

International Valuation Guidance Note No. 8
The Cost Approach for Financial Reporting-(DRC)
(Revised 2005)

1.0 Introduction

- 1.1 The purpose of this Guidance Note (GN) is to assist users and preparers of Valuation Reports in the interpretation of the meaning and application of *depreciated replacement cost* for financial reporting purposes.
- 1.2 *Depreciated replacement cost* is an application of the cost approach used in assessing the value of specialised assets for financial reporting purposes, where direct market evidence is limited. As an application of the cost approach, it is based on the principle of substitution.

2.0 Scope

- 2.1 This GN provides background to the use of *depreciated replacement cost* in connection with International Valuation Application 1 (IVA 1), Valuation for Financial Reporting.
- 2.2 The depreciated replacement cost approach is also discussed in GN3 (Valuation of Plant and Equipment) and IVA 3 (Valuation of Public Sector Assets for Financial Reporting, publication forthcoming).

3.0 Definitions

- 3.1 *Depreciated Replacement Cost.* The current cost of reproduction or replacement of an asset less deductions for physical deterioration and all relevant forms of obsolescence and optimisation.
- 3.2 *Specialised Property.* Property that is rarely, if ever, sold in the market, except by way of a sale of the business or entity of which it is part, due to uniqueness arising from its specialised nature and design, its configuration, size, location, or otherwise.
- 3.3 *Improvements.* Buildings, structures, or modifications to land, of a permanent nature, involving expenditures of labour and capital, and intended to enhance the value or utility of the property. Improvements have differing patterns of use and economic lives.
- 3.4 *Adequate Profitability.* When an asset has been valued by reference to *depreciated replacement cost*, *adequate profitability* is the test that the entity should apply to ensure that it is able to support the *depreciated replacement cost* conclusion.

- 3.5 *Service Potential*. The capacity to provide goods and services in accordance with the entity's objectives, whether those objectives are the generation of net cash inflows or the provision of goods and services of a particular volume and quantity to the beneficiaries thereof. In the public sector, the concept of *service potential* takes the place of the test of *adequate profitability* applied in the private sector.
- 3.6 *Modern Equivalent Asset (MEA)*. A structure similar to an existing structure and having the equivalent productive capacity, which could be built using modern materials, techniques, and design. Replacement cost is the basis used to estimate the cost of constructing a *modern equivalent asset*.
- 3.7 *Impairment Loss*. The amount by which the carrying amount of an asset or a cash-generating unit exceeds its recoverable amount. International Accounting Standard 36 (IAS 36), para. 6.
- 3.8 *Optimisation*. The process by which a least cost replacement option is determined for the remaining service potential of an asset. It is a process of adjustments reducing the replacement cost to reflect that an asset may be technically obsolescent or over-engineered, or the asset may have a greater capacity than that required. Hence optimisation minimises, rather than maximises, a resulting valuation where alternative lower cost replacement options are available. In determining the depreciated replacement cost, optimisation is applied for obsolescence and relevant surplus capacity.

4.0 Relationship to Accounting Standards

- 4.1 *Depreciated replacement cost* is used where there is insufficient market data to arrive at Market Value by means of market-based evidence.
- 4.1.1 International Accounting Standard (IAS) 16, Property, Plant and Equipment, paragraph 33, provides that in the absence of market-based evidence an entity may need to estimate the fair value of a specialised asset using an income or a depreciated replacement cost approach.
- 4.1.2 International Public Sector Accounting Standard (IPSAS) 17, Property, Plant and Equipment, paragraphs 42 and 43, prescribe the use of *depreciated replacement cost* for valuing *specialised buildings* and *other man-made structures* as well as *items of plant and equipment of a specialised nature*.

5.0 Guidance

- 5.1 **Property, plant and equipment that is commonly traded in the market must be distinguished from specialised assets.**
- 5.2 The classification of an asset as specialised should not automatically lead to the conclusion that a *depreciated replacement cost* valuation must be adopted. **Even though an asset may be specialised, it may be possible in some cases to**

undertake a valuation of a specialised property using the market comparison approach and/or the income capitalisation approach.

- 5.3 **In the absence of direct market evidence, *depreciated replacement cost* is regarded as an acceptable method of assessing the value of specialised assets but the methodology must incorporate market observations by the Valuer with regard to land value, current cost, and depreciation rates.** The methodology is based on the same theoretical transaction between rational informed parties as the Market Value concept.
- 5.4 **In applying *depreciated replacement cost* methodology, the Valuer shall:**
- 5.4.1 **When valuing *specialised property*, assess the value of the land applying *Market Value* principles but recognising the constraints, if any, on the use of the land imposed by existing improvements.**
- 5.4.2 **Assess the current gross replacement cost of the asset, or in the case of *specialised property*, the improvements to the land and deduct allowances for:**
- **Physical deterioration**
 - **Functional or technical obsolescence**
 - **Economic or external obsolescence**
- 5.4.3 **In assessing the physical deterioration of the improvements resulting from wear and tear over time and any lack of maintenance, different valuation methods may be used for estimating the amount required to rectify the physical condition of the improvements.** Estimates of specific elements of depreciation and contractors' charges can be used or direct unit value comparisons between properties in similar condition.
- 5.4.4 **Functional and technical obsolescence can be caused by advances in technology that create new assets capable of more efficient delivery of goods and services.** Modern production methods may render previously existing assets fully or partially obsolete in terms of current cost equivalency. **Obsolescence and optimisation may be allowed for by adopting the replacement cost of a *Modern Equivalent Asset* as distinct from a reproduction of the asset.**
- 5.4.5 **Economic obsolescence resulting from external influences may affect the value of the asset.** External factors may include changed economic conditions which affect the demand for goods and services and the profitability of business entities.
- 5.5 **If the depreciated replacement cost method results in a value that is materially lower than the value of the asset for an alternative use, the Market**

- Value of the alternative use shall be reported, together with a statement that the value for the alternative use takes no account of issues such as business closure or disruption and the associated costs that would be incurred in achieving that use.**
- 5.6 **In the event that the entity may not continue as a going concern, and the Valuer considers that the value of the asset would be materially lower if it ceases to be part of the going concern, a statement to this effect should be included in the report.**
- 5.7 **By a process of market observation, Valuers estimate rates of depreciation and remaining economic life for existing buildings and other improvements in comparison with new or recent replacement buildings and other improvements.** Analysed depreciation rates may be all-encompassing or separated into the physical, functional, and economic elements of depreciation.
- 5.8 **Property transactions constantly reflect changing patterns in depreciation rates and remaining economic life estimates due to market influences.** Valuers should identify these changes and be capable of using them to support depreciation rates applied in depreciated replacement cost. The application of depreciated replacement cost replicates the deductive process of a potential buyer with a limited market for reference and who therefore must rely on cost and the substitution principle.
- 5.9 **In the application of depreciated replacement cost, the Valuer shall ensure that the key elements of a market transaction have been considered. These include:**
- 5.9.1 **an understanding of the asset, its function, and its environment;**
 - 5.9.2 **research and analysis to determine the remaining physical life (to estimate physical deterioration) and economic life of the asset;**
 - 5.9.3 **knowledge of the business requirements (to estimate functional/technical obsolescence);**
 - 5.9.4 **an assessment of future industry requirements (to estimate economic/external obsolescence);**
 - 5.9.5 **familiarity with the class of property through access to available market data;**
 - 5.9.6 **knowledge of construction techniques and materials (to estimate the cost of a modern equivalent asset); and**

- 5.9.7 **sufficient knowledge to determine the impact of economic/external obsolescence on the value of the improvements.**
- 5.10 **For a private sector entity with specialised assets, a valuation assessed by *depreciated replacement* cost must be subject to the test of adequate profitability in relation to the whole of the assets held by the entity or the cash generating unit.**
- 5.11 **For not-for-profit public sector entities, the test of adequate profitability is replaced by the test of adequate *service potential*. Governments place particular emphasis on the test of adequate service potential in asset reporting as many agencies utilise public sector assets in the context of a service obligation to the general public. **The test of adequate service potential is undertaken by the entity.****
- 5.12 **The valuation conclusion shall be reported in accordance with IVS 3, Valuation Reporting.**
- 5.12.1 **The Valuer reports the result as Market Value subject to the test of adequate profitability or service potential, a test, which is the responsibility of the entity.**
- 5.12.2 **In reporting the Market Value the Valuer shall disclose that the method used is depreciated replacement cost and that the value can only be adopted in the accounts of the entity if the relevant test of either adequate profitability or service potential is applied and met.**

6.0 Effective Date

- 6.1 This International Valuation Guidance Note became effective 31 January 2005.