

1 Appraisal Institute's Appraisal Standards Committee Comments on  
2 Exposure Draft of Proposed Revisions to:

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4 International Valuation Guidance Note No. 8 - The Cost Approach  
5 for Financial Reporting- (DRC)  
6 Proposed revisions 2006  
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9 **1.0 Introduction**

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11 1.1 The purpose of this Guidance Note (GN) is to assist users and preparers of  
12 Valuation Reports in the interpretation of the meaning and application of *depreciated*  
13 *replacement cost* for financial reporting purposes.  
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15 1.2 *Depreciated replacement cost* is an application of the cost approach **that may be**  
16 **used in assessing to determine** the value of specialised assets for financial reporting  
17 purposes, ~~where direct market evidence is limited.~~ **The depreciated replacement cost**  
18 **may be the more applicable approach when comparable sales data is insufficient but**  
19 **sufficient market data exists concerning costs and accrued depreciation.** As an  
20 application of the cost approach, it is based on the principle of substitution.  
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22 **2.0 Scope**

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24 2.1 This GN provides background to the use of *depreciated replacement cost* in  
25 connection with International Valuation Application 1 (IVA 1), Valuation for Financial  
26 Reporting.  
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28 2.2 The *depreciated replacement cost* approach is also discussed in GN3 (Valuation  
29 of Plant and Equipment) and IVA 3 (Valuation of Public Sector Assets for Financial  
30 Reporting, publication forthcoming).  
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32 **3.0 Definitions**

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34 3.1 *Depreciated Replacement Cost*. The current cost of replacing an asset with a  
35 modern equivalent asset less deductions for physical deterioration and all relevant  
36 forms of obsolescence and optimisation  
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38 3.2 *Plant and Equipment*. Tangible assets, other than *realty*, that:

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40 (a) are held by an entity for use in the production or supply of goods or  
41 services, for rental by others, or for administrative purposes; and

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(b) are expected to be used over a period of time

The categories of plant and equipment are:

*Plant.* Assets that are inextricably combined with others and that may include specialised buildings, machinery, and equipment.

*Machinery.* Individual machines or a collection of machines. A machine is an apparatus used for a specific process in connection with the operation of the entity.

*Equipment.* Other assets that are used to assist the operation of the ~~enterprise or~~ entity.

3.3 *Specialised Property.* *Real 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.

3.4 *Improvements.* Buildings, structures, or some 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 may have differing patterns of use and economic lives.

3.5 *Adequate Profitability.* When an asset has been valued by reference to *depreciated replacement cost*, *adequate profitability* is the test that ~~the~~ **a for-profit** entity should apply to ensure that it is able to support the *depreciated replacement cost* conclusion.

3.6 *Service Potential.* The capacity of an asset to continue to provide goods and services in accordance with the entity's objectives.

3.7 *Modern Equivalent Asset.* An asset which has a similar function and equivalent productive capacity to the asset being valued, but of a current design and constructed or made using current materials and techniques.

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 adjusting the replacement cost to reflect that an asset may be technically obsolete or over-engineered, or the asset may have a greater capacity than that required. Hence

83 optimisation minimises, rather than maximises, a resulting valuation where  
84 alternative lower cost replacement options are available.

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## 86 4.0 Relationship to Accounting Standards

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88 4.1 *Depreciated replacement* cost is used where there is insufficient market data to  
89 arrive at Market Value by means of market-based evidence

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91 4.1.1 International Accounting Standard (IAS) 16, Property, Plant and  
92 Equipment, paragraph 33, provides that in the absence of market-based  
93 evidence an entity may need to estimate the fair value of a specialised asset  
94 using an income or a *depreciated replacement cost* approach.

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96 4.1.2 International Public Sector Accounting Standard (IPSAS) 17, Property,  
97 Plant and Equipment, paragraphs 42 and 43, prescribe the use of *depreciated  
98 replacement cost* for valuing *specialised buildings* and *other man-made  
99 structures* as well as *items of plant and equipment of a specialised nature*.

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## 101 5.0 Guidance

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103 5.1 The classification of an asset as specialised should not automatically lead to the  
104 conclusion that a *depreciated replacement cost* valuation must be adopted. Even  
105 though an asset may be specialised, it may be possible ~~in some cases~~ **if sufficient**  
106 **direct market evidence exists** to undertake a valuation of ~~a~~ **the** specialised property  
107 using the sales comparison approach and/or the income capitalisation approach.

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109 5.2 In the absence of **sufficient** direct market evidence, *depreciated replacement*  
110 *cost* is regarded as an acceptable method of ~~assessing~~ **determining** the value of  
111 specialised assets but the methodology must incorporate market observations by the  
112 Valuer with regard to current **design (including layout and optimisation**  
113 **considerations)** costs and depreciation rates. The methodology is based on the same  
114 theoretical transaction between rational informed parties as the Market Value  
115 concept.

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117 5.3 ~~The~~ **In the application of *depreciated replacement cost*, the** Valuer ~~assesses~~  
118 **should determine** the cost of a *modern equivalent asset* at the relevant valuation  
119 date. This may involve ~~assessing~~ **determining** the cost of having a suitable asset  
120 commissioned to order. The *depreciated replacement cost* needs to reflect all  
121 incidental costs that would be incurred, for example for design, delivery, installation  
122 and commissioning. In the case of *Specialised Property*, the cost of acquiring land  
123 suitable for the development of *all* equivalent specialised facility in the market should

124 be included, together with the cost of all *Improvements* that would be required to the  
125 land.

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127 5.4 In the application of *depreciated replacement cost*, the Valuer then assesses  
128 should determine depreciation by comparing the *modern equivalent asset* with the  
129 asset being valued. Depreciation rates may be all-encompassing or analysed  
130 separately for:

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- 132     ▪ Physical deterioration
  - 133     ▪ Functional obsolescence
  - 134     ▪ ~~Economic~~ **External** obsolescence
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136 5.4.1 In ~~assessing~~ **determining** the physical deterioration of the actual asset  
137 resulting from wear and tear over time, including any lack of maintenance,  
138 different valuation methods may be used for estimating the amount required to  
139 rectify the physical condition of the improvements. Estimates of specific elements  
140 of depreciation and contractors' charges can be used or direct unit value  
141 comparisons between properties in similar condition.

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143 5.4.2 Functional obsolescence can be caused by advances in technology that  
144 result in new assets being capable of a more efficient delivery of goods and  
145 services. Modern production methods may render previously existing assets fully  
146 or partially obsolete in terms of current cost equivalency. The application of the  
147 optimisation process will account for many elements of functional obsolescence.

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149 5.4.3 ~~Economic~~ **External** obsolescence resulting from external influences may  
150 affect the value of the asset. External factors include changed economic  
151 conditions, which affect the **supply and** demand for goods and services produced  
152 by the asset or the costs of its operation. **External factors also include cost and**  
153 **reasonable availability of raw materials, utilities (particularly energy related costs)**  
154 **and labor costs.**

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156 5.4.4 When valuing *specialised property* it is not appropriate to **the Valuer must**  
157 **not** depreciate the cost of replacing the land element.

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159 5.5 In the application of *depreciated replacement cost*, the Valuer shall ensure that  
160 **must consider** the key elements of a market transaction ~~have been considered~~.  
161 These include:

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163         5.5.1 an understanding of the asset, its function, and its environment;

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165 5.5.2 research and analysis to determine the remaining physical life (to  
166 estimate physical deterioration) and economic life of the asset;  
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168 5.5.3 knowledge of the ~~business requirements~~ **changes in tastes,**  
169 **preferences, technical innovations, and/or market standards that may effect**  
170 **the asset** (to estimate functional/~~technical~~ obsolescence);  
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172 5.5.4 an assessment ~~analysis~~ of future industry requirements **potential**  
173 **external changes that may effect the asset** (to estimate ~~economic/external~~  
174 obsolescence);  
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176 5.5.5 familiarity with the class of property **of the asset** through access to  
177 available market data;  
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179 5.5.6 knowledge of construction techniques and materials **of the asset** (to  
180 estimate the cost of *a modern equivalent asset*); and  
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182 5.5.7 sufficient knowledge to determine the impact of ~~economic/external~~  
183 obsolescence on the value of the improvements.  
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185 5.6 Depreciation rates and estimates of future economic life are influenced by  
186 market trends **and/or** the entity's intentions. Valuers must identify these trends **and**  
187 **intentions** and be capable of using them to support the depreciation rates applied.  
188 The application of *depreciated replacement cost* should replicate the deductive  
189 process of a potential buyer with a limited market for reference.  
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191 5.7 In the final stage of the process Valuers should consider if the actual asset has  
192 any additional features not reflected in the cost of the *modern equivalent asset* and  
193 make any appropriate further adjustments. An example would be a *specialised*  
194 *property* where there is the possibility of a more valuable use in future when the  
195 *improvements* have reached the end of their economic life.  
196  
197 5.8 If it is clear that the result based on the *depreciated replacement cost* method is  
198 materially lower than a readily identifiable alternative use that is both commercially  
199 and legally feasible at the date of valuation, the *Market Value* based on that  
200 alternative use ~~shall~~ **must** be reported. ~~This~~ **In addition, the Valuer** must include a  
201 statement that the value for the alternative use takes no account of matters such as  
202 business closure or disruption and any associated costs that would be incurred.  
203

204 5.9 If the Valuer ~~considers~~ **determines** that the value of the asset would be materially  
205 different if it ceases to be part of the going concern, a statement to this effect  
206 should be included in **any** report.

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208 5.10 **For for-profit entities, a** valuation of a specialised asset ~~assessed~~ **developed**  
209 by the *depreciated replacement cost* method is subject to the test of adequate  
210 profitability in relation to the whole of the assets held by **the** for-profit entity or the  
211 ~~cash-generating reporting~~ **reporting** unit. **A test of adequate profitability may, in part be based**  
212 **on, a rate of return analysis (WACC) comparing the specialised asset with other**  
213 **companies in its peer group.**

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215 5.11 For not-for-profit public sector entities, the test of adequate profitability is  
216 replaced by the test of adequate *service potential, which should be justifiable by the*  
217 *entity*. Governments place particular emphasis on the test of adequate service  
218 potential in asset reporting as many agencies utilise public sector assets in the  
219 context of a service obligation to the general public.

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221 5.12 ~~The~~ **A** valuation conclusion **developed through the application of the depreciated**  
222 **replacement cost** shall be reported in accordance with IVS 3, Valuation Reporting.

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224 5.12.1 The Valuer reports the result as Market Value subject to the test of  
225 adequate profitability or ~~justified~~ **adequate** service potential, a test which is  
226 the responsibility of the entity.

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228 5.12.2 In reporting the value the Valuer shall identify the valuation method as  
229 *depreciated replacement cost* noting that the value can only be adopted in the  
230 accounts of the entity if the relevant test of either adequate profitability or  
231 **adequate** service potential is applied and met.

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## 233 **6.0 Effective Date**

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235 6.1 This International Valuation Guidance Note became effective xxx 2007 but earlier  
236 adoption is encouraged.

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