of completing the retail outlets: the cost of release is the amount that would be required to obtain the consent of the other party to release the local government from its liability.

45.29 If a liability may be extinguished either by fulfilling at a cost of CU600, or by securing release at a cost of CU800, the cost of fulfillment is a more relevant measurement basis than the cost of release. Conversely, where seeking release is less costly than fulfillment (and assuming that seeking release is a feasible course of action for the entity), cost of release is a more relevant measure than cost of fulfillment. Just as with assets the choice between value in use and net selling

price does not depend on the entity's intended use (as noted in paragraph ~~4.6~~<sup>5.8</sup> above), so for liabilities the settlement amount is (at least in principle) the lower of the cost of fulfillment and release, irrespective of the intentions of the entity.<sup>28</sup>

*Cost of Fulfillment*

<sup>45.30</sup> The cost of fulfillment includes all costs that the entity will incur in fulfilling the obligations represented by the liability, assuming that it does so in the least costly manner. The costs include not only payments to the counterparty but also other costs that will arise from fulfilling the obligation.

<sup>45.31</sup> Where the cost of fulfillment depends on uncertain future events, all possible outcomes are reflected in the estimated cost of fulfillment, which should aim to reflect ~~in an unbiased manner~~ all those possible outcomes in an unbiased manner.

<sup>45.32</sup> Where fulfillment requires work to be done—for example where the liability is to rectify environmental damage—the relevant costs are those that the entity will incur~~—t.~~ This may be the cost of doing the work itself, or of employing a contractor to do the work on behalf of the entity. However, the costs of employing a contractor are only relevant where employing a contractor is the least costly means of fulfilling the obligation.

<sup>45.33</sup> The cost of fulfilling a liability is the value to the entity of resources that will be used in making fulfillment, and not necessarily their carrying amount.

<sup>45.34</sup> Where fulfillment will be made by the entity itself, the fulfillment cost does not include any profit, ~~as because~~ any such profit does not represent a use of the entity's resources. Where fulfillment amount is based on the charges of employing a contractor, the amount will implicitly include the profit required by the contractor~~—however, as~~ the total amount charged by the contractor will be a demand on the entity's resources.<sup>29</sup>

<sup>45.35</sup> Where fulfillment will not take place for an extended period, the costs need to be discounted to reflect the value of the liability at the reporting date. In some cases it is possible and appropriate to adjust the cash flows for risk before discounting ~~(at a risk-free rate)~~. Alternatively, the discount rate is reduced to reflect the riskiness of the liability—the higher the risk, the lower the discount rate and hence the larger the liability at the reporting date. This is analogous to reflecting the riskiness of future returns in the discount rate used in a calculation of value in use.

<sup>28</sup> Judgement is sometimes required in practice to distinguish possible courses of action that are not feasible (and should therefore not be reflected in the selected basis of measurement) from those that, although feasible do not represent the manner of settlement that the entity intends to pursue.

<sup>29</sup> Analogously for assets, replacement cost would include the profit required by a supplier, but no profit would be included in the replacement cost for assets that the entity would replace by its own construction efforts.

- 45.36 It is questionable whether the cost of fulfillment should reflect the possibility that the entity may default on a liability. The issue of whether the measurement of a liability should reflect the entity's credit risk is discussed in Appendix [BA](#).

*Cost of Release*

- 45.37 Cost of release refers to the amount that either (i) the creditor will accept in settlement of its claim; or (ii) a third party would charge to accept the transfer of the liability. Where there is more than one ~~means-way~~ of securing release from the liability, the cost of release is ~~the lowest amount~~ [that of the most economical](#).
- 45.38 Transferring a liability may be distinguished from entering into an agreement with another party that will fulfill the entity's obligation or bear all the costs stemming from a liability. ~~In order for~~ For a liability to be transferred it is necessary that all of the creditor's rights against the entity are extinguished. If this is not the effect of an arrangement, the liability continues to exist and should continue to be reported. The arrangement may, however, result in a separate asset of the entity ~~representing that represents~~ its rights against the other party. For example, if an entity has an obligation under a lease to restore a property and pays a contractor to carry out the necessary work, payment gives rise to a right against the contractor, not [a](#) transfer of the liability (unless the lessor agrees to release the liability and obtains rights [directly](#) against the contractor).
- 45.39 For many liabilities it will be clear that transfer is not [practically](#) possible ~~(or practicable)~~ and cost of release will therefore be simply the amount that the creditor will accept in settlement of its claim. This is particularly the case in the public sector. This [amount](#) will be known if it is specified in the agreement with the creditor (for example, where a contract includes a specific cancellation clause). In some cases there may be evidence of the price at which liabilities may be transferred (for example in the case of some pension liabilities). In other cases cost of release will not be known, but adequate evidence may exist to show that it must be higher than cost of fulfillment (and therefore the settlement amount is cost of fulfillment).
- 45.40 Cost of release will usually be more than the cost of fulfillment. ~~A creditor will usually~~ [The party to which the obligation is owed will often](#) attach a higher value to fulfillment than release and will therefore require a premium to accept immediate settlement. A third party will usually incur the same costs in fulfilling an obligation as the reporting entity and will only accept a transfer at a lower price if it has a competitive advantage. Thus the cases in which cost of release is the appropriate measurement basis may be expected to be relatively rare, but this may be the case, for example, where a contract has become onerous.
- 45.41 In considering whether cost of release is appropriate it is necessary to consider whether release in the envisaged manner is an option that is open to the entity in practice, ~~including having regard to~~ any consequences of obtaining release, such as damage to the entity's reputation.

*Assumption Price*

- 45.42 Assumption price is the concept for liabilities that is analogous to replacement cost for assets. As is explained below, ~~it~~ assumption price is most often relevant to exchange transactions carried out on arms-length terms, rather than non-exchange transactions.
- 45.43 In the context of an activity that is carried out with a view to profit, an entity will assume a liability only if the price it receives is greater than the cost of fulfillment or release (i.e. settlement amount). Once that amount has been paid, the entity has an obligation to its creditor.
- ~~4.435.44~~ Although typically the entity will expect to be able to fulfill its obligation, and ~~that will thereby~~ extinguish its liability, it is an oversimplification to characterize the obligation as simply that of performing. More precisely, the entity's obligation is *either* to perform *or* to compensate the other party for any loss that might arise from ~~its~~ the entity's failure to perform. (Compensation would at least include refunding the amount paid.) Thus stating the liability at fulfillment price would understate the liability, but assumption price provides a representationally faithful measure, reflecting the entity's accountability to its creditor for the amount that has been paid.<sup>30</sup>
- 45.45 Assumption price represents the amount that was accepted by the entity for assuming a liability: it is therefore usually reasonable to assume that it is the price that it would rationally accept for assuming a similar liability. It would charge a higher amount, if competitive pressures allowed it to do so, but it might be unwilling to accept a lower price.
- 45.46 Just as replacement cost is a current value so, conceptually, is assumption price. There are, however, serious practical problems in reflecting changes in prices in obligations that are stated at assumption price.
- 45.47 As noted in the Consultation Paper on Elements and Recognition, it ~~is~~ sometimes questioned whether items reported as ~~"deferred revenue" outflows~~ are liabilities ~~as defined in the conceptual framework. However, s.~~ It is possible that some such items can be seen as performance obligations that are measured at assumption price.
- 45.48 A consequence of stating performance obligations at the assumption price is that no profit is reported at the time the obligation is taken on. Profit is reported in the financial statements in the period of fulfillment (or release), as it is the difference between the revenue arising ~~in respect of~~ from satisfaction of the liability and the cost of settlement.
- 45.49 An entity may have a potential obligation to its customer that is larger than assumption price. If the entity ~~seeks~~ has to seek release from a contract, the

<sup>30</sup> The IASB's recent Exposure Draft "Revenue from Contracts with Customers" (ED/2010/6) requires performance obligations when recognized to be measured at "the transaction price" which is equivalent to the "assumption price".

customer may be able to claim recompense for losses that it will sustain, as well as the return of any amounts paid. However, provided that the entity can settle the obligation by fulfillment, it can avoid such additional obligations and it is representationally faithful to report the obligation at assumption price. (This is analogous to the position where an asset will yield greater benefits than replacement cost where, as explained above, the deprival value model restricts the measurement to replacement cost.)

*Non-Exchange Transactions and Onerous Contracts*

- 45.50 Public sector entities may enter into non-exchange transactions that give rise to liabilities to transfer goods or provide services either for free or at a price that is not commensurate with the value of the goods and services to be provided. Similarly a contract, although originally entered into on arms-length terms, may become onerous when it becomes clear that settlement will now be more costly and exceeds the original assumption price. In such a case, the relief model suggests that the appropriate measurement basis for the liability is settlement amount: the liability should be restated to settlement amount and a loss should be recognized for the difference between that amount and the assumption price.
- 45.51 Because, as mentioned above, the settlement amount does not include an element for profit, no profit will be made when a liability measured at settlement amount is settled.

*Preliminary View 5: The deprival value model*

The deprival value model provides a rationale for selecting a measurement basis for assets and liabilities that is relevant in a particular case. However, because the deprival value model indicates only the most relevant measurement basis, it is necessary to consider the extent to which that basis embodies qualitative characteristics other than relevance. The deprival value model is concerned only with relevance, it is necessary to consider whether the measurement basis it suggests adequately reflects the other qualitative characteristics of financial information.

Assets that may be Sold for Alternative Use

- 5.16 ~~Replacement cost (as defined above) reflects the cost of the service potential that the entity is able to use. A consequence of this is that replacement cost may understate the value of an asset if it has alternative uses that could be exploited by others. For example, if a government department is located in a building in a prime central business district but could function equally well at a less valuable remote location, replacement cost is the cost of a building in that remote location. Arguably, replacement cost would, in such a case, not provide a relevant measure of the value of the asset that is used in the entity's operations, because the entity could sell the present asset and obtain equivalent service potential at current replacement cost.~~
- 5.17 ~~Where it appears that there may be incremental value arising from an alternative use it is relevant to consider whether the existing use of the asset requires the current location. If it is necessary for an activity to be carried out in a prime~~



- business location, (which may be the case, for example, for a school or hospital) then the full value of that asset relates to that activity, and not to an alternative use. This may be the case even if the market value of the asset is very high and the current activity yields little or no cash flow.
- 5.18 In considering reflecting an alternative use value in financial statements, the strength of the evidence that the value represented by the alternative use would actually be received in the event of sale is relevant. Possible sales for alternative uses will range from the probable to the speculative, or even fanciful. It would not be appropriate for an alternative use value to be reflected in the financial statements unless there was adequate evidence that it was representationally faithful of the value of the asset to the entity. The value that might be obtained from an alternative use would also be reduced by the costs of relocation and disruption to activities that would be caused by a move to alternative premises. The approach to be adopted may also be affected by whether the asset is considered as a single unit or, for example, land and improvements are assessed separately.
- 5.19 This suggests that incremental value relating to an alternative use might only be reflected where there is a high degree of evidence to support it, for example where the entity is planning disposal of the asset and has received professional advice in that connection.
- 5.20 In other cases, apparent incremental value due to a possible alternative use may be best dealt with by supplementary disclosure either in the notes to the GPFSs or elsewhere in GPFRs.

## Appendix A

### Possible Applications of Measurement Concepts in Accounting Standards

Accounting standards address specific issues. The Conceptual Framework is intended to guide the development of standards, not to replace it. This Appendix illustrates how some of the concepts discussed in this paper might be reflected in standards, but it does not imply that other conclusions would necessarily conflict with these concepts. This might be the case, for example if different views were taken of the relative importance in the specific cases of the individual qualitative characteristics or of the costs of the various possible solutions. It is also possible that actual standards would differ from the illustrations as the concepts identified in the Framework are not the only consideration that is relevant in judging the appropriate accounting requirements of a standard.

#### Inventory of Materials

A1. The measurement basis used for inventory directly affects the reported cost of services in the period in which the inventory is consumed. An accounting standard might therefore require inventory to be reported at replacement cost, reflecting the view that the current cost of service provision is relevant to assessing future resource needs. However, the standard might permit the use of historical cost on cost-benefit grounds, for example, for inventories whose prices are relatively stable and that are consumed within a short period of their acquisition.

#### Property, Plant and Equipment

A2. An accounting standard might require property plant and equipment to be stated at replacement cost, because it is more relevant than historical cost or fair value. The standard might allow historical cost in certain circumstances for practical reasons.

#### Intangible Assets not Traded on a Market

A3. An accounting standard might require intangible assets that are not traded on a market to be stated at historical cost. This might be because it is judged that a valuation is unlikely to be verifiable or representationally faithful.

#### Investments

A4. An accounting standard might require investments that are listed on an active market to be stated at market value since this is the most relevant measurement basis for assessing their value for the purpose of which they are held—that is, securing an income and capital appreciation. The standard might also require an estimated market value to be used for unlisted investments, because the increase in comparability with listed investments outweighs the complexity and lack of verifiability of the use of estimates.

A5. ~~A standard might, however, distinguish equities held for investment purposes from strategic holdings, such as an equity stake in a joint venture which provides community leisure or artistic facilities. For such strategic holdings, it might be concluded that there is little relevance in an estimated current value and so require the historical cost to be used.~~

#### **Negligence Liabilities**

A6. ~~An accounting standard might address the measurement of liabilities such as those arising from claimed negligence (for example, in providing healthcare). The standard might require such liabilities to be stated at settlement amount, taken to be the lower of the cost of fulfillment and the cost of release. In such a case historical cost and assumption price are unlikely to be available.~~

**-Appendix BA**

**The ~~measurement~~ Measurement of Liabilities and ~~the an~~ Entity's Own Credit Risk**

B1A1. Respondents' views are invited on the question of whether, ~~conceptually~~, the amount at which a liability is stated in a public-sector entity's financial statements should reflect the entity's own credit risk. This appendix summarizes the principal considerations on this issue.<sup>31</sup>

AB2. In the public sector context, some have argued that ~~the~~ this issue is of limited significance. They have noted that the credit ratings of public sector entities are often high and subject to little change, as evidenced by the use of a rate paid on government bonds to approximate a risk-free rate. This argument may, however, be questioned in the light of recent market conditions.

A3. The significance of the issue of an entity's own credit risk depends upon the measurement basis adopted.

- Where historical cost is used, the effect on an entity's own credit risk is reflected in the consideration received and therefore in the amount reported at initial recognition. No adjustment is generally made for changes in an entity's credit risk.
- If market values are used, the effect of an entity's own credit risk is reflected at initial recognition and the effect of any changes is recognized in all subsequent periods.
- Where liabilities are measured at the cost of fulfillment, and fulfillment will not take place for an extended period, it can be argued that incurring interest, at a rate that reflects the entity's own credit risk, is a necessary part of the cost of fulfillment.
- Where liabilities are measured at assumption price or cost of release, it may be argued that an entity's own credit risk would be relevant to a current value.<sup>32</sup>

Any measurement basis could, however, be modified by specifying that it excludes the effect of an entity's own credit risk.

**The Case for Reflecting an Entity's Own Credit Risk**

B3A4. One of the arguments for current values is that they are generally more relevant than historical values because they reflect economic and financial conditions

<sup>31</sup> Technically, credit risk relates to specific liabilities rather than the entity as a whole: an entity may have several liabilities ~~in issue~~ whose credit risk differs because the terms (including the security pledged) differ. However, for simplicity, reference is made only to the credit risk of an entity in this Appendix.

<sup>32</sup> As noted in paragraph 5.36-46 there are serious practical problems in using a current assumption price.

prevailing at the reporting date. An entity's own credit risk is one of the factors that affect the current value of its liabilities, and ~~thus so~~ the relevance of the amount of the liability is enhanced if it is stated at an amount that reflects the entity's own credit risk.

**B4A5.** An entity might issue a liability in an arm's-length transaction that requires it to pay CU100 in two years' time in return for consideration of CU91. The amount of the discount (CU9) reflects the appropriate charge for the time value of money, having regard to the entity's credit risk. One year later, the liability has a remaining maturity of one year, and the entity might expect (assuming no general changes in interest rates) to be able to issue a similar liability with that maturity for CU95. However, the amount that would be received will have changed if the entity's credit rating has changed: if it has deteriorated it would receive a lower amount, and if it has improved the amount would be greater. Unless the measure of the liability is updated to reflect changes in the entity's own credit risk, it is possible that it might have two identical liabilities (one issued a year ago and one newly-issued) that are stated at different amounts. This is contrary to the qualitative characteristic of comparability, which requires that similar items are reported in a similar manner. This suggests that it is necessary to reflect changes in an entity's own credit risk if all relevant circumstances are to be captured in the reported amount.

**B5A6.** Reflecting changes in an entity's own credit risk has implications that seem paradoxical. If the entity's credit risk (and ~~so therefore~~, presumably, its financial condition) has deteriorated, the result of reflecting changes in that risk is that a gain is reported, as the liability is now reported at a lower amount; ~~conversely~~ conversely a loss is reported if the credit risk improves.

**B6A7.** Those who support reflecting an entity's own credit risk, however, do not see this as anomalous. They note that, as an entity's financial condition deteriorates, the value of its assets, as well as its liabilities, will fall. The gain on its liabilities will be offset by losses on its assets, although those losses may not be recognized in the financial statements (for example, if they relate to unrecognized assets such as some intangibles). Parallel considerations apply where the entity's financial condition improves.

**B7A8.** Another rationalization for these gains and losses is that they represent transfers of value between an entity's owners and its creditors. It can be argued (building on the assumption that the total value of an entity is unaffected by its capital structure) that as the value of the debt changes due to changes in credit risk there is an equal and opposite increase in the value of ownership interest.<sup>33</sup> This might suggest that it is ~~right for~~ appropriate to report gains and losses ~~to be reported~~ as the credit risk of an entity changes. ~~Others note~~ Some who hold this view

<sup>33</sup> Because public sector entities have no equity investors, some would consider that arguments that rely on transfer of wealth between creditors and owners have no application in the public sector context, because public sector entities do not have owners whose position parallels that of shareholders in the private sector.

maintain that, because these gains and losses relate to changes in the value of the ownership interest ~~they-and~~ do not affect the entity itself, ~~they-maintain-that-the-gains-and-losses~~ should be reported as a change in ownership interest, ~~but-not-rather-than~~ reflected in the surplus or deficit for the year.

B8A9. This last view is similar (but not identical) to that taken in the IASB's recent Exposure Draft ED/2010/4 "Fair Value Option for Financial Liabilities" (May 2010). That Exposure Draft proposes that, for certain liabilities, the total change in fair value should be presented in profit or loss, and that the amount of that change attributable to changes in credit risk should be presented in other comprehensive income, with an offsetting entry in profit or loss.

### The Case Against Reflecting an Entity's Own Credit Risk

B9A10. Others question whether including the effect of an entity's own credit risk in the measurement of liabilities provides relevant information. They believe that the counter-intuitive effects noted in paragraph B5-A6 above are ~~problematic-not-representationally-faithful-of-the-entity's-financial-condition~~. They note that it is only in relatively rare circumstances that an entity is able to take advantage of a decline in its own credit risk by redeeming a liability for less than that which is contractually due, and this may be particularly the case in the public sector.

B10A11. ~~More conceptually, perhaps, it~~ may also be reasoned that the interest rate implicit in liabilities is greater than a risk-free rate only because of the possibility of default. From the perspective of the entity the possibility of default is irrelevant, and so an entity's own credit risk should not be reflected in its financial statements. ~~They would add that it~~ To do so is inconsistent with the going concern assumption on which financial statements are based.

B11A12. As noted above, when a liability is issued for a consideration, the entity's credit risk affects the amount that is received in exchange for its issue. Those who take the view that the carrying amount of a liability should not reflect changes in an entity's credit risk therefore have to consider what should be done when a liability is issued in a market transaction.

- Some would suggest that, consistent with the view that an entity's own credit risk is irrelevant in the preparation of its financial statements, the effect of the entity's own credit risk should be removed from the amount initially recognized. They would therefore adjust the amount of the liability to a risk-free basis, which would increase its reported amount: thus a loss would be reported when a liability is issued in a market transaction.
- Others would agree that it is appropriate ~~that-to-reflect~~ an entity's own credit risk ~~should-be-reflected~~ in the initial recognition of a liability that is issued in a market transaction, but ~~that-not-to-reflect~~ subsequent changes ~~should-not-be-reflected~~. They would acknowledge that some non-comparability would result between liabilities issued at different times, and between liabilities issued in a market transaction and other liabilities. However, they would suggest that there is no superior solution available,

especially given the difficulties of obtaining objective information on market perceptions of an entity's own credit risk.

Appendix B

Assets that ~~may~~ May be Sold for an Alternative Use

5.16B1. Replacement cost (as defined ~~above~~ in this paper) reflects the cost of the service potential that the entity is able to use. ~~As a consequence of this is that~~ replacement cost may understate the value of an asset if it has alternative uses that could be exploited by others. For example, if a government department is located in a building in a prime central business district but could function equally well at a less valuable remote location, replacement cost is the cost of a building in that remote location. Arguably, replacement cost would, in such a case, not provide a relevant measure of the value of the asset that is used in the entity's operations, because the entity could sell the present asset and obtain equivalent service potential at current replacement cost.

5.17B2. ~~This may be distinguished from the case where Where it appears that there may be incremental value arising from an alternative use it is relevant to consider whether the existing use of the asset requires the current location. If it is necessary for to carry out an activity to be carried out in a prime business location the current location, (which may be the case, for example, for a school or hospital). In such a case then~~ the full value of that asset relates to that activity, and not to an alternative use. This may be the case even if the market value of the asset is very high and the current activity yields little or no cash flow. Replacement cost, carefully applied, deals appropriately with such situations.

5.18B3. ~~In considering reflecting an alternative use value in financial statements, the~~ The strength of the evidence that the value ~~represented by the alternative use would could~~ actually be ~~received in the event of obtained from~~ sale is relevant. Possible sales for alternative uses will range from the probable to the speculative, or even to the fanciful. ~~It would not be appropriate for an alternative use value to be reflected in the financial statements unless there was adequate evidence that it was representationally faithful of the value of the asset to the entity.~~ The value that might be obtained from an alternative use would also be reduced by the costs of relocation and disruption to activities that would be caused by a move to alternative premises. The approach to be adopted may also be affected by whether the asset is considered as a single unit or, for example, land and improvements are assessed separately.

5.19B.4 This suggests that incremental value relating to an alternative use might only be reflected where there is a high degree of evidence to support it, for example where the entity is planning disposal of the asset and has received professional advice in that connection.

5.20B.5 In other cases, apparent incremental value due to a possible alternative use may be best dealt with by supplementary disclosure either in the notes to the GPFSs or elsewhere in GPFs.