

REAL PROPERTY VALUATION

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1.0 Introduction

- 1.1 The International Valuation Standards Committee's (IVSC) Concepts Fundamental to Generally Accepted Valuation Principles set forth terms and concepts that are fundamental to all valuations. The purpose of Guidance Note No.1 (GN 1) is to amplify those fundamentals so they may be better understood in valuations of real property.
- 1.2 *Real property* constitutes a substantial portion of the world's wealth. If the operations of property markets are to be established on dependable valuations, there must be generally agreed upon Standards by which *Market Value* and other value types are determined and reported by Valuers. Correct understanding and proper application of these Standards will inevitably promote the viability of international and domestic transactions in real property, improve the relative position of real property among other investment alternatives, and reduce the instances of fraud and abuse.
- 1.3 The term *property* in a legal sense may be defined as ownership rather than the physical entity of land, buildings, and tangible personal items. In this context, the IVSC identifies four general property types:
- 1.3.1 Real Property (GN 1)
 - 1.3.2 Personal Property (GNs 3, 4, and 5)
 - 1.3.3 Businesses (GN 6)
 - 1.3.4 Financial Interests
- 1.4 As with other property types, there are commonly agreed upon and generally accepted methods for valuing real property. It is important to the Valuer and the users of valuation services that proper methods be thoroughly understood, competently applied, and satisfactorily explained. By meeting this objective, Valuers contribute to the soundness and reliability of *Market Value* estimates and, thereby, the well-being of the markets in which they practice.
- 1.5 Promotion of understanding and avoidance of abuses in the market require that the Valuer and user of valuation services carefully distinguish between the types of property. Failure to do so can result in improper or ill-advised market decisions and misrepresentations of reported values. Over- or under-reporting of value is a common result where property types are confused or mixed. The same is true when terminology is indistinct or inadequate.
- 1.6 Real Property Valuers recognise the complexities of markets and the real estate bought and sold therein. Differences in real estate markets and between individual properties are reflected accurately and reliably where Generally Accepted Valuation Principles (GAVP) are followed.
- 1.7 In all IVSC Member States, it is recognised that the valuation of real property requires special education, training, and experience. Just as the emergence of professional valuation societies at the national level attests to a market need for competent and highly ethical Valuers within each country, the globalisation of property markets and the establishment of IVSC reflect the market need for Valuers to adopt consistent methods throughout the world. GN 1, Real Property, provides an international framework for the application of generally accepted methods used for real property valuation.
- 1.8 The relationship between GNs 6 and 12, pertaining to business and trade related property (TRP) valuation, and GN 1, pertaining to real property valuation, must be clearly understood. Real property is valued as a distinct "entity," i.e., as physical assets to which particular ownership rights apply. For example, an office building, a residence, a factory, or other property types generally incorporate an underlying land component. Business or TRP valuation, however, values a business entity or TRP asset of which real property may be a component. The *Market Value* of real property is always valued in accordance with International Valuation Standard 1 (IVS 1). When a real property value estimate is incorporated as an element of a business valuation, it is a *Market Value* estimate of the real property. As discussed in GN 1, this convention is distinct from the unacceptable practice of purportedly developing a *Market Value* estimate for real property as an allocation of the value of a going concern.
- 1.9 It is not the objective of GN 1 to provide specific Guidance as to how a given valuation should

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 1

be performed or to supercede the qualifications for and procedures applied by Valuers. These are addressed within the training programs of each State. It is the IVSC's intent to establish a framework and requirements for real property valuation that will serve to harmonise worldwide valuation practices.

2.0 Scope

- 2.1 This GN is provided to assist in the course of rendering or using real property valuations.
- 2.2 Principal elements of GN 1 include
 - 2.2.1 an identification of key terms and definitions;
 - 2.2.2 a summary of the Valuation Process and its rationale;
 - 2.2.3 an elaboration on the importance of principles and concepts;
 - 2.2.4 a discussion of proper disclosure and reporting requirements;
 - 2.2.5 examples of abuses and misunderstandings; and
 - 2.2.6 a presentation of real property Guidance.
- 2.3 The specific application of quantitative and qualitative valuation procedures is beyond the scope of GN 1. It is important to stress, however, that Valuers are trained in such procedures, and that the procedures are included in generally accepted practices. In application, Valuers commonly apply several procedures in each valuation and then reconcile the results into a final indication of *Market Value* or other specified value.

3.0 Definitions

- 3.1 Concepts Fundamental to Generally Accepted Valuation Principles defines the concepts of *land* and *property*; *real estate*, *property*, and *asset*; *price*, *cost*, and *value*; *Market Value*, *highest and best use*, and *utility*. The Glossary of Terms further defines many of the concepts and technical terms used throughout the Standards and Guidance Notes. The following definitions are specific to GN 1 and are included here for reader convenience.
- 3.2 *Comparable Data*. Data generally used in a valuation analysis to develop value estimates. *Comparable Data* relate to properties that have characteristics similar to those of the property being valued (the subject property). Such data include sale prices, rents, income and expenses, and market-derived capitalisation and yield/discount rates.

- 3.3 *Elements of Comparison*. Specific characteristics of properties and transactions that cause the prices paid for real estate to vary. *Elements of comparison* include, but are not limited to, the following: property rights conveyed, financing terms, conditions of sale, market conditions, location, and physical and economic characteristics. (See para. 5.22 of this document for a full presentation of *Elements of Comparison*.)
- 3.4 *Highest and Best Use*. The most probable use of a property which is physically possible, appropriately justified, legally permissible, financially feasible, and which results in the highest value of the property being valued. (See Concepts Fundamental to Generally Accepted Valuation Principles, section 6.)
- 3.5 *A Market*. The environment in which goods, services and commodities trade between buyers and sellers through a price mechanism.
- 3.6 *Market Value*. Definitions are included in Concepts Fundamental to Generally Accepted Valuation Principles and International Valuation Standard 1, section 3.
- 3.7 *Property Rights*. The rights that are related to the ownership of real estate. These include the right to develop or not develop the land, to lease it to others, to sell it, to give it away, to farm it, to mine it, to alter its topography, to subdivide it, to assemble it, to use it for waste disposal, or to choose to exercise none of these rights. The combination of these property rights is sometimes referred to as the *bundle of rights* inherent in the ownership of real estate. *Property rights* are typically subject to public or private restrictions such as easements, rights-of-ways, specified development density, zoning, and other restrictions that may encumber the property.
- 3.8 *Real Estate*. Land and all things that are a natural part of the land, e.g., trees and minerals, as well as all things that are attached by people, e.g., buildings and site improvements. All permanent building attachments such as plumbing, heating and cooling systems; electrical wiring; and built-in items like elevators, or lifts, are also part of the *real estate*. *Real estate* includes all attachments, both below and above the ground. (See also Concepts Fundamental to Generally Accepted Valuation Principles as well as in the Glossary of Terms.)
- 3.9 *Real Property*. All the rights, interests, and benefits related to the ownership of *real estate*. *Real property* is a legal concept distinct from *real estate*, which is a physical asset. There may also

be potential limitations upon ownership rights to real property. (See Property Types, para. 2.2.1 and 2.2.4.)

3.10 *Units of Comparison*. Typically a factor produced by two components, which reflects precise differences between properties and facilitates analysis in the three approaches to value, e.g., price per square metre or square foot, or the ratio of a property's sale price to its net income (net income multiplier/years' purchase).

3.11 The *Cost Approach*. One of the approaches to value commonly applied in *Market Value* estimates and many other valuation situations.

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. (See GN 8, The Cost Approach for Financial Reporting-(DRC).)

4.0 Relationship to Accounting Standard

4.1 For a general discussion of the accounting requirements for real property valuations, and the utility of *Market Value* in promoting the objectivity and comparability of real property valuations, see International Valuation Application 1.

5.0 Guidance

5.1 Value, in its broadest sense, is defined as the relationship between something owned and an individual or individuals who wish(es) to own it. To distinguish between the broad subjective relationships that may occur among people, Valuers must identify a particular type of value as the basis of any valuation. ***Market Value is the most common value type, but valuation bases other than Market Value also exist.*** (See Introduction to Standards 1, 2 and 3; and IVS 1 and 2.)

5.1.1 *Market Value* has evolved in concept and definition under the influence of market forces and in response to various principles of real estate economics. **By applying a definition of value such as Market Value in valuations, Valuers and the users of their services are afforded an objective plan of analysis.**

5.1.2 When *Market Value* is the purpose of a valuation, the Valuer shall apply definitions, processes, and methods consistent with IVS 1.

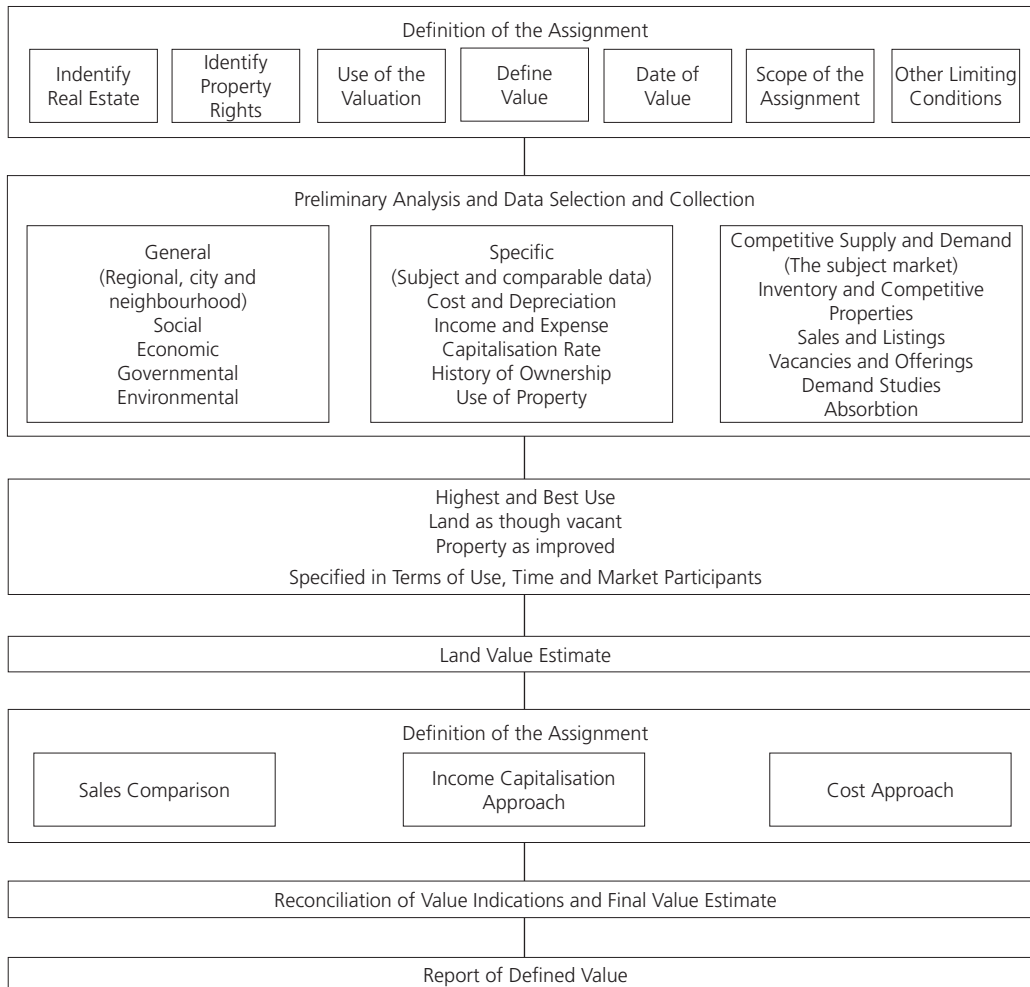
5.2 Where a type of value other than *Market Value* is the purpose of a valuation, the Valuer shall apply the appropriate definition of value and shall follow IVS 2 and applicable GNs. It is the responsibility of the Valuer to avoid potential misunderstandings or misapplications of the valuation estimate in situations where a value other than *Market Value* is the purpose of the assignment. Proper disclosures, identification and definition of terms, and stated limitations on the applicability of the valuation and the Valuation Report normally ensure compliance.

5.3 GN Figure 1-1 illustrates the Valuation Process as it is applied in many States. The process reflects Generally Accepted Valuation Principles (GAVP) and is approximated in virtually all States, whether or not the particular steps are explicitly followed. The principles from which this process derives are common to all States. Although the process may be used for either *Market Value* or applications founded on other bases of value, *Market Value* applications require the development of valuations solely on the basis of market data.

5.4 A valuation must be distinguished from a Valuation Report. Valuation includes all of the research, data, reasoning, analysis, and conclusions necessary to arrive at a value estimate. A Valuation Report communicates those processes and conclusions. Although requirements differ among States, it is a requisite under these Standards that adequate records be kept to demonstrate that a Valuation Process was followed and that the conclusions are credible and reliable. These records must be available in case reasonable enquiry is subsequently made. (See IVS Code of Conduct, para. 5.3.5 and 5.3.6.) In practice, some forms of reporting may incompletely represent the entire basis for the valuation. If the report is in any way limited, the Valuer will generally identify and distinguish between the scope of the valuation and that of the Valuation Report.

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 1

Guidance Note Figure 1-1: The Valuation Process



5.5 It is appropriate and customary that a *client's instruction* (para. 5.6 below) be stated in writing in a *letter or contract for services*. In *Market Value* situations it is also common for the independence, or external status, of the Valuer to be established in an affirmative statement. The agreement also sets forth the business relationship between the Valuer and the client, fee and payment terms, special directives and limitations, an identification of the Standards to be applied, and other pertinent matters.

5.6 As GN Figure 1-1 indicates, a Valuer and the valuation client must agree on the context and scope of the valuation. The *definition of the assignment* includes

- 5.6.1 an identification of the real estate involved in the valuation;
- 5.6.2 an identification of the property rights to be valued;

5.6.3 the intended use of the valuation, and any related limitations;

5.6.4 the identification of any subcontractors or agents and their contribution;

5.6.5 a definition of or the basis of the value sought;

5.6.6 the date as of which the value estimate will apply; and the date of the intended report;

5.6.7 an identification of the scope/extent of the valuation and of the report; and

5.6.8 an identification of any contingent and limiting conditions upon which the valuation is based.

5.7 In performing the steps of a *preliminary analysis*, and *data selection and collection*, suggested in the Valuation Process, the Valuer becomes familiar with the general market and subject property, thereby proceeding to a

- position from which more specific analyses can be made.
- 5.7.1 **General economic data** are collected at the neighbourhood, city, regional, and even national and international levels, depending on the property involved. Social, economic, governmental, and environmental factors that may have bearing on *Market Value* (or other defined value type) are examined to better understand the particular property. Any other specific forces that must be considered are investigated in detail.
- 5.7.2 **Property-specific data**, or data more directly relevant to the property being valued and to comparable properties are also gathered and examined. These include site and improvement data, cost and depreciation data, income and expense data, capitalisation and yield rate data, ownership and utilisation histories, and other information determined to be significant and generally considered by buyers and sellers in their negotiations and transactions.
- 5.7.3 **Supply and demand data** characteristic of the most probable market for the property are analysed to develop an inventory of properties that compete with the subject property for market share as well as an inventory of existing properties to be adapted or new properties to be built, which will increase the competitive supply. Markets are analysed to determine market trends, relationships between supply and demand, absorption rates, and other market-specific information.
- 5.8 Once the above data are gathered and analysed, the Valuer will be able to determine possible land uses for the subject property. Because different real estate parcels may have different use potentials, **the first requisite step toward selecting sales and other comparable data is to determine the highest and best use (HABU) of the subject property. The Valuer considers both the highest and best use of the land as though vacant and the highest and best use of the property as improved.** (See the discussion of HABU in Concepts Fundamental to Generally Accepted Valuation Principles, para. 6.0 et seq.)
- 5.8.1 **The concept of HABU** is based on the notion that although two or more parcels of real estate may have physical similarities and closely resemble one another, there may be significant differences in how they can be used. How a property can be optimally utilised is a foundation for determining its *Market Value*.
- 5.8.2 **Basic determinants of HABU** include the answers to the following questions:
- Is the suggested use a reasonable and likely one?
 - Is the use legal, or is there a reasonable likelihood that a legal entitlement for the use can be obtained?
 - Is the property physically suited to the use or can it be adapted to the use?
 - Is the suggested use financially feasible? and
 - Of those uses that meet the first four tests, is the selected HABU the most productive use of the land?
- 5.9 **Several methods are used for land valuation.** Their applicability differs according to the type of value estimated and availability of data. **For Market Value estimates, any method chosen must be supported by market data.** (See para. 5.25 et seq.)
- 5.10 In many, but not all, States **three valuation approaches are recognised in the Valuation Process: sales comparison, income capitalisation, and cost.** While a well-evidenced market may make the *cost approach* less relevant, a lack of comparable data may cause the *cost approach* to be predominant. The laws of some States preclude or limit the application of one or more of the three approaches. Unless there are such restrictions, or unless there are other compelling reasons for a particular omission, **it is reasonable for the Valuer to consider each approach.** In some States, the use of each approach is mandated unless the Valuer can demonstrate a lack of supporting data or other valid reason for omission of a particular approach. **Each approach is based, in part, on the Principle of Substitution**, which holds that when several similar or commensurate commodities, goods, or services are available, the one with the lowest price attracts the greatest demand and widest distribution. In simple terms, the price of a property established by a given market is limited by the prices commonly paid for properties that compete with it for market share, the financial alternatives of investing money elsewhere, and the cost of building a new property or adapting an old property to a use similar to that of the subject property (property being valued).
- 5.11 **The sales comparison approach** recognizes that property prices are determined by the market. **Market Value can, therefore, be calculated**

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 1

from a study of market prices for properties that compete with one another for market share. The comparative processes applied are fundamental to the Valuation Process.

5.11.1 When data are available, the *sales comparison approach* is the most direct and systematic approach to estimating value.

5.11.2 When data are insufficient, the applicability of the *sales comparison approach* may be limited. Insufficient research by the Valuer, however, is not an excuse for omission of this approach where data are available or could reasonably be developed. (See section 5.23 et seq. for discussion of market research, data verification, adjustment procedure, and reconciliation of indications.)

5.11.3 After sales data are gathered and verified, one or more *units of comparison* are selected and analysed. Units of comparison use two components to produce a factor (e.g., the price per measurement unit or a ratio such as that produced by dividing a property's sale price by its net income, i.e., net income multiplier, or years' purchase) that reflects precise differences between properties. The units of comparison that buyers and sellers in a given market use in making their purchase and sale decisions take on special relevance and may be afforded greater weight.

5.11.4 *Elements of comparison* are the specific characteristics of properties and transactions that cause the prices paid for real estate to vary. They are crucial considerations in the *sales comparison approach*.

5.11.5 To make direct comparisons between a comparable sale property and the subject property, a Valuer shall consider possible adjustments based on differences in the elements of comparison. Adjustments can narrow the differences between each comparable and the subject. Valuers apply quantitative and/or qualitative methods to analyse differences and estimate adjustments.

5.12 The *income capitalisation approach* can be applied in both *Market Value* assignments and other types of valuations. However, for *Market Value* applications, it is necessary to develop and analyse relevant market information. This focus differs distinctly from the development of subjective information for a specific owner or the reflection or viewpoint of a particular analyst or investor.

5.12.1 The *income capitalisation approach* is based on the same principles that apply to other valuation approaches. In particular, it perceives value as created by the expectation of future benefits (income streams). *Income capitalisation* employs processes that consider the present value of anticipated future income benefits.

5.12.2 As with other approaches, the *income capitalisation approach* can be used reliably only when relevant comparative data are available. When such information is not available, the approach may be used for general analysis but not for the purpose of direct market comparison. The *income capitalisation approach* is particularly important for properties that are purchased and sold on the basis of their earnings capabilities and characteristics and in situations where there is market evidence to support the various elements incorporated into the analysis. Nonetheless, the mathematical precision of the procedures used in the approach must not be mistaken as an indication of the precise accuracy of the results.

5.12.3 Market research is important to the *income capitalisation approach* in a number of ways. In addition to providing specific data that will be processed, market research also furnishes qualitative information to determine comparability and to assist in weighing the applicability of the results of the analysis. Thus, the approach is not merely quantitative, or mathematical, but requires qualitative assessments as well.

5.12.4 Once appropriate market research is completed and comparable data are collected and verified, Valuers analyse the income and expense statement provided for the subject property. This step involves a study of the historical incomes and expenses of the property under consideration and of other competing properties for which data are available. Subsequently, a cash flow (based upon a *reconstructed operating statement*) is developed that reflects market expectations, eliminates the special experiences of a particular owner, and provides a format that assists further analysis. The purpose of this step is to estimate the income that can be earned by the property, which will be capitalised into an indication of value. This estimate may reflect income and expenses for only a single year or a series of years.

- 5.12.5 Following the development of a cash flow (based on a *reconstructed operating statement*), the Valuer must choose a means of capitalisation. *Direct capitalisation* applies an *overall rate*, or *all risks yield*, which produces a value indication. *Direct capitalisation* is used in particularly well-evidenced markets. *Yield capitalisation* considers the time value of money, and is applied to a series of net operating incomes for a period of years. A method called *discounted cash flow analysis* (DCF) is a prominent example of *yield capitalisation*. (See Guidance Note 9). Either *direct capitalisation* or *yield capitalisation* (or both) can be applied to estimate *Market Value* if the capitalisation and yield rates are appropriately supported by the market. If applied correctly, both procedures should result in the same value estimate.
- 5.12.6 Reconstructed operating statements specify that the income projection is subject to the assumption that the property is run by a reasonably efficient operator or average competent management.

AUSNZ 5.12.7

When adopting the income approach to value for owner-occupied property, the valuer must adopt notional market lease terms and conditions including a market rental. These terms and conditions should be stipulated in the report and if applicable, any vacancy and/or letting-up allowances included.

AUSNZ 5.12.8

Where the income approach to value is used for financial reporting purposes in relation to owner-occupied property, a deduction is not made for vacancy or letting-up factors if the going concern presumption applies. Areas intended to be vacated should not be valued on this basis.

- 5.13 The *cost approach*, also known as the contractor's method, is recognised in most States. In any application, the *cost approach* establishes value by estimating the costs of acquiring land and building a new property with equal utility or adapting an old property to the same use with no undue expense resulting from delay. The cost of land is added to the total cost of construction. (Where applicable, an estimate of entrepreneurial incentive, or developer's profit/loss, is commonly added to construction costs.) The cost approach establishes the upper limit of what the market would normally pay for a given property when it is new. For an older property, some allowance for various forms of accrued depreciation (physical deterioration; functional, or technical, obsolescence; and economic, or external obsolescence) is deducted to estimate a price that approximates *Market Value*. Depending upon the extent of market data available for the calculations, the cost approach may produce a direct indication of *Market Value*. The *cost approach* is very useful in estimating the *Market Value* of proposed construction, special-purpose properties, and other properties that are not frequently exchanged in the market. (See also GN 8, The Cost Approach for Financial Reporting- (DRC).)
- 5.14 The three approaches to value are independent of one another even though each approach is based on the same economic principles. All three approaches are intended to develop an indication of value, but the final value conclusion depends on consideration of all data and processes employed and the reconciliation of the value indications derived from different approaches into a final estimate of value. As shown in GN Figure 1-1, the reconciliation process is followed by a report of defined value.
- 5.15 The requirements for valuation reports are addressed in the IVSC Code of Conduct, and IVS 3, Valuation Reporting.
- 5.16 Where there is sufficient market data to support the valuation, *Market Value* is derived. In other circumstances, where there is insufficient market data or special instructions have been given, the result will be a *Value* other than *Market Value*.
- 5.17 The existence of different types of value must not confuse Valuers or the users of valuation services. *Market Value*, the value type most commonly sought in the market, is distinct from all other value types. Each of the other value types has its own rationale and application and shall be investigated only in an appropriate context. By proper reporting, adequate disclosure and discussion, and the assurance that the value type identified in the valuation report suits the intended purpose and use of the valuation, the Valuer assists the market in its reliance on valuations.
- 5.18 The terms *market* and *markets* imply properties, buyers, sellers, and some degree of

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 1

- competition.** If a property chosen for comparison does not, or cannot, compete in the same market as the property being valued, it is likely that the comparison property belongs to a different market.
- 5.19 The totality of private ownership rights associated with a particular property is referred to as a *freehold interest*, a *fee simple interest*, or by other appropriate terms depending on the State.
- 5.20 **In any analysis of comparable data, it is essential that the properties from which the comparable data are collected have characteristics similar to the property being valued.** These include legal, physical, locational, and use characteristics that are consistent with those of the subject property and reflect conditions in the market where the subject property competes. Differences shall be noted and analysed to develop adjustments in all three valuation approaches.
- 5.20.1 **In the sales comparison approach, comparable sales data** are adjusted to reflect the differences between each comparable property and the subject property. **Elements of comparison** include real property rights conveyed, financing terms, conditions of sale, expenditures made immediately after purchase, market conditions, location, physical characteristics, economic characteristics, use, and non-realty components of a sale.
- 5.20.2 **In the income capitalisation approach, comparable data** include rental, income, expense, and capitalisation and yield rate data. **The categories of comparable income and expense data** used in projections of future income and expenses and in the development of capitalisation and yield rates **must be identical.**
- 5.20.3 **In the cost approach, comparable data** refer to the costs of building or development, and adjustments are made to account for differences in quantities, qualities, and utility. In addition, analysis of comparable land data and comparable depreciation estimates is undertaken.
- 5.21 **Suitable units of comparison** are selected to conduct proper analyses. Different units of comparison may be used, depending on the property type and focus of the analyses. Office buildings and warehouse properties can be compared using price per square metre or square foot of leaseable or lettable area. In some markets, comparison of warehouse properties may use price per cubic metre or cubic foot; apartments can be compared using price per apartment unit or flat; and agricultural properties can be compared, using crop yield per hectare or per acre or supportable Animal Units (AU) per hectare or per acre. **Units of comparison are only useful when they are consistently selected and applied to the subject property and the comparable properties in each analysis and most closely reflect the units of comparison used by buyers and sellers in a particular market.**
- 5.22 **Elements of comparison** identify specific characteristics of properties and transactions that may explain price variations. Market analysis identifies which elements are especially sensitive. **The following elements of comparison are considered as basic in comparable sales analysis.**
- 5.22.1 **Real property rights conveyed.** A precise identification of the real property rights conveyed in each comparable transaction, selected for analysis, is essential because the transaction price is always predicated on the property interest conveyed.
- 5.22.2 **Financing terms.** Where different financing arrangements can cause the price paid for one property to differ from that of another identical property, the types and conditions of financing arrangements in the transaction shall be fully understood, analysed, and accounted for.
- 5.22.3 **Conditions of sale.** The special motivations of the parties to the transaction in many situations can affect the prices paid and even render some transactions as non-market. Examples of special conditions of sale include a higher price paid by a buyer because the parcel had synergistic, or marriage, value; a lower price paid because a seller was in a hurry to conclude the sale; a financial, business, or family relationship between the parties involved in the transaction; unusual tax considerations; lack of exposure of the property in the (open) market; or the prospect of lengthy litigation proceedings.
- 5.22.4 **Expenditures made immediately after the purchase** are expenditures that would have to be made upon purchase of the property and that a knowledgeable buyer may negotiate into the purchase price. Examples include the cost to repair or replace structures or parts of structures, the cost to remediate environmental contamination, or the costs associated with zoning changes to permit development.
- 5.22.5 **Market conditions.** Market conditions at the time of the sales transaction of a comparable property may differ from those on the valuation date of

- the property being valued. Factors that impact market conditions include rapidly appreciating or depreciating property values, changes in tax laws, building restrictions or moratoriums, fluctuations in supply and demand, or any combination of forces working in concert to alter market conditions from one date to another.
- 5.22.6 **Location.** The locations of the comparable sale properties and the subject property are compared to ascertain whether location and the immediate environs are influencing the prices paid. Extreme locational differences may indicate that a transaction is not truly comparable and should be disqualified.
- 5.22.7 **Physical characteristics.** Attributes such as the size, construction quality, and physical condition of the subject property and the comparable properties are described and analysed by the Valuer. If the physical characteristics of a comparable property vary from those of the subject property, each of the differences is considered, and the Valuer shall adjust for the impact of each of these differences on value.
- 5.22.8 **Economic characteristics.** Qualities such as income, operating expenses, lease provisions, management, and tenant mix are used to analyse income-producing properties.
- 5.22.9 **Use.** Zoning and other restrictions or limitations affect the use of a property. If there is a difference in the current use or *highest and best use* of a comparable property and that of the subject property, its impact on value shall be carefully considered. Generally, only properties with the same or similar *highest and best uses* are used in comparable analysis.
- 5.22.10 **Non-realty components of sale.** Personal property, business interests, or other items that do not constitute real property may be included in either the transaction price or the ownership interest in the property being valued. These components shall be analysed separately from the real property. Typical examples of personal property are furniture, fixtures, and equipment (FF&E) in a hotel or restaurant.
- 5.23 **In applying the sales comparison approach, a Valuer follows a systematic procedure. The Valuer will:**
- 5.23.1 **Research the market** to develop appropriate market information for similar properties that compete with the subject for market share; this information will vary among different property types but will commonly include the property type, date of sale, size, location, zoning, and other relevant information.
- 5.23.2 **Verify the information** by confirming that it is accurate and that the terms and conditions of sale are consistent with *Market Value* requirements; where differences occur, the Valuer will determine whether the data warrant only general consideration.
- 5.23.3 **Select relevant units of comparison** (e.g., price per metre or per square square foot; price per room; income multiplier, or years' purchase; or others) and develop a comparative analysis for each unit.
- 5.23.4 **Compare the sale properties with the subject property** using the elements of comparison and adjusting the sale price of each comparable property when data are available to support such adjustments. As an alternative, the Valuer may use the sales data to bracket or determine a probable range of values for the property. If the data are found not to be sufficiently comparable, the sale property shall be eliminated as a comparable.
- 5.23.5 **Reconcile the results into a value indication.** Where market conditions are indefinite, or when an array of the sales data shows varying degrees of comparability, it may be advisable to develop a range of value indications.
- 5.24 **Highest and best use underlies the analysis for all Market Value assignments.** An understanding of real estate market behaviour and dynamics is essential to the determination of a property's *highest and best use*. Since market forces create *Market Value*, the interaction between market forces and *highest and best use* is of fundamental importance. **Highest and best use identifies the most profitable use among potential uses to which the property can be put, and is, therefore, market-driven.**
- 5.24.1 It is possible that the *highest and best use* (HABU) of land as though it were vacant and the HABU of an improved parcel of land are different. In many States, it may be illegal to demolish buildings even if a more productive use is possible. Where demolition and site clearance are legal and possible, the costs associated with them might make new construction economically unfeasible. Thus, it is possible that there is a difference between the HABU of land as though vacant and that of the property as improved. The Valuer must analyse and report these considerations, and

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 1

clearly distinguish which HABU was selected. The Valuer must also provide support for the HABU selection.

5.24.2 In many States, it is necessary to make a land value estimate based on the HABU as though there were no improvements on the land. This HABU determination is, of course, necessary if the land is vacant, but it also provides an economic basis for judging the productivity of the improvements when they are present. The practice also involves analysing market information to determine the extent of accrued depreciation that may be present in the improvements. In other States, or in situations where there is little, if any, market information on vacant land sales, it is possible that land value may not be estimated. Local standards within each State prescribe practice in these situations, but in any event such restrictions shall be fully and clearly understood.

5.25 The primary methods of valuing land are:

5.25.1 A **sales comparison technique** for land valuation involves direct comparison of the subject property with similar land parcels for which actual data on recent market transactions are available. Although sales are the most important, analysis of listings and prices offered for similar parcels that compete with the subject may contribute to greater understanding of the market.

5.25.2 A **subdivision development technique** may also be applied to land valuation. This process entails projecting the subdivision of a particular property into a series of lots, developing incomes and expenses associated with the process, and discounting the resulting net incomes into an indication of value. This technique may be supportable in some situations, but is subject to a number of assumptions that may be exceedingly difficult to associate with the *Market Value* definition. Caution is advised in the development of supportable assumptions, of which the Valuer is advised to make full disclosure.

Where direct land comparisons are not available, the following methods can be applied with caution.

5.25.3 **Allocation** is an indirect comparison technique that develops a ratio between land value and improvement value or some other relationship between property components. The result is a measure that allocates a total market price between the land and improvements for comparative purposes.

5.25.4 **Extraction** is another indirect comparison technique (sometimes called *abstraction*). It provides a value estimate of improvements by applying a cost less depreciation analysis and extracting the result from the total price of otherwise comparable properties. The residual is an indication of possible land value.

5.25.5 The **land residual technique** for land valuation also applies income and expense data as elements in its analysis. A financial analysis is made of the net income that can be obtained by an income-producing use and a deduction from the net income is made for the financial return required by the improvements. The remaining income is considered residual to the land and is capitalised into a value indication. The method is limited to income-producing properties and is most applicable to newer properties for which fewer assumptions are required.

5.25.6 Land can also be valued by **ground rent capitalisation**. If the land is capable of independently producing a ground rental, that rent may be capitalised into a *Market Value* indication where sufficient market data are available. Care must be taken, however, not to be misled by special terms and conditions in a ground-rent lease that may not necessarily be representative of the particular market. In addition, since ground leases may have been drawn up many years before the valuation date, the rents quoted therein may be outdated, and current income capitalisation rates may be hard to obtain.

5.26 A **real estate market** may be defined as the interaction of individuals or entities that exchange real property rights for other assets, typically money. **Specific real estate markets** are defined by the property type, location, income-producing potential, typical tenant characteristics, attitudes and motivations of typical investors, or other attributes recognised by those individuals or entities participating in the exchange of real property. In turn, **real estate markets** are subject to a broad variety of social, economic, governmental, and environmental influences.

5.26.1 In comparison to markets in goods, securities, or commodities, **real estate markets are still considered inefficient**. This feature is attributable to a variety of factors including the relatively inelastic supply and the fixed location of real estate. Consequently, the supply of real estate does not adjust quickly in response to changes in market demand.

- 5.26.2 **Investment in real estate**, which is relatively illiquid, involves large sums of money for which appropriate financing might not be readily available. Valuers shall recognize these inefficiencies, and their understanding of the particular characteristics of a real estate market and/or sub-market shall produce a credible and objective analysis for the clients they serve.
- 5.27 **The use of the *cost approach*** can be appropriate when properties are new or of relatively new construction, provided estimates of items such as land value and depreciation are validated by market evidence. In depressed markets, economic or external obsolescence must be factored into the indication of value derived from the *cost approach*.

6.0 Effective Date

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

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VALUATION OF LEASE INTERESTS

REVISED 2007

1.0 Introduction

- 1.1 International Valuation Standards (IVSs) Concepts Fundamental to Generally Accepted Valuation Principles distinguish between *real estate*, the physical tangible “thing” (see Concepts Fundamental to GAVP 3.0), and *real property* which pertains to the rights, interests, and benefits related to the ownership of real estate. *Lease interests* are a form of real property, arising from the contractual relationship (the terms of which are conveyed by a *lease*) between a *lessor*, one who owns the property leased to another, and a *lessee*, or tenant, one who typically receives a non-permanent right to use the leased property in return for rental payments or other valuable economic consideration.
- 1.2 To avoid misunderstandings or misrepresentations, Valuers and users of valuation services should recognise the important distinction between the physical and the legal issues involved in considering the value of lease interests.
- 1.3 This class of ownership is, as for the fee simple or freehold interest, common to all types of property assets valued. A piece of real estate may comprise one or more property interests, each of which will have a *Market Value* providing it is capable of being freely exchanged.
- 1.4 In no circumstances is it considered proper to value different property interests in the same piece of *real estate* separately and then to aggregate their values as an indication of the *real estate's* total value. Lease contracts establish unique legal estates that are different from fee simple, or freehold, ownership.
- 1.5 International Financial Reporting Standards (IFRSs) (including International Accounting Standards (IASs)) contain specific accounting requirements for property that is either held under a lease, or subject to a lease.
- 1.6 The relationships between different legal interests in the same property can be complex and can be made more confusing by the different terminology used to describe the various interests. This Guidance Note (GN) seeks to address and clarify

these issues. The diagram on the following page illustrates the relationship between lease interests.

2.0 Scope

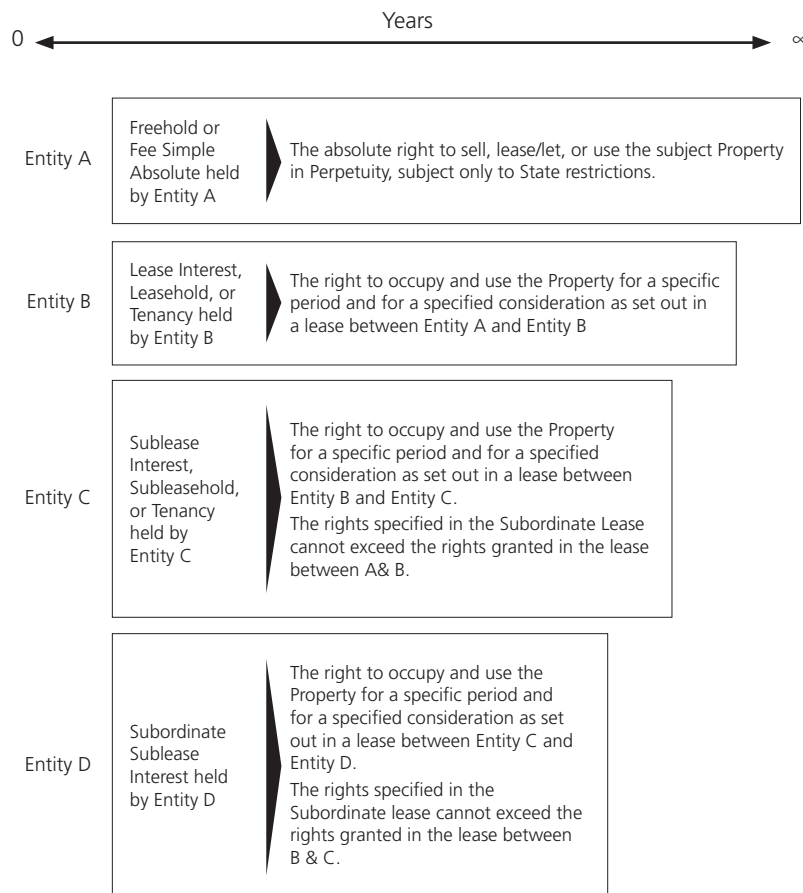
- 2.1 This GN sets out definitions, principles, and important considerations in the valuation of and related reporting for lease interests.
- 2.2 This GN is to be applied with particular reference to IVSs Concepts Fundamental to Generally Accepted Principles and to IVSs 1 and 2, and IVAs 1, 2 and 3.
- 2.3 This GN applies in States where a lessee holds an interest in land and/or buildings, which is regarded as a separate legal estate. A lease interest is subordinate to a superior interest, which itself may be either another lease interest for a longer term or the ultimate fee simple, or freehold, interest.

3.0 Definitions

- 3.1 Terms basic to the definition and valuation of legal interests include the following:
- 3.1.1 *Freehold Interest*. A *fee simple* estate, representing the perpetual ownership in land.
- 3.1.2 *Freehold subject to Lease Interest/s*, has the same meaning as Leased Fee Interest, representing the ownership interest of a lessor owning real estate that is subject to (a) lease(s) to others.
- 3.1.3 *Ground Lease*. Usually a long-term lease of land with the lessee permitted to improve or build on the land and to enjoy those benefits for the term of the lease.
- 3.1.4 *Headlease, or Master Lease*. A lease to a single entity that is intended to be the holder of subsequent leases to sublessees that will be the tenants in possession of the leased premises.
- 3.1.5 *Headleasehold Interest* has the same meaning as *Sandwich Lessor Interest*. The holder of a headlease or master lease.

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 2

Hierarchy of Property Rights



The Valuer must identify the property interest to be valued along with the pertinent rights and restrictions.

- 3.1.6 *Lease*. A contract arrangement in which rights of use and possession are conveyed from a property's title owner (called the landlord, or lessor) in return for a promise by another (called a tenant, or lessee) to pay rents as prescribed by the lease. In practice the rights and the duties of the parties can be complex, and are dependent on the specified terms of their contract.
- 3.1.7 *Lease Interest*, also known as *Lessee Interest*, *Tenant's Interest*, or *Leasehold Estate*. The ownership interest that is created by the terms of a lease rather than the underlying rights of real estate ownership. The lease interest is subject to the terms of a specific lease arrangement, expires within a specified time, and may be capable of subdivision, or subleasing to other parties.
- 3.1.8 *Lessor Interest*. The interest held by the lessor in any of the circumstances set out in paras. 3.1.2, 3.1.4, or 3.1.5 above.

- 3.1.9 *Marriage Value*, or *Merged Interests Value*. The excess value, if any, produced by a merging of two or more interests in a property, over-and-above the sum of the values of those individual interests.

3.1.10 Rent Types

- 3.1.10.1 *Market Rent*. The estimated amount for which a property, or space within a property, should lease on the date of valuation between a willing lessor and a willing lessee on appropriate lease terms in an arm's-length transaction, after proper marketing wherein the parties had each acted knowledgeably, prudently, and without compulsion.

Whenever *Market Rent* is provided, the "appropriate lease terms" which it reflects should also be stated.

- 3.1.10.2 *Contract Rent*, or *Passing Rent*. The rent

specified by a given lease arrangement; although a given contract rent may equate to the *Market Rent*, in practice they may differ substantially, particularly for older leases with fixed rental terms.

3.1.10.3 *Turnover Rent, or Participation Rent.*

Any form of lease rental arrangement in which the lessor receives a form of rental that is based on the earnings of the lessee. Percentage rent is an example of a turnover rent.

- 3.1.11 *Sale and Leaseback.* A simultaneous sale of real estate and lease of the same property to the seller. The buyer becomes the lessor, or landlord, and the seller becomes the lessee, or tenant. Because there may be unique circumstances or relationships between the parties, sale and leaseback transactions may or may not involve typical market terms.

4.0 Relationship to Accounting Standards

- 4.1 Leased property is accounted for differently from freehold property, plant and equipment under IFRSs/IASs. The valuation requirements are summarized in IVA 1 and Addendum A to IVA 1.

5.0 Guidance

- 5.1 Lease interests are valued on the same general principles as freeholds, but with recognition of the differences created by the lease contract encumbering the freehold interest, which may cause the interest to be unmarketable or restricted.
- 5.2 Lease interests, in particular, are often subject to restrictive covenants or alienation provisions.
- 5.3 Freeholds subject to an *operating lease* are for accounting purposes generally considered *investment property*, and as such are valued on the basis of *Market Value*. Headleasehold interests are also commonly valued on the basis of *Market Value*.
- 5.4 In some States a lessee may have a statutory right to purchase the lessor's interest, usually the freehold, or may have an absolute or conditional right to a renewal of the lease for a term of years. The Valuer should draw attention to the existence of statutory rights

and indicate in the Valuation Report whether or not regard has been paid to them.

- 5.5 The importance of the distinction between the physical matter and the legal interest in it is critical to valuation. For example, a lease might specify that the lessee has no right to sell or transfer the leasehold interest, causing it to be unmarketable during the term of the lease. Its value to the lessee, therefore, lies solely in the rights of use and occupancy. The leasehold value may be expressed in monetary terms but is not a *Market Value* as the interest cannot be sold in the market. However, the lessor's interest (leased fee value) does have a *Market Value*, based on the value of the rental income during the lease together with any residual value remaining at the end of the lease.

- 5.6 Each legal interest in a property shall be valued as a separate entity and not treated as though merged with another interest. Any calculation of *merged interests value* or *marriage value* should be referred to in supplementary advice only and may be undertaken as a valuation based on specific assumptions only and where the Valuer's Report is appropriately qualified.

- 5.7 Onerous lease covenants may adversely affect the *Market Value* of a lease interest. The Valuer must draw attention in the Valuation Report to the existence of such circumstances. The most common situation where this adverse effect arises involves restrictions on assignment, or on the right to sublet.

5.8 Inter-Company Leases

- 5.8.1 Where a property is subject to a lease or tenancy agreement between two companies in the same group, it is acceptable to take account of the existence of that agreement, providing the relationship between the parties is disclosed in the report, and that the agreement is on arm's-length terms in accordance with normal commercial practice. When the valuation is being undertaken for inclusion in a financial statement, it is acceptable to reflect any inter-company leases, providing the interests of one of the parties to the lease are being valued. However, if the interest of the group is being valued for inclusion in its consolidated accounts, the existence of any inter-company leases should be disregarded. (International Accounting Standard 40, para B21)

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 2

5.9 Leasehold Alterations

5.9.1 When valuing any property interest that is subject to a lease, it is important that Valuers establish whether any alterations or adaptations have been made to the property by the lessee. If so the following questions need to be addressed:

- a) has the lessee complied with any lease conditions or restrictions relating to the alterations?
- b) what is the impact of any state laws on the rights of the parties in relation to the alterations?
- c) are the alterations obligatory or voluntary? (see below)
- d) is there any obligation on the lessor to compensate the lessee for the cost or value of the work, or on the lessee to remove the alterations at the lease end?

5.9.2 Leasehold alterations fall into two main categories:

- a) *Obligatory alterations*: These usually arise where a property is leased in a basic state or constructed to a "shell" specification that is not suitable for occupation without the lessee undertaking further building or fitting-out work. The lease will often impose a condition that such work be carried out by the lessee within a certain timescale
- b) *Voluntary alterations*: Typically these arise where a property is leased in a completed state ready for immediate occupation, but where the lessee elects to undertake work to improve or adapt the accommodation to suit the lessee's own particular requirements. Although the tenant may regard these as alterations, the general market may not.

5.9.3 Obligatory alterations will usually have a beneficial impact on the *Market Rent*. Voluntary alterations may have a beneficial, neutral or detrimental effect on the *Market Rent*, depending upon their nature and degree of specialisation. The degree to which the impact on the *Market Rent* is reflected in the value of either the lessor's or the lessee's interest will depend upon the answers to the questions in 5.9.1.

5.10 Negative *Market Values*

5.10.1 Where lease interests are liabilities to an undertaking, they may have a negative *Market Value*.

5.11 General

Due to the relative complexity of lease interest valuations, it is essential that the client or the client's legal advisor provide the Valuer with either copies of all the leases or, for multitenanted property, typical sample leases together with a summary of lease terms on the other leases.

6.0 Effective Date

6.1 This International Valuation Guidance Note became effective 31 July 2007.

VALUATION OF PLANT AND EQUIPMENT

REVISED 2007

1.0 Introduction

- 1.1 Plant and equipment collectively constitute a general class of tangible property assets. International Valuation Application 1 (IVA 1) deals with valuation requirements for financial reporting purposes. This Guidance Note provides additional information to assist in the application of the International Valuation Standards to plant and equipment assets.
- 1.2 Plant and equipment assets have particular characteristics that distinguish them from most types of real property and that influence both the approach to and reporting of their value. Plant and equipment are normally capable of being moved or relocated and often will depreciate at a significantly faster rate than real property. Frequently, the value will differ notably depending on whether an item of plant or equipment is valued in combination with other assets within an operational unit or whether it is valued as an individual item for exchange, and where it may be considered as either in-situ (in place) or for removal.

2.0 Scope

- 2.1 This Guidance Note focuses on the application of the approaches, principles and bases described in the Standards to the valuation of plant and equipment. The following Guidance Notes may also be relevant to the valuation of plant and equipment:
- GN 4, Valuation of Intangible Assets
 - GN 5, Valuation of Personal Property
 - GN 6, Business Valuation
 - GN 7, Consideration of Hazardous and Toxic Substances in Valuation
 - GN 8, Cost Approach for Financial Reporting—(DRC)
- 2.2 This Guidance Note applies to the valuation of the plant and equipment assets of both private-sector and public-sector entities.

3.0 Definitions

International Valuation Standards Definitions

- 3.1 *Fair Value.* The amount for which an asset could be exchanged between knowledgeable willing parties in an arm's length transaction.
- 3.2 *Market Value.* The estimated amount for which a property should exchange on the date of 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.
- 3.3 *Plant and Equipment.* Tangible assets, other than *realty*, that:
- (a) are held by an entity for use in the production or supply of goods or services, for rental by others, or for administrative purposes; and
 - (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.

International Financial Reporting Standards Definitions

- 3.3 *Finance Lease.* A lease that transfers substantially all the risks and rewards incidental to ownership of an asset. Title may or may not be eventually transferred. (IAS 17, para. 4)
- 3.4 *Operating Lease.* A lease other than a finance lease. (IAS 17, para. 4)

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 3

- 3.5 *Property, Plant and Equipment*. Tangible items that:
- are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes; and
 - are expected to be used during more than one (accounting) period. (IAS 16, para. 6)

4.0 Relationship to Accounting Standards

- 4.1 Under International Financial Reporting Standards (IFRSs), *Property Plant and Equipment* may be included on an entity's balance sheet at either cost less depreciation less impairment or at fair value at the date of revaluation less depreciation less impairment. (IAS 16, paras. 29, 30 and 31). The fair value of items of plant and equipment is usually their market value determined by appraisal (IAS 16, para. 32). Plant and equipment, together with other fixed assets, may be subject to other IFRSs, including IAS 2, Inventories; IAS 17, Leases; IAS 36, Impairment of Assets; IFRS 3, Business Combinations; and IFRS 5, Non-Current Assets Held for Sale and Discontinued Operations.
- 4.2 International Valuation Application (IVA) 1, Valuation for Financial Reporting, sets out the valuation and valuation reporting requirements under the various IFRSs referred to above.
- 4.3 International Public Sector Accounting Standards (IPSASs) require that after recognition, items of *Property, Plant and Equipment* be carried at either cost less any accumulated depreciation and any accumulated impairment losses, or at a revalued amount being the fair value at the date of revaluation less any subsequent accumulated depreciation and subsequent accumulated impairment losses (IPSAS 17, paras. 43 and 44). IPSAS 21, Impairment of Non-Cash-Generating Assets, may also apply to plant and equipment, together with other fixed assets. International Valuation Application 3, Valuation of Public Sector Assets for Financial Reporting, sets out the valuation and valuation reporting requirements under IPSASs.
- 4.4 The valuation approach and assumptions applicable to a valuation of plant and equipment for inclusion in a financial statement may be very different from those appropriate for another purpose. A clear distinction should be made if values for different purposes are reported in the same document. Different valuation assumptions

may be appropriate under different IFRSs and IPSASs and therefore it is important for the Valuer to be familiar with the basic requirements of the relevant standard, and to discuss the appropriate assumptions with the client before proceeding.

5.0 Guidance

- 5.1 Valuations of plant and equipment can be carried out using any of the following approaches:
- sales comparison approach*.
 - cost approach (depreciated replacement cost)* (See GN 8); and
 - income capitalisation approach*.

AUSNZ 5.1.4 Income Streams

It is recognised that it is rarely possible to identify an income stream and allocate it to individual assets. As a result, it is generally very difficult, if not impossible, to assess values for individual assets by reference to the income approach. It is also arguable that any cash flow based valuation will, by default, include more than just the plant & equipment assets.

- 5.2 For many purposes, including compliance with IFRSs, the most appropriate basis of value is *Market Value*. However, *Market Value* simply stipulates that an exchange is assumed to take place on an arm's-length basis between knowledgeable and willing parties; it is silent as to how the particular asset is to be presented for sale or any of the other specific circumstances that could have a fundamental effect on the valuation. When undertaking a valuation of plant and equipment, the Valuer must therefore establish and state the additional assumptions that are appropriate, having regard to the nature of the asset and the purpose of the valuation. These assumptions may include the state of the business in which the plant and equipment are currently utilized, or the extent to which individual items are aggregated with other assets. Examples of assumptions that may be appropriate in different circumstances, or for different valuation purposes include:
- that the plant and equipment are valued as a whole, in-situ (in place) and as part of the business considered as a going concern;

- 5.2.2 that the plant and equipment are valued in-situ but on the assumption that the business is closed; or
- 5.2.3 that the plant and equipment are valued as individual items for removal from their current location.

For assets in the public sector, the assumption equivalent to a business continuing as a going concern is that the public sector assets will continue to be used for the provision of the relevant public good or service.

AUS 5.2.4

There is no distinction in Australian Accounting Standards between public and private sector assets. However there is a distinction between for-profit and not-for-profit sector assets. Valuations determined using the DRC approach should be reported subject to the test of adequate profitability in the case of a for-profit enterprise and to the test of service potential in the case of a not-for-profit enterprise. Along the same lines, for assets in the not-for-profit sector, the assumption equivalent to a business continuing as a going concern is that the not-for-profit sector assets will continue to be used for the provision of the relevant good or service.

- 5.3 The list of assumptions above is not comprehensive. Because of the diverse nature and transportability of much plant and equipment, *Market Value* will need appropriate qualifying assumptions to describe the state and circumstances in which the asset is offered to the market. These assumptions should be discussed with the client and must be included in the report. Frequently, it may be appropriate to report on more than one set of assumptions, e.g., in order to illustrate the effect of business closure or cessation of operations on the *Market Value* of plant and equipment assets, where closure or cessation is not yet definite.
- 5.4 Other factors that can affect the *Market Value* of plant and equipment include:
 - 5.4.1 the costs of installation and commissioning where plant and equipment are valued in situ;
 - 5.4.2 where they are valued for removal, any allowance made for the costs of decommissioning, removal, and possible reinstatement following removal, and which party is to bear those costs. In some cases,

these costs can be substantial and therefore the Valuer should reach an agreement with the client as to how they should be reflected and which specific assumption(s) are to be made.

- 5.5 Factors such as finite sources of raw materials, the limited life of the buildings or limited tenure of the land and buildings housing the plant, and statutory restrictions or environmental legislation can also have a significant impact on the value of plant and equipment. These factors will need to be taken into account by the Valuer and any necessary assumptions will have to be made.
- 5.6 Some plant and equipment connected with the supply or provision of services to a building will normally be included in any exchange of the real estate interest. Examples include plant for the supply of electricity, gas, heating, cooling or ventilation and equipment such as elevators. Although the value of these items would normally be reflected in the value of the real estate interest, for certain purposes, such as depreciation accounting, it may be necessary to value these items separately. Where this is the case, the Valuer should make it clear that the separate valuation and treatment of these items will affect the value of the real estate interest. When different Valuers are employed to carry out valuations of real estate assets and plant and equipment assets at the same location, careful liaison is necessary to avoid either omissions or double counting.
- 5.7 Intangible assets fall outside the definition of plant and equipment. However, intangible assets may have an impact on the value of plant and equipment; for example, the value of patterns and dies is often inextricably linked to associated intellectual property rights. In such cases the Valuer should establish what assumptions are appropriate as to the availability of those intangible assets before reporting a valuation. Operating software, technical data, production records and patents are examples of intangible assets that can have an impact on the value of plant and equipment, depending on whether or not they are included in the transfer.
- 5.8 An item of plant and equipment may be subject to a financing arrangement, such as a finance lease. Accordingly, the asset cannot be sold without the lender or lessor being paid any balance outstanding under

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 3

the arrangement. This payment may or may not exceed the unencumbered value of the item. Items of plant and equipment subject to such arrangements should be separately identified from assets that are unencumbered, and their value separately reported. Items, which are subject to operating leases or are otherwise the property of third parties, are normally excluded as the benefits of ownership are not transferred to the lessee. Guidance on Finance and Operating Leases is included in Addendum 1 to IVA 1.

- 5.9 *Market Value* does not imply any particular method of sale, as for example, by private treaty, tender, auction, etc. The conceptual framework in IVS 1 makes it clear that *Market Value* assumes a sale after proper marketing in the most appropriate manner. It is implicit in this definition that the method of sale will be the one that will achieve the highest price for the asset or the defined group of assets in a given set of circumstances. A willing and knowledgeable seller would not voluntarily choose a method of sale that did not maximize the price. However, if the exchange is to take place under circumstances that prevented the seller from choosing the optimal method of disposal, the anticipated realisation will not be the *Market Value* unless the constraint on the seller was one common to all sales in that particular market at that time. A constraint specific to a particular seller or asset, coupled with a requirement to sell subject to that constraint, will result in a forced sale.
- 5.10 Plant and equipment assets are more likely to be subject to forced sale circumstances than real estate interests. For example, assets sometimes have to be disposed of in a time frame that precludes proper marketing because the current owner of the assets has to vacate or surrender the land and buildings where they are located. If such a scenario has actually arisen, or is reasonably foreseeable, it may be appropriate for the Valuer to provide advice on the price that could be anticipated or that should be accepted, although before doing so the Valuer will need to establish the exact nature of the constraint on the vendor and understand the consequences for the vendor of failing to dispose of the assets within the stipulated time limit. For example, the assets may be subject to forfeit or the owner may be subject to a specific financial penalty. It may also be necessary to consider any alternatives

to sale, for example, the practicality and cost of removing the items to another location for disposal. Without knowledge of the actual or anticipated circumstances, the Valuer cannot give meaningful advice since the exchange may fall outside the definition of *Market Value*. Assumptions regarding realisation of a transfer under forced sale circumstances must be carefully considered and clearly stipulated.

AUSNZ 5.11 Materiality

In order to establish what represents a 'sufficiently comprehensive' inspection of plant & equipment it is necessary to have regard to materiality. For the purpose of defining materiality the API and PINZ refers to the principles of materiality as identified in Australian and New Zealand Accounting Standards, which define materiality as follows:

"Materiality means, in relation to information, that information which if omitted, misstated or not disclosed has the potential to adversely affect decisions about the allocation of scarce resources made by users of the financial report or the discharge of accountability by the management or governing body of the entity".

6.0 Effective Date

- 6.1 This Guidance Note became effective 31 July 2007.

VALUATION OF INTANGIBLE ASSETS

REVISED 2007

1.0 Introduction

- 1.1 The International Valuation Standards Committee (IVSC) adopted this Guidance Note (GN) to improve the consistency and quality of intangible asset valuations among the international community for the benefit of users of financial statements and users of intangible asset valuations.
- 1.2 Intangible asset valuations are commonly sought and performed on the *Market Value* basis of valuation applying the provisions of International Valuation Standard 1 (IVS 1). Where other bases of valuation are used with proper explanation and disclosure, the provisions of IVS 2 are applied.
- 1.3 In general, the concepts, processes, and methods applied in the valuation of intangible assets are the same as those for other types of valuations. Certain terms may have different meanings or uses. Those differences become important disclosures wherever they are used. This GN sets forth important definitions used in valuations of intangible assets.
- 1.4 Care should be taken by Valuers and users of valuation services to distinguish between the value of individual, identifiable intangible assets and going concern considerations, including those encountered in the valuation of real property interests. An example of the latter is valuations of trade related property.

2.0 Scope

- 2.1 This GN is provided to assist in the course of rendering or using valuations of intangible assets.
- 2.2 In addition to the elements that are common to other GNs to the International Valuation Standards, this GN contains a more expansive discussion of the intangible asset valuation process. This is included to typify what is commonly involved in valuations of intangible assets and to provide a basis of comparison with other types of valuations, but the discussion should not be considered as either mandatory or limiting except as provided in this GN or otherwise in the IVSs.
- 2.3 Because other basic valuation principles, the

International Valuation Standards, and Guidance Notes are also applicable to valuations of intangible assets, this GN should be understood to incorporate all other applicable portions of the IVSs.

3.0 Definitions

3.1 Book Value

- 3.1.1 With respect to assets, the capitalised cost of an asset less accumulated depreciation, depletion, or amortisation as it appears on the account books of the business.
- 3.1.2 With respect to a business entity, the difference between total assets (net of depreciation, depletion, and amortisation) and total liabilities of a business as they appear on the balance sheet. In this case, book value is synonymous with net book value, net worth, and shareholder's equity.
- 3.2 *Business Entity*. A commercial, industrial, or service organisation pursuing an economic activity.

3.3 Capitalisation

- 3.3.1 At a given date, the conversion into the equivalent capital value of net income or a series of net receipts, actual or estimated, over a period.
- 3.3.2 In business valuation, the term refers to the capital structure of a business of a business entity.
- 3.3.3 In business valuation, this term also refers to the recognition of an expenditure as a capital asset rather than a periodic expense.
- 3.4 *Capitalisation Factor*. Any multiple or divisor used to convert income into capital value.
- 3.5 *Capitalisation Rate*. Any divisor (usually expressed as a percentage) that is used to convert income into capital value.

3.6 Cash Flow

- 3.6.1 *Gross Cash Flow*: Net income after taxes, plus non-cash items such as depreciation and amortisation.
- 3.6.2 *Net Cash Flow*: During an operating period, that amount of cash that remains after all cash needs of the business have been satisfied. *Net cash flow*

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 4

is typically defined as being cash available to equity or invested capital.

- 3.6.3 *Equity Net Cash Flow*: Net income after taxes, plus depreciation and other non-cash charges, less increases in working capital, less capital expenditures, less decreases in invested capital debt principal, plus increases in invested capital debt principal.
- 3.6.4 *Invested Capital Net Cash Flow: Equity net cash flow*, plus interest payments net of tax adjustment, less net increases in debt principal.
- 3.7 *Discount Rate*. A rate of return used to convert a monetary sum, payable or receivable in the future, into present value. A weighted average of the discount rate applied to intangibles and the discount rate applied to tangibles should correlate with the weighted average cost of capital for the business.
- 3.8 *Economic Life*. The period over which property may be profitably used. Economic life may vary by State depending on the level of industrial development and regulatory atmosphere in each State.
- 3.9 *Effective Date*. The date as of which the Valuer's opinion of value applies. (Also referred to as *Valuation Date*, and/or *As Of Date*.)
- 3.10 *Enterprise*. See Business Entity.
- 3.11 *Going Concern*. An operating business.
The entity is normally viewed as a going concern, that is, as continuing in operation for the foreseeable future. It is assumed that the entity has neither the intention nor the necessity of liquidation or of curtailing materially the scale of its operations. (IAS 1, 23-24, Framework, 23)

3.12 Goodwill.

- 3.12.1 Future economic benefits arising from assets that are not capable of being individually identified and separately recognised. (IFRS 3, Appendix A)
- 3.12.2 *Personal Goodwill*. The value of profit over and above market expectations, which would be extinguished upon sale of the trade related property, together with those financial factors related specifically to the current operator of the business, such as taxation, depreciation policy, borrowing costs and the capital invested in the business.
- 3.12.3 *Transferable Goodwill*. That intangible asset that arises as a result of property-specific name and reputation, customer patronage, location, products, and similar factors, which generate economic benefits. It is inherent to the trade related property, and will transfer to a new owner on sale.
- 3.13 *Income Capitalisation Approach*. A general way of estimating a value indication of an intangible asset using one or more methods wherein a value is estimated by converting anticipated benefits into capital value.
- 3.14 *Intangible Assets*. Assets that manifest themselves by their economic properties. They do not have physical substance; they grant rights and privileges to their owner and usually generate income for their owner. Intangible Assets can be categorised as arising from *Rights*, *Relationships*, *Grouped Intangibles*, or *Intellectual Property*.
- 3.14.1 *Rights* exist according to the terms of a contract, written or unwritten, that is of economic benefit to the parties. Examples are supply contracts, distribution contracts, providing contracts, and licensing permits, among others.
- 3.14.2 *Relationships* between parties are normally non-contractual, can be short-lived, and can have great value to the parties. Examples are assembled workforce, customer relationships, supplier relationships, distributor relationships, and structural relationships between parties, among others.
- 3.14.3 *Grouped Intangibles* are the residual *intangible asset* value left after all identifiable *intangible assets* have been valued and deducted from total intangible asset value. Alternative concepts include patronage, excess earnings, and residual value. *Grouped intangibles* are often called *goodwill*. *Goodwill* has, at various times, been said to be the tendency for customers to return to a place of business, the extra income generated by a business over and above a fair return to the identified assets, and/or the extra value of the entity as a whole over and above the aggregate value of its constituent identifiable assets.
- 3.14.4 *Intellectual Property* is a special classification of *intangible assets* because it is usually protected by law from unauthorised use by others. Examples are brand names, or tradenames; copyrights; patents; trademarks; trade secrets, or know-how; among others.
- 3.14.5 In general, the accounting profession limits the recognition of individual *intangible assets* to those that are commonly recognisable, have a statutory or contractual remaining life, and/or must be individually transferable and separable from the

business.

- 3.15 *Intangible Property*. The rights and privileges granted to the owner of intangible assets.
- 3.16 *Legal Life*. The life of the *intangible assets* allowed by law.
- 3.17 *Market Approach*. A general way of estimating a value indication for an intangible asset using one or more methods that compare the subject to similar assets that have been sold.
- 3.18 *Market Value*. See IVS 1, para. 3.1.
- 3.19 *Rate of Return*. An amount of income (loss) and/or change in value realised or anticipated on an investment, expressed as a percentage of that investment.
- 3.20 *Replacement Cost New*. The current cost of a similar new item having the nearest equivalent utility as the item being appraised.
- 3.21 *Report Date*. The date of the Valuation Report. May be the same as or different from the valuation date.
- 3.22 *Reproduction Cost New*. The current cost of an identical new item.
- 3.23 *Valuation Approach*. In general, a way of estimating value using one or more specific valuation methods. (See *Asset Based Approach*, *Market Approach*, and *Income Capitalisation Approach* definitions).
- 3.24 *Valuation Method*. Within valuation approaches, a specific way to estimate a value.
- 3.25 *Valuation Procedure*. The act, manner, and technique of performing the steps of a valuation method.
- 3.26 *Valuation Ratio*. A factor wherein a value or price serves as the numerator and financial, operating, or physical data serve as the denominator.
- 3.27 *Value in Use*. This value type focuses on the value that specific property contributes to the entity of which it is a part without regard to the property's *highest and best use* or the monetary amount that might be realised upon its sale. Value in use is the value a specific property has for a specific use to a specific user and is, therefore, non-market related.

4.0 Relationship to Accounting Standards

- 4.1 Intangible asset valuations are commonly used as a basis for making allocations of value for various assets to aid in the establishment or restatement

of financial statements. In this context, Intangible Asset Valuers reflect the *Market Value* of all components of a business's balance sheet in order to meet accounting Standards, having regard to the convention that reflects the effect of changing prices.

- 4.2 International Accounting Standard 38 (IAS 38) prescribes the accounting treatment for intangible assets, discusses the criteria an intangible asset must meet for recognition, specifies the carrying amount of intangible assets, and sets forth requirements for disclosures about intangible assets.

5.0 Guidance

- 5.1 **Valuations of intangible assets may be required for a number of possible uses including acquisitions and dispositions of businesses or parts of businesses, mergers, sale of an intangible asset, financial reporting and the like.**
 - 5.1.1 **Where the purpose of the valuation requires a *Market Value* estimate, the Valuer shall apply definitions, processes, and methodologies consistent with their provision in IVS 1.**
 - 5.1.2 **When an engagement calls for a value basis other than *Market Value*, the Valuer shall clearly identify the type of value involved, define such value, and take steps necessary to distinguish the value estimate from a *Market Value* estimate.**
- 5.2 If, in the opinion of the Valuer, certain aspects of an engagement indicate that a departure from any provision of the International Valuation Standards or of this GN is necessary and appropriate, such departure should be considered for disclosure along with the reason for invoking the departure.
- 5.3 **The Valuer shall take steps to assure that all data sources relied on are reliable and appropriate to the valuation undertaking.** In many instances it will be beyond the scope of the Valuer's services to perform a complete verification of secondary or tertiary data sources. Accordingly, the Valuer shall verify the accuracy and reasonableness of data sources as are customary in the markets and locale of the valuation.
- 5.4 **Valuers of intangible assets must frequently rely on information received from a client or from a client's representatives. The source of any such data relied upon must be cited by the Valuer in oral or written reports, and the data**

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 4

- shall be reasonably verified wherever possible. The requirements for Valuation Reports are addressed in the IVSC Code of Conduct (section 7), and IVS 3, Valuation Reporting.
- 5.5 Although many of the principles, methods, and techniques of intangible asset valuation are similar to those used in other fields of valuation, valuations of intangible assets require special education, training, skills, and experience.
- 5.6 A description of the valuation assignment must include
- 5.6.1 identification of the intangible asset(s), or the ownership interest in the intangible asset(s), to be valued;
- 5.6.2 the effective date of the valuation;
- 5.6.3 the definition of value;
- 5.6.4 the owner of the interest; and
- 5.6.5 the purpose and use of the valuation.
- 5.7 Factors to be considered by the Intangible Asset Valuer include:
- 5.7.1 The rights, privileges, or conditions that attach to the ownership interest
- 5.7.1.1 Ownership rights are set forth in various legal documents. In various States, or in some legal jurisdictions, these documents may be called patents, trademarks, brands, know-how, databases, and copyrights, to name a few.
- 5.7.1.2 Whoever owns the interest is bound by the documents that record such interest in the intangible assets. There may be rights and conditions contained in an agreement or exchange of correspondence, and these rights may or may not be transferable to a new owner of the interest.
- 5.7.2 Remaining economic life and/or legal life of the intangible asset
- 5.7.3 The earnings capacity of the intangible assets
- 5.7.4 The nature and history of the intangible assets. Since value resides in the benefits of future ownership, history is valuable in that it may give a guide to the expectations of the intangible assets for the future.
- 5.7.5 The economic outlook that may affect the subject intangible assets, including political outlook and government policy. Matters such as the exchange rate and inflation and interest rates may affect intangible assets that operate in different sectors of the economy quite differently.
- 5.7.6 The condition and outlook of the specific industry, which may affect the subject intangible assets
- 5.7.7 Intangible value may also be contained in undifferentiated assets, often called *goodwill*. Note that goodwill value in this context is similar to goodwill in the accounting sense in that both are the residual value (historical cost in accounting terms) after all other assets have been taken into account.
- 5.7.8 Prior transactions in ownership interests of the subject intangible assets
- 5.7.9 Other market data, e.g., rates of return on alternative investments, etc.
- 5.7.10 The market prices for acquisition of similar intangible assets interests or intangible assets
- 5.7.10.1 Often, particularly in the use of acquisition transactions, adequate information is difficult or impossible to obtain. While the actual transaction price may be known, the Valuer may not know what warranties and indemnities were given by the seller, what terms were given or received, or what impact taxation planning had on the transaction.
- 5.7.10.2 Comparable data should always be used with care, and numerous adjustments may need to be made.
- 5.7.11 Adjustment of historical financial statements to estimate the economic abilities of and prospects for the intangible assets
- 5.7.12 Any other information the Valuer believes to be relevant
- 5.8 Intangible asset valuation approaches
- 5.8.1 *Market (sales comparison) approach* to intangible asset valuation
- 5.8.1.1 The *market approach* compares the subject to similar intangible assets or intangible asset ownership interests and securities that have been sold in the open market.
- 5.8.1.2 The two most common sources of

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 4

- data used in the *market approach* are markets in which ownership interests of similar intangible assets are traded and prior transactions in the ownership of the subject intangible assets.
- 5.8.1.2.1 There must be a reasonable basis for comparison with and reliance upon the similar intangible assets in the *market approach*. These similar intangible assets should be in the same industry as the subject or in an industry that responds to the same economic variables. The comparison must be made in a meaningful manner and must not be misleading.
- 5.8.1.3 Through analysis of acquisitions of intangible assets, the Valuer often computes valuation ratios, which are usually price divided by some measure of income or net assets. Care must be used in calculating and selecting these ratios.
- 5.8.1.3.1 The ratio(s) selected must provide meaningful information about the value of the intangible assets.
- 5.8.1.3.2 The data on the similar intangible assets used to compute the ratio must be accurate.
- 5.8.1.3.3 The calculation of ratios must be accurate.
- 5.8.1.3.4 If the data are averaged, the time period considered and the averaging method must be appropriate.
- 5.8.1.3.5 All calculations must be done in the same way for both the similar intangible assets and the subject intangible assets.
- 5.8.1.3.6 The price data used in the ratio(s) must be valid as of the valuation date and representative of the market at that time.
- 5.8.1.3.7 Where appropriate, adjustments may need to be made to render the similar intangible assets and the subject intangible assets more comparable.
- 5.8.1.3.8 Adjustments may need to be made for unusual, non-recurring, and non-operating items.
- 5.8.1.3.9 The selected ratios must be appropriate given the differences in risk and expectations of the similar intangible assets and the subject intangible assets.
- 5.8.1.3.10 Several value indications may be calculated since several valuation multiples may be selected and applied to the subject intangible assets.
- 5.8.1.4 When prior transactions in the subject intangible assets are used to provide valuation guidance, adjustments may need to be made for the passage of time and for changed circumstances in the economy, the industry, and the intangible assets.
- 5.8.2 *Income capitalisation approach* to intangible asset valuation
- 5.8.2.1 The *income approach* estimates the value of an intangible asset or of intangible asset ownership interests by calculating the present value of anticipated benefits. The two most common *income approach* methods are (*direct*) *capitalisation* of income and *discounted cash flow analysis* (DCF).
- 5.8.2.1.1 In (*direct*) *capitalisation* of income, a representative income level is divided by a capitalisation rate or multiplied by an income multiple (capitalisation factor) to convert the income into value.
- 5.8.2.1.2 Income is typically allocated to the various intangible assets by the Valuer. Care must be taken so that the income allocated to all of the individual assets does not exceed the income available to all assets.
- 5.8.2.1.3 In theory, income can consist of a variety of types of income and cash flow. In practice, the income measure is usually pre-tax income or post-tax income. If capitalisation methods are used, the economic life of the assets must be infinite, or very long.
- 5.8.2.1.4 In DCF *analysis* and/or *dividend method*, cash receipts are

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 4

estimated for each of several future periods. These receipts are converted to value by the application of a discount rate, using present value techniques. Many definitions of *cash flow* could be used. Discounting methods are most commonly used for intangible assets with finite economic lives. The time period covered by the discounting methods is normally the shorter of the economic life or the legal life (the definable period over which the asset or interest therein is legally protected).

- 5.8.2.1.4.1 **Economic life** is measured as the period when the intangible assets can be expected to give the owner an economic return on the assets. An example is computer software that may have an expected life of 36 months before it is necessary to replace it with an updated version.
- 5.8.2.1.4.2 **Legal life** is measured as the period when the intangible asset can be protected by law. An example is a patent that has a definable life at its inception and that slowly, over time, goes to zero.
- 5.8.2.1.5 **Capitalisation rates and discount rates are derived from the market and are expressed as price multiples (derived from data on publicly traded businesses or transactions) or an interest rate (derived from data on alternative investments).**
- 5.8.2.2 Anticipated income or benefits are converted to value using calculations that consider the expected growth and timing of the benefits, the risk associated with the benefit stream, and the time value of money.
- 5.8.3 The **cost approach**, often called the cost to recreate, is also known as the *adjusted asset approach*.
 - 5.8.3.1 A cost-based approach is founded on the Principle of Substitution, i.e., an asset is worth no more than it would cost to replace all of its constituent parts.

- 5.8.3.2 In the execution of the cost approach, the cost of each item in the creation of the assets, including developer's profit, must be estimated using the knowledge possessed as of the valuation date.

5.9 Reconciliation processes

- 5.9.1 The value conclusion shall be based upon
 - 5.9.1.1 the definition of value, and
 - 5.9.1.2 all relevant information as of the valuation date necessary in view of the scope of the assignment.
- 5.9.2 The value conclusion shall also be based on value indications from the valuation methods performed.
 - 5.9.2.1 The selection of and reliance on the appropriate approaches, methods, and procedures depend on the judgment of the Valuer.
 - 5.9.2.2 The Valuer must use judgment when determining the relative weight to be given to each of the value indications derived during application of the Valuation Process. The Valuer should provide the rationale and justification for the valuation methods used and for the weighting of the methods relied on in reaching the reconciled value conclusion.

6.0 Effective Date

- 6.1 This International Valuation Guidance Note became effective 31 July 2007.

VALUATION OF PERSONAL PROPERTY

REVISED 2007

1.0 Introduction

- 1.1 The objective of this Guidance Note (GN) is to improve the consistency and quality of personal property valuations for the benefit of users of personal property valuation services.
- 1.2 Personal property valuations are commonly sought and performed on the *Market Value* basis of valuation, applying the provisions of International Valuation Standard 1 (IVS 1). Where other bases of valuation are used, the provisions of IVS 2 are applied, subject to proper disclosure and explanation.
- 1.3 While certain terms may have alternative definitions, and the applicability of specific methods may diverge, the theory, concepts, and processes applied in the valuation of personal property are fundamentally the same as those for other types of valuations. Whenever terms that have different meanings are used, it is important that those differences be disclosed. This GN sets forth important definitions used in personal property valuations.
- 1.4 Care should be taken by Valuers and users of valuation services to distinguish among the market components and corresponding *Market Values* of personal properties. One example of such differentiation is the *Market Value* of properties sold at auction vs that of properties sold by or acquired from private dealers where the negotiated price is not publicly disclosed. Another example would be the *Market Value* of personal property sold wholesale vs the market value of the same item(s) sold retail.

2.0 Scope

- 2.1 This GN is provided to assist in the course of rendering or using personal property valuations.
- 2.2 In addition to the elements that are common to other Applications and Guidance Notes in the International Valuation Standards, this GN contains an expanded discussion of the Valuation Process

for personal properties. This is included to typify what is commonly involved in personal property valuations and to provide a basis of comparison with other types of valuations.

- 2.3 Plant and equipment (P&E) is a category of personal property, but P&E valuation is dealt with under GN 3.

3.0 Definitions

- 3.1 *Auction Price*. The price that is the final accepted bid at a public auction; may or may not include any fees or commissions. See also Hammer Price, Private Treaty Sale.
- 3.2 *Collectibles*. Broad descriptive term for objects collected because of the interest they arouse owing to their rarity, novelty, or uniqueness. In some States, the term may be applied to fine art, antiques, gems and jewelry, musical instruments, numismatic and philatelic collections, rare books, and archival materials, among others. Elsewhere the term is normally used for these and a wide variety of other items not found in any other category.
- 3.3 *Cost Approach*. A comparative approach to the value of property or another asset that considers as a substitute for the purchase of a given property, the possibility of constructing another property that is equivalent to the original or one that could furnish equal utility with no undue cost resulting from delay. The Valuer's estimate is based on the reproduction or replacement cost of the subject property or asset, less total (accrued) depreciation.
- 3.4 *Cost Approach for Valuing Fine Art*. A comparative approach to the value of fine art that considers as a substitute for the purchase of a given work of fine art the possibility of creating another work of fine art that replaces the original. The Valuer's estimate is based on the reproduction or replacement cost of the subject work of fine art, and the nature of the replacement, i.e., whether it be *new for old*, *indemnity basis*, a *replica*, or a *facsimile*.

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 5

New for old refers to the cost of purchasing the same item or, if unavailable, an item similar in nature and condition in the retail market for new works of fine art.

Indemnity basis refers to the cost of replacing an item with a similar item in similar condition in the second-hand retail market for art and antiques.

A *replica* is a copy of the original item, as near as possible to the original in terms of nature, quality, and age of materials but created by means of modern construction methods.

A *facsimile* is an exact copy of the original item, created with materials of a closely similar nature, quality, and age and using construction methods of the original period.

- 3.5 *Fixtures and Fittings*. The totality of improvements integral to a property, valued collectively. See Trade Fixtures or Tenant's Fixtures.
- 3.6 *Furniture, Fixtures and Equipment*. (FF&E) A term used in North America to refer to tangible personal property plus trade fixtures and leasehold improvements. See also Personal Property.
- 3.7 *Goods and Chattels Personal*. In certain States, a term used for identifiable, portable, and tangible objects considered by the public to be personal property. See also Personal Property.
- 3.8 *Hammer Price*. The accepted and announced bid, exclusive of any fees or commissions and, therefore, not necessarily the purchase price. See also Auction Price, Private Treaty Sale.
- 3.9 *Income Capitalisation Approach*. A comparative approach to value that considers income and expense data relating to the property being valued and estimates value through a capitalisation process.
- 3.10 *Intrinsic Value*. The amount considered, on the basis of an evaluation of available facts, to be the "true" or "real" worth of an item. A long-term, *Non-Market Value* concept that smoothes short-term price fluctuations.
- 3.11 *Leasehold Improvements or Tenant's Improvements*. Fixed improvements or additions to land or buildings, installed by and paid for by the tenant to meet the tenant's needs; typically removable by the tenant upon expiration of the lease; removal causes no material damage to the real estate. See also Personal Property, Trade Fixtures or Tenant's Fixtures.
- 3.12 *Market Value*. See IVS 1, para. 3.1.
- 3.13 *Personal Property*. A legal concept referring to all

rights, interests, and benefits related to ownership of items other than real estate. In certain States, items of personal property are legally designated as personalty in distinction to realty, which may either refer to real property or real estate. Items of personal property can be tangible, such as a chattel, or intangible, such as a debt or patent. Items of tangible personal property typically are not permanently affixed to real estate and are generally characterized by their movability. See also Collectibles; Fixtures and Fittings; Furniture, Fixtures and Equipment (FF&E); Goods and Chattels Personal; Leasehold Improvements or Tenant's Improvements; Plant and Equipment; Trade Fixtures or Tenant's Fixtures.

- 3.14 *Personalty*. A legal term used in certain States to designate items of personal property in distinction to realty, which may either refer to real property or real estate. Personalty includes tangible and intangible items that are not real estate. See also Personal Property.

- 3.15 *Plant and Equipment*. Tangible assets, other than realty, that:

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

- 3.16 *Private Treaty Sale*. A sale negotiated and transacted between persons rather than by public auction or another method. The sale price paid in a private treaty sale is generally not known except by the parties to the transaction. See also Auction Price, Hammer Price.
- 3.17 *Professional Property Valuer*. A person who possesses necessary qualifications, ability, and experience to estimate property value for a diversity of purposes including transactions involving transfers of property ownership, property considered as collateral to secure loans and mortgages, property subject to litigation or

- pending settlement on taxes, and property treated as fixed assets in financial reporting.
- 3.18 *Sales Comparison Approach.* A general way of estimating a value indication for personal property or an ownership interest in personal property, using one or more methods that compare the subject to similar properties or to ownership interests in similar properties. This approach to the valuation of personal property is dependent upon the Valuer's market knowledge and experience as well as recorded data on comparable items.
- 3.19 *Trade Fixtures or Tenant's Fixtures.* Non-realty fixtures attached to property by the tenant and used in conducting the trade or business. See also Leasehold Improvements or Tenant's Improvements, Personal Property.
- 3.20 *Valuation Approach.* In general, a way of estimating value that employs one or more specific valuation methods. Depending on the nature and purpose of the property, three valuation approaches may be applied. These are the *sales comparison, income capitalisation, and cost approaches*. Their application will enable the Valuer to determine *Market Value* or a value other than *Market Value*.
- 3.21 *Valuation Method.* Within the valuation approaches, a specific way to estimate value.
- 3.22 *Valuation Procedure.* The act, manner, and technique of performing the steps of a valuation method.

4.0 Relationship to Accounting Standards

- 4.1 In some instances the valuation of personal property undertaken in conjunction with the valuation of real property and/or a business provides a basis for determining the extent of depreciation or obsolescence of certain fixed assets. In this application, the personal property valuation *per se* may or may not be the principal reason for the valuation, but the combination of services by a Personal Property Valuer, a Business Valuer and/or a Real Property Valuer, is necessary to properly allocate and reflect the *Market Value* of assets to be included in a financial statement.

5.0 Guidance

- 5.1 **Personal property valuations may be required for a number of possible uses including financial reporting, acquisitions and disposals/**

dispositions, insurance, and taxation.

- 5.1.1 Where the purpose of the valuation requires a **Market Value** estimate, the Valuer shall apply definitions, processes, and methodologies consistent with their provision in IVS 1.
- 5.1.2 When an engagement calls for a value basis **other than Market Value**, e.g., insurable value, the Valuer shall clearly identify the type of value involved, define such value, and take steps necessary to distinguish the value estimate from a *Market Value* estimate as consistent with IVS 2.
- 5.2 **Steps shall be taken by the Valuer to assure that all data sources relied upon are reliable and appropriate to the valuation undertaking.** In many instances, it will be beyond the scope of the Valuer's services to perform a complete verification of secondary or tertiary data sources. Accordingly, the Valuer shall take reasonable steps to verify the accuracy and reasonableness of data sources as is customary in the market(s) and locale of the valuation.
- 5.3 It is not uncommon for personal property valuations to require that the Personal Property Valuer call for and rely upon the services of other Professional Property Valuers and/or other professionals. Thus, **the parameters of responsibility relating to the classification of property items must be established between Valuers of different disciplines to ensure that nothing has been omitted or double entered.** A common example is reliance upon a Real Property Valuer to value the real estate components of a property. **Where the services of other experts are relied upon, the Personal Property Valuer shall:**
- 5.3.1 **take verification steps as are reasonably necessary to ensure that such services are competently performed and that the conclusions relied upon are reasonable and credible, or**
- 5.3.2 **disclose the fact that no such verification steps were taken.**
- 5.4 **Personal Property Valuers must frequently rely upon information received from a client or from a client's representatives. The source of any such data relied upon shall be cited by the Valuer in oral or written reports, and the data shall be reasonably verified wherever possible.**
- 5.5 Although many of the principles, methods, and techniques of personal property valuation are similar to those in other fields of valuation,

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 5

- personal property valuations require special education, training, skill, and experience.
- 5.6 Requirements for Valuation Reports are addressed in the IVSC Code of Conduct, and IVS 3, Valuation Reporting. For personal property the Valuation Report must include:
- 5.6.1 Identification of the property and owner or ownership interest to be valued (location of the object of personal property and address of the owner);
- 5.6.2 The effective date of the valuation;
- 5.6.3 The basis or definition of value;
- 5.6.4 Identification of the owner of interest or instructing party (n.b., in some States, the identity of the owner of interest may not be made known for reason of confidentiality);
- 5.6.5 The purpose and use of the valuation;
- 5.6.6 The conditions of the valuation;
- 5.6.7 Liens and encumbrances on the property; and
- 5.6.8 A Compliance Statement (signed and dated).
- 5.7 Factors to be considered (but not necessarily reported) by the Personal Property Valuer include:
- 5.7.1 Rights, privileges, or conditions that attach to the ownership of the subject property
- 5.7.1.1 Ownership rights are set forth in various legal documents
- 5.7.1.2 Rights and conditions contained in an owner's agreement or exchange of correspondence; these rights may or may not be transferable to a new owner of the subject property.
- 5.7.1.3 The documents may contain restrictions on the transfer of the property and may contain provisions governing the basis of valuation that has to be adopted in the event of transfer of the property.
- 5.7.2 The nature of the property and history of its ownership (provenance)
- 5.7.2.1 Previous sales or transfers of the property
- 5.7.3 The economic outlook that may affect the subject property, including political outlook and government policy
- 5.7.4 The condition and outlook of a market specific to the trade of personal properties that may affect the subject property
- 5.7.5 Whether or not the subject property has intangible value
- 5.7.5.1 If intangible value is inherent in the personal property, the Valuer must ensure that the intangible value is fully reflected, whether the identifiable intangible has been valued separately or not.
- 5.7.5.1.1 Intangible value, insofar as can be reasoned, should be distinguished from the value of the tangible property.
- 5.7.5.2 It is essential that the Valuer be aware of the legal restrictions and conditions that arise through the laws of the State in which the property exists.
- 5.7.5.3 Often, particularly in the use of acquisition transactions, adequate information is difficult to obtain. While the actual transaction price may be known, the Valuer may not know what warranties and indemnities were given by the seller, whether cash or other assets were taken from the seller prior to acquisition, how value should be allocated among the assets acquired, or what impact taxation planning had on the transaction.
- 5.7.5.4 For the reasons explained in para. 5.7.5.3, comparable data should always be used with care, and adjustments may need to be made. When using published auction results, it must be borne in mind that those results may represent transactions for a small market sector. Adjustments may be needed for differences due to differing market levels.
- 5.7.6 Any other information the Valuer believes is relevant.
- 5.8 Personal property valuations performed by means of the *sales comparison approach*
- 5.8.1 The *sales comparison approach* compares the subject property to similar properties and/or property ownership interests that have been sold in open markets.
- 5.8.2 The two most common sources of data used in the *sales comparison approach* are published auction results and transactions reported by firms regularly engaged in the trade of similar properties.

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 5

- 5.8.3 There must be a reasonable basis for comparison with and reliance upon the similar properties in the *sales comparison approach*. These similar properties should be regularly traded in the same market as the subject or in a market that responds to the same economic variables. The comparison must be made in a meaningful manner and must not be misleading. Factors to be considered in whether a reasonable basis for comparison exists include:
- 5.8.3.1 Similarity to the subject property in terms of qualitative and quantitative descriptive characteristics
 - 5.8.3.2 Amount and verifiability of data on the similar property
 - 5.8.3.3 Whether the price of the similar property represents an arm's-length transaction
 - 5.8.3.4 A thorough, unbiased search for similar properties is necessary to establish the independence and reliability of the valuation. The search should include simple, objective criteria for selecting similar properties
 - 5.8.3.5 A comparative analysis of qualitative and quantitative similarities and differences between similar properties and the subject property must be made
 - 5.8.3.6 Where appropriate, adjustments may need to be made to render the value of the similar properties more comparable to the subject property. Adjustments may need to be made for unusual, non-recurring and unique items.
 - 5.8.3.7 Appropriate adjustments for differences in the subject property's ownership and the ownership of similar properties with regard to the character and influence of such provenance or marketability/saleability or lack thereof, must be made, if applicable.
- 5.8.4 When prior transactions of the subject property are used to provide valuation guidance, adjustments may need to be made for the passage of time, for changes in the subject property, and for changed circumstances in the economy, industry, scholarly appreciation, and the business in which such properties are traded.
- 5.8.5 Anecdotal valuation rules, or rules of thumb, may be useful in the valuation of a property or ownership interest in an item of personal property.
- However, value indications derived from the use of such rules should not be given substantial weight unless it can be shown that buyers and sellers place substantial reliance on them.
- 5.9 **Personal property valuations performed by means of the *income capitalisation approach***
- 5.9.1 The Income Capitalisation Approach to value considers income and expense data relating to the property being valued and estimates value through a capitalisation process.
- 5.9.2 The application of the *income capitalisation approach* may be appropriate in the valuation of furniture, fixtures, and equipment (FF&E) essential to the operation of properties such as hotels, furnished apartments, and care facilities.
- 5.9.2.1 FF&E may be subject to heavy use and, therefore, require periodic replacement to maintain the attractiveness and utility of the facility.
 - 5.9.2.2 The useful lives of items of FF&E are estimated on the basis of their quality, durability, and the amount of use they receive. A weighted average for the useful lives of items of FF&E may then be calculated.
 - 5.9.2.3 An estimate of the future replacement cost of the items of FF&E is divided by this figure to arrive at an annual replacement allowance/renewal fund. The replacement allowance/renewal fund is included among the entity's operating expenses/outgoings.
- 5.10 **Personal property valuations performed by means of the *cost approach***
- 5.10.1 The *cost approach* considers as a substitute for the purchase of a given item of personal property, the possibility of creating another item equivalent to the original or one that could furnish equal utility with no undue cost resulting from delay.
- 5.10.2 The Valuer's estimate is based on the reproduction or replacement cost of the subject property or asset.
- 5.10.2.1 Replacement cost refers to what one might expect to pay for an object of similar age, size, color, and condition. Generally, it seeks to establish the cost of an alternative example or of a *replica*, or copy, of the original item, as near as possible to the original in terms of nature, quality, and age of materials

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 5

but created by means of modern construction methods.

- 5.10.2.1.1 In the case of assets such as valuable antiques or paintings, replacement may be impractical regardless of the cost.
- 5.10.2.1.2 Reproduction cost refers to what one might expect to pay for a *facsimile*, or exact copy, of the original item, created with materials of a closely similar nature, quality, and age and using construction methods of the original period.
- 5.10.2.1.3 Over time some items of personal property that do not suffer physical depreciation may appreciate since current cost to replace or reproduce such items typically outpaces increases in their current price.

5.10.3 The application of the *cost approach* is especially appropriate in valuations of personal property such as manufactured products or items for which multiple copies exist, e.g., prints, porcelain figurines, or products turned out by a mint.

5.11 Reconciliation processes

- 5.11.1 The value conclusion shall be based upon
 - 5.11.1.1 the definition of value;
 - 5.11.1.2 the purpose and intended use of the valuation; and
 - 5.11.1.3 all relevant information as of the valuation date necessary in view of the scope of the assignment.
- 5.11.2 The value conclusion shall also be based on value estimates from the valuation methods performed.
 - 5.11.2.1 The selection of and reliance on the appropriate approaches, methods, and procedures depend on the judgment of the Valuer.
 - 5.11.2.2 The Valuer must use judgment when determining the relative weight to be given to each of the value estimates during the Valuation Process. The Valuer should provide the rationale and justification for the valuation methods used and for the weighting of the methods relied on in reaching the value reconciliation when requested.

6.0 Effective Date

- 6.1 This International Valuation Guidance Note became effective 31 July 2007.

BUSINESS VALUATIONS

REVISED 2007

1.0 Introduction

- 1.1 The International Valuation Standards Committee (IVSC) adopted this Guidance Note (GN) to improve the consistency and quality of business valuations among the international community for the benefit of users of financial statements and users of business valuations.
- 1.2 Business valuations are commonly sought and performed on the *Market Value* basis of valuation applying the provisions of International Valuation Standard 1 (IVS 1). Where other bases of valuation are used, with proper explanation and disclosure, the provisions of IVS 2 are applied.
- 1.3 In general the concepts, processes, and methods applied in the valuation of businesses are the same as those for other types of valuations. Certain terms may have different meanings or uses. Those differences become important disclosures wherever they are used. This GN sets forth important definitions used in business valuations.
- 1.4 Care should be taken by Valuers and users of valuation services to distinguish between the value of a business entity or trade related property, the valuation of assets owned by such an entity, and various possible applications of business or going concern considerations encountered in the valuation of real property interests. An example of the latter is valuations of trade related property. (See Property Types, para. 4.3.2.)

2.0 Scope

- 2.1 This GN is provided to assist in the course of rendering or using business valuations.
- 2.2 In addition to the elements that are common to other GNs to the International Valuation Standards, this GN contains a more expansive discussion of the business valuation process. This is included to typify what is commonly involved in business valuations and to provide a basis of comparison with other types of valuations, but the discussion should not be considered as either mandatory or limiting except as provided in this GN or otherwise in the International Valuation Standards.

- 2.3 Because other basic valuation principles, International Valuation Standards, and Guidance Notes are also applicable to business valuations, this GN should be understood to incorporate all other applicable portions of the IVSs.

3.0 Definitions

- 3.1 *Adjusted Book Value*. The book value that results when one or more asset or liability amounts are added, deleted or changed from the reported book amounts.
- 3.2 *Asset-based Approach*. A means of estimating the value of a business and/or equity interest using methods based on the *Market Value* of individual business assets less liabilities.
- 3.3 *Book Value*
 - 3.3.1 With respect to assets, the capitalised cost of an asset less accumulated depreciation, depletion, or amortisation as it appears on the account books of the business.
 - 3.3.2 With respect to a business entity, the difference between total assets (net of depreciation, depletion, and amortisation) and total liabilities of a business as they appear on the balance sheet. In this case, *book value* is synonymous with *net book value*, *net worth*, and *shareholder's equity*.
- 3.4 *Business Entity*. A commercial, industrial, service, or investment entity pursuing an economic activity.
- 3.5 *Business Valuation*. The act or process of arriving at an opinion or estimation of the value of a business or entity or an interest therein.
- 3.6 *Business Valuer*. A person who, by education, training, and experience is qualified to perform a valuation of a business, business ownership interest, security and/or intangible assets.
- 3.7 *Capitalisation*
 - 3.7.1 At a given date, the conversion into the equivalent capital value of net income or a series of net receipts, actual or estimated, over a period.
 - 3.7.2 In business valuation, the term refers to the capital structure of a business entity.

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 5

- 3.7.3 In business valuation, this term also refers to the recognition of an expenditure as a capital asset rather than a periodic expense.
- 3.8 *Capitalisation Factor*. Any multiple used to convert income into value.
- 3.9 *Capitalisation Rate*. Any divisor (usually expressed as a percentage) that is used to convert income into value.
- 3.10 *Capital Structure*. The composition of the invested capital.
- 3.11 *Cash Flow*
- 3.11.1 *Gross Cash Flow*: Net income after taxes, plus non-cash items such as depreciation and amortisation.
- 3.11.2 *Net Cash Flow*: During an operating period, that amount of cash that remains after all cash needs of the business have been satisfied. *Net cash flow* is typically defined as being cash available to equity or invested capital.
- 3.11.3 *Equity Net Cash Flow*: Net income after taxes, plus depreciation and other non-cash charges, less increases in working capital, less capital expenditures, less decreases in invested capital debt principal, plus increases in invested capital debt principal.
- 3.11.4 *Invested Capital Net Cash Flow*: *Equity net cash flow*, plus interest payments net of tax adjustment, less net increases in debt principal.
- 3.12 *Control*. The power to direct the management and policies of a business.
- 3.13 *Control Premium*. The additional value inherent in the control interest that reflects its power of control, as contrasted to a minority interest.
- 3.14 *Discount for Lack of Control*. An amount or percentage deducted from a pro rata share of the value of 100 % of an equity interest in a business to reflect the absence of some or all of the powers of control.
- 3.15 *Discount Rate*. A rate of return used to convert a monetary sum, payable or receivable in the future, into present value.
- 3.16 *Economic Life*. The period over which property may be profitably used.
- 3.17 *Effective Date*. The date as of which the Valuer's opinion of value applies (Also referred to as *Valuation Date*, and/or *As Of Date*).
- 3.18 *Enterprise*. See Business Entity.
- 3.19 *Going Concern*
- 3.19.1 An operating business.
- 3.19.2 A premise of valuation, under which Valuers and accountants consider a business as an established entity that will continue in operation indefinitely. The premise of a going concern serves as an alternative to the premise of liquidation.
- Adoption of a going concern premise allows the business to be valued above liquidation value and is essential to the development of *Market Value* for the business.
- 3.19.3 The entity is normally viewed as a going concern, that is, as continuing in operation in the foreseeable future. It is assumed that the entity has neither the intention nor the necessity of liquidation or of curtailing materially the scope of its operations. (IAS 1, 23-24, Framework, 23)
- 3.20 *Goodwill*
- 3.20.1 Future economic benefits arising from assets that are not capable of being individually identified and separately recognised. (IFRS 3, Appendix A)
- 3.20.2 *Personal Goodwill*. The value of profit over and above market expectations, which could be extinguished upon sale of the trade related property, together with those financial factors related specifically to the current operator of the business, such as taxation, depreciation policy, borrowing costs and the capital invested in the business.
- 3.20.3 *Transferable Goodwill*. That intangible asset that arises as a result of property-specific name and reputation, customer patronage, location, products, and similar factors, which generate economic benefits. It is inherent to the trade related property, and will transfer to a new owner on sale.
- 3.21 *Holding Company*. A business that receives returns on its assets.
- 3.22 *Income Capitalisation Approach*. A general way of estimating a value indication of a business, business ownership interest, or security using one or more methods wherein a value is estimated by converting anticipated benefits into capital value.
- 3.23 *Invested Capital*. The sum of the debt and equity in a business on a long-term basis.
- 3.24 *Majority Control*. The degree of control provided by a majority position.
- 3.25 *Majority Interest*. Ownership position greater than 50% of the voting interest in a business
- 3.26 *Market Approach*. A general way of estimating a value indication of a business, business ownership

interest, or security using one or more methods that compare the subject to similar businesses, business ownership interests, or securities that have been sold.

- 3.27 *Market Value*. See IVS 1, para. 3.1.
- 3.28 *Marketability Discount*. An amount or percentage deducted from an equity interest to reflect lack of marketability.
- 3.29 *Minority Discount*. A Discount for lack of control applicable to a minority interest.
- 3.30 *Minority Interest*. Ownership position less than 50% of the voting interest in a business.
- 3.31 *Net Assets*. Total assets less total liabilities.
- 3.32 *Net Income*. Revenue less expenses, including taxes.
- 3.33 *Operating Company*. A business that performs an economic activity by making, selling, or trading a product or service.
- 3.34 *Rate of Return*. An amount of income (loss) and/or change in value realised or anticipated on an investment, expressed as a percentage of that investment.
- 3.35 *Replacement Cost New*. The current cost of a similar new item having the nearest equivalent utility as the item being appraised.
- 3.36 *Report Date*. The date of the Valuation Report. May be the same as or different from the Valuation date.
- 3.37 *Reproduction Cost New*. The current cost of an identical new item.
- 3.38 *Valuation Approach*. In general, a way of estimating value using one or more specific valuation methods. (See *Market Approach*, *Income Capitalisation Approach*, and *Asset Based Approach* definitions.)
- 3.39 *Valuation Method*. Within approaches, a specific way to estimate value.
- 3.40 *Valuation Procedure*. The act, manner, and technique of performing the steps of a valuation method.
- 3.41 *Valuation Ratio*. A factor wherein a value or price serves as the numerator and financial, operating, or physical data serve as the denominator.
- 3.42 *Working Capital*. The amount by which current assets exceed current liabilities.

4.0 Relationship to Accounting Standards

- 4.1 Business valuations are commonly used as a basis for making allocations of various assets to aid in the establishment or restatement of financial statements. In this context, business Valuers reflect the *Market Value* of all components of a business's balance sheet in order to meet Accounting Standards, having regard to the convention that reflects the effect of changing prices.
- 4.2 In some instances the business valuation provides a basis for estimating the extent of obsolescence of certain fixed assets. In this application the business valuation may or may not be the principal reason for the valuation, but the combination of services by the Business Valuer and, for example, a Real Property Valuer, is necessary to properly allocate and reflect the *Market Value* of assets to appear in a financial statement.
- 4.3 Other considerations relative to the relationship of business valuations and Accounting Standards are similar to the provisions discussed in International Valuation Application 1 (IVA 1).

5.0 Guidance

- 5.1 Business valuations may be required for a number of possible uses, including acquisitions and dispositions of individual businesses, mergers, valuation of shareholder ownings, and the like.
 - 5.1.1 Where the purpose of the valuation requires a *Market Value* estimate, the Valuer shall apply definitions, processes, and methodologies consistent with their provision in IVS 1.
 - 5.1.2 When an engagement calls for a value basis other than *Market Value*, the Valuer shall clearly identify the type of value involved, define such value, and take steps necessary to distinguish the value estimate from a *Market Value* estimate.
- 5.2 If, in the opinion of the Valuer, certain aspects of an engagement indicate that a departure from any provision of IVSs or of this Guidance, is necessary and appropriate, such departure shall be disclosed and the reason for invoking the departure clearly set forth in all Valuation Reports (oral or written) issued by the Valuer. The requirements for Valuation Reports are addressed in the IVSC Code of Conduct and IVS 3, Valuation Reporting.

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 6

- 5.3 The Valuer shall take steps to assure that all data sources relied upon are reliable and appropriate to the valuation undertaking. In many instances it will be beyond the scope of the Valuer's services to perform a complete verification of secondary or tertiary data sources. Accordingly, the Valuer shall verify the accuracy and reasonableness of data sources as is customary in the markets and locale of the valuation.
- 5.4 Business Valuers must often rely upon the services of Professional Property Valuers and/or other experts. A common example is reliance upon a Real Property Valuer to value the real estate components owned by a business. Where the services of other experts are relied upon, the Business Valuer shall
- 5.4.1 take such verification steps as are necessary to assure that such services are competently performed and that the conclusions relied upon are reasonable and credible, or
- 5.4.2 disclose the fact that no such steps were taken.
- 5.5 Business Valuers must frequently rely upon information received from a client or from a client's representatives. The source of any such data relied upon shall be cited by the Valuer in oral or written Valuation Reports, and the data shall be reasonably verified wherever possible.
- 5.6 Although many of the principles, methods, and techniques of business valuation are similar to other fields of valuation, business valuations require special education, training, skills, and experience.
- 5.7 Going concern has several meanings in accounting and valuation. In some contexts, going concern serves as a premise under which Valuers and accountants consider a business as an established entity that will continue in operation indefinitely.
- 5.7.1 The premise of a going concern serves as an alternative to the premise of liquidation. Adoption of a going concern premise allows the business to be valued above liquidation value and is essential to the development of the *Market Value* of the business.
- 5.7.1.1 In liquidations, the value of most intangible assets (e.g., goodwill) tends toward zero, and the value of all tangible assets reflects the circumstance of liquidation. Expenses associated with liquidation (sales fee, commissions, taxes, other closing costs, administrative costs during close-out, and loss of value in inventory) are also calculated and deducted from the estimate of business value.
- 5.8 Awareness of current market activity, and knowledge about relevant economic developments and trends are essential for competent business valuations. In order to estimate the *Market Value* of a business, Business Valuers identify and assess the impact of such considerations in their valuations and Valuation Reports.
- 5.9 A description of the business valuation assignment must include
- 5.9.1 Identification of the business, business ownership interest, or security to be valued;
- 5.9.2 the effective date of the valuation;
- 5.9.3 the definition of value;
- 5.9.4 the owner of the interest; and
- 5.9.5 the purpose and use of the valuation.
- 5.10 Factors to be considered by the Valuer in the valuation of a business include:
- 5.10.1 The rights, privileges, or conditions that attach to the ownership interest, whether held in corporate form, partnership form, or proprietorship
- 5.10.1.1 Ownership rights are set forth in various legal documents. In various States these documents may be called articles of association and/or the capital clause in the memorandum of the business, articles of incorporation, bylaws, partnership agreements, and shareholder agreements, to name a few.
- 5.10.1.2 Whoever owns the interest is bound by the business's documents. There may be rights and conditions contained in an owner's agreement or exchange of correspondence, and these rights may or may not be transferable to a new owner of the interest.
- 5.10.1.3 The documents may contain restrictions on the transfer of the interest and may contain provisions governing the basis of valuation that has to be adopted in the event of transfer of the interest. For example, the documents may stipulate

that the interest to be transferred should be valued as a pro rata fraction of the value of the entire issued share capital even though the interest to be transferred represents a minority interest. In each case the rights of the interest being valued and the rights attaching to any other class of interest must be considered at the outset.

- 5.10.2 **The nature of the business and history of the business.** Since value resides in the benefit of future ownership, history is valuable in that it may give guidance as to the expectations of the business for the future.
- 5.10.3 **The economic outlook that may affect the subject business,** including political outlook and government policy. Matters such as exchange rates, inflation and interest rates may affect businesses that operate in different sectors of the economy quite differently.
- 5.10.4 **The condition and outlook of the specific industry that may affect the subject business**
- 5.10.5 **The assets, liabilities, and equity and financial condition of the business**
- 5.10.6 **The earnings and dividend paying capacity of the business**
- 5.10.7 **Whether or not the business has intangible value**
 - 5.10.7.1 Intangible value may be embodied in identifiable intangible assets such as patents, trademarks, copyrights, brands, know-how, databases, etc.
 - 5.10.7.2 Intangible value may also be contained in undifferentiated assets, often called "*goodwill*." Note that goodwill value in this context is similar to goodwill in the accounting sense in that both are the residual value (historical cost in accounting terms) after all other assets have been taken into account.
 - 5.10.7.3 If the business has intangible assets, the Valuer must ensure that the value of the intangibles is fully reflected, whether the identifiable intangible assets have been valued separately or not.
- 5.10.8 **Prior transactions in ownership interests of the subject business**
- 5.10.9 **The relative size of the ownership interest to be valued**
 - 5.10.9.1 **There are different levels of control or lack of control resulting from differences in the size of ownership interests.** In some instances effective control may be obtained with less than 50% of the voting rights. Even if one person owns more than 50% of the voting rights and has operational control, there may be certain actions, such as winding the business up (i.e., putting everything in order before the business may be dissolved), that may require more than 50% affirmative vote, and may require an affirmative vote of all owners.
 - 5.10.9.2 It is essential that the Valuer be aware of the legal restrictions and conditions that arise through the laws of the State in which the business exists.
 - 5.10.10 **Other market data,** e.g., rates of return on alternative investments, advantages of control, disadvantages of lack of liquidity, etc.
 - 5.10.11 **The market prices of publicly traded stocks or partnership interests, acquisition prices for business interests, or businesses engaged in the same or similar lines of business.**
 - 5.10.11.1 Often, particularly in the use of acquisition transactions, adequate information is difficult or impossible to obtain. While the actual transaction price may be known, the Valuer may not know what warranties and indemnities were given by the seller, what terms were given or received, whether cash or other assets were taken from the business prior to acquisition, or what impact taxation planning had on the transaction.
 - 5.10.11.2 Comparable data should always be used with care, and inevitably numerous adjustments need to be made. When using market prices that reflect public trading, the Valuer must bear in mind that the market prices are from transactions for small minority holdings. The price for the acquisition of an entire business

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 6

represents 100% of the business. Adjustments must be made for differences arising due to different levels of control.

5.10.12 Any other information the Valuer believes to be relevant.

5.11 Use of financial statements

5.11.1 There are three goals of financial analysis and adjustment:

5.11.1.1 Understanding of the relationships existing in the profit and loss statement and the balance sheet, including trends over time, to assess the risk inherent in the business operations and the prospects for future performance

5.11.1.2 Comparison with similar businesses to assess risk and value parameters

5.11.1.3 Adjustment of historical financial statements to estimate the economic abilities of and prospects for the business

5.12 To aid in understanding the economics of and risk in a business interest, financial statements should be analysed in terms of 1) money, 2) percentages (percentage of sales for items in the income statement and percentage of total assets for items in the balance sheet), and 3) financial ratios.

5.12.1 **Analysis in terms of money** as stated in the financial statements is used to establish trends and relationships between income and expense accounts in a business interest over time. These trends and relationships are used to assess the expected income flow in the future, along with the capital needed to allow the business to provide that income flow.

5.12.2 **Analysis in terms of percentages** compares accounts in the profit and loss statement to revenues, and accounts in the balance sheets to total assets. Percentage analysis is used to compare the trends in relationships, i.e., between revenue and expense items, or between balance sheet amounts, for the subject business over time and among similar businesses.

5.12.3 **Analysis in terms of financial ratios** is used to compare the relative risk of the subject business over time and among similar businesses.

5.13 For estimates of the *Market Value* of a business, common adjustments to the financial record of the business are made to more closely approximate economic reality of both the income stream and the balance sheet.

5.13.1 Financial statement adjustments should be made to reported financial information for items that are relevant and significant to the valuation process. Adjustments may be appropriate for the following reasons:

5.13.1.1 To adjust revenues and expenses to levels that are reasonably representative of expected continuing operations

5.13.1.2 To present financial data of the subject and guideline comparison businesses on a consistent basis

5.13.1.3 To adjust from reported values to *Market Values*

5.13.1.4 To adjust for non-operating assets and liabilities and the related revenue and expenses

5.13.1.5 To adjust for non-economic revenue or expense

5.13.2 Whether an adjustment is appropriate, or not, may depend on the degree of control held by the ownership interest under valuation. For controlling interests, including an ownership interest of 100%, most adjustments may be appropriate if the owner could make the changes implied by the adjustment. For valuation of minority interests, whose owners do not have the ability to change most items, the Valuer should be careful to reflect reality when considering potential adjustments. **Common adjustments include:**

5.13.2.1 **Elimination of the impact of non-recurring events from the income statement and balance sheet, if any.** Since these events are not likely to recur, a buyer of the interest would not expect to incur them, and would not include them in the income stream. Adjustments may be required in taxes. These types of adjustments are typically appropriate for both majority and minority interest valuations. Examples of non-recurring items include:

5.13.2.1.1 Strikes, if unusual

5.13.2.1.2 New plant startup

- 5.13.2.1.3 Weather phenomena such as floods, cyclones, etc.
- 5.13.2.2 **The Valuer should be wary of adjusting for non-recurring items whenever non-recurring items arise in most years, but in each year they appear to be the result of different events.** Many businesses have non-recurring items every year, and the Valuer should make contingency provisions for these expenses.
- 5.13.2.3 **Elimination of the impact of non-operating items from the balance sheet and the income statement** in the context of valuation of a controlling shareholder's interest. In the context of valuation of a minority shareholder's interest, these adjustments may not be appropriate. If non-operating items are on the balance sheet, they should be removed and valued separately from the operating business. Non-operating items should be valued at *Market Value*. Tax adjustments may be required. Costs of sale should be taken into account. Adjustments to the income statement should include removal of both income and expense arising from the non-operating assets, including tax impacts. **Examples of non-operating items and the appropriate adjustments include:**
- 5.13.2.3.1 **Non-essential personnel.** Eliminate compensation expense and taxes related to compensation expense and adjust income taxes. The Valuer should be wary of adjusting for items such as non-essential personnel in arriving at a maintainable profits figure. Unless the Valuer knows that the acquirer, or whoever the Valuer is acting for, actually has the controlling power to make the change and intends to get rid of non-essential personnel, there is a danger of overvaluing the business if the expenses are added back to profit.
- 5.13.2.3.2 **Non-essential assets** (e.g., an airplane). Eliminate the value of the non-essential asset(s) and any associated assets and liabilities from the balance sheet. (After the business has been valued, the value of the non-essential asset(s) is added to reconciled business value net of costs of disposal, including taxes if any.). Eliminate income statement impact of owning the non-essential asset(s), including support expenses (in the case of an airplane, the fuel, crew, hanger, taxes, maintenance, etc.) and revenue (charter or rental income).
- 5.13.2.3.3 **Redundant assets** (surplus or not necessary to the requirements of the business) should be discussed in the Valuation Report similarly with non-operating items. Such redundant assets may principally include: unemployed licences, franchises, copyrights and patents; investments in land, rental buildings and excess equipment; investments in other businesses; a marketable securities portfolio; and, excess cash or term deposits. The net realisable value of redundant assets (net of income tax and selling costs) must be added as inflow to operating net cash flow, especially in the first year of the specified forecast period.
- 5.13.2.4 **Depreciation** may need to be adjusted from the tax or accounting depreciation shown in the reported financial statements to an estimate that compares more accurately to depreciation used in similar businesses. Tax adjustments may subsequently need to be made.
- 5.13.2.5 **Inventory accounting** may need to be adjusted to more accurately compare to similar businesses, whose accounts may be kept on a different basis from the subject business, or to more accurately reflect economic reality. **Inventory adjustments** may be different when considering the income statement and when considering the balance sheet. For example, first-in-first-out (a method of costing inventory that assumes the first acquired stock will be the first sold) may most accurately represent the value of the inventory when constructing a *Market Value* balance sheet. But, when examining the income statement, last-in-first-out (a method of costing inventory that assumes the most recently acquired stock will be the first sold) may more

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 6

accurately represent the income level in times of inflation or deflation. Tax adjustments may subsequently need to be made.

- 5.13.2.6 **Compensation of the owner(s)** may need to be adjusted to reflect the market cost of replacing the labor of the owner(s). **Severance pay** for non-essential personnel may need to be considered. **Tax adjustments** may need to be made. **Service contracts** may need to be looked at carefully to adjust for the value (rather than the face amount of the cost) of terminating contracts with senior personnel.
- 5.13.2.7 **Cost of items leased, rented or otherwise contracted from related parties** may need to be adjusted to reflect *Market Value* payments. Tax adjustments may subsequently need to be made.
- 5.13.3 **Some adjustments that would be made in the context of valuation of the entire business might not be made in the context of valuation of a non-controlling interest** in that entity since the non-controlling interest would not have the ability to exert an influence that would warrant adjustment.
- 5.13.4 **Financial statement adjustments are made for the purpose of assisting the Valuer in reaching a valuation conclusion.** If the Valuer is acting as a consultant to either the buyer or seller in a proposed transaction, the adjustments should be understood by the client. For example, the proposing purchaser should understand that the value derived after adjustments may represent the maximum that should be paid. If the purchaser does not believe the financial or operational improvements can be made, a lesser price may be appropriate.
- 5.13.5 **Adjustments made should be fully described and supported.** The Valuer should be very careful in making adjustments to the historical record. Such adjustments should be discussed fully with the client. The Valuer should make adjustments only after sufficient access to the business to support their validity.

5.14 Business valuation approaches

5.14.1 *Market approach* to business valuation

5.14.1.1 The *market approach* compares the

subject to similar businesses, business ownership interests, and securities that have been sold in the market.

5.14.1.2 The three most common sources of data used in the *market approach* are public stock markets in which ownership interests of similar businesses are traded, the acquisition market in which entire businesses are bought and sold, and prior transactions in the ownership of the subject business.

5.14.1.3 There must be a reasonable basis for comparison with and reliance upon the similar businesses in the *market approach*. These similar businesses should be in the same industry as the subject or in an industry that responds to the same economic variables. The comparison must be made in a meaningful manner and must not be misleading. Factors to be considered in whether a reasonable basis for comparison exists include:

5.14.1.3.1 Similarity to the subject business in terms of qualitative and quantitative business characteristics

5.14.1.3.2 Amount and verifiability of data on the similar business

5.14.1.3.3 Whether the price of the similar business represents an arm's-length transaction

5.14.1.3.3.1 A thorough, unbiased search for similar businesses is necessary to establish the independence and reliability of the valuation. The search should include simple, objective criteria for selecting similar businesses.

5.14.1.3.3.2 A comparative analysis of qualitative and quantitative similarities and differences between similar businesses and the subject business must be made.

5.14.1.4 Through analysis of the publicly traded businesses or acquisitions, the Valuer often computes valuation ratios, which are usually price divided by some measure of income or net assets. Care must be used in calculating and selecting these ratios.

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 6

- 5.14.1.4.1 The ratio must provide meaningful information about the value of the business.
- 5.14.1.4.2 The data from the similar businesses used to compute the ratio must be accurate.
- 5.14.1.4.3 The calculation of ratios must be accurate.
- 5.14.1.4.4 If the data are averaged, the time period considered and averaging method must be appropriate.
- 5.14.1.4.5 All calculations must be done in the same way for both the similar businesses and the subject business.
- 5.14.1.4.6 The price data used in the ratio must be valid as of the valuation date.
- 5.14.1.4.7 Where appropriate, adjustments may need to be made to render the similar businesses and the subject business more comparable.
- 5.14.1.4.8 Adjustments may need to be made for unusual, non-recurring, and non-operating items.
- 5.14.1.4.9 The selected ratios must be appropriate given the differences in risk and expectations of the similar businesses and the subject business.
- 5.14.1.4.10 Several value indications may be derived since several valuation multiples may be selected and applied to the subject business.
- 5.14.1.4.11 Appropriate adjustments for differences in the subject ownership interest and interests in the similar businesses with regard to control or lack of control, or marketability or lack of marketability, must be made, if applicable.
- 5.14.1.5 **When prior transactions in the subject business are used to provide valuation guidance, adjustments may need to be made for the passage of time and for changed circumstances in the economy, the industry, and the business.**
- 5.14.1.6 Anecdotal valuation rules, or rules of thumb, may be useful in the valuation of a business, business ownership interest, or security. However, value indications derived from the use of such rules should not be given substantial weight unless it can be shown that buyers and sellers place significant reliance on them.
- 5.14.2 ***Income capitalisation approach to business valuation***
- 5.14.2.1 **The *income capitalisation approach* estimates the value of a business, business ownership interest or security by calculating the present value of anticipated benefits. The two most common income approach methods are capitalisation of income and *discounted cash flow analysis* or *dividends method*.**
- 5.14.2.1.1 **In (direct) capitalisation of income, a representative income level is divided by a capitalisation rate or multiplied by an income multiple to convert the income into value. In theory, income can be a variety of definitions of income and cash flow. In practice, the income measured is usually either pre-tax income or post-tax income. The capitalisation rate must be appropriate for the definition of income used.**
- 5.14.2.1.2 **In *discounted cash flow analysis* and/or *dividends method*, cash receipts are estimated for each of several future periods. These receipts are converted to value by the application of a discount rate using present value techniques. Many definitions of cash flow could be used. In practice, net cash flow (cash flow that could be distributed to shareholders), or actual dividends (particularly in the case of minority shareholders) are normally used. The discount rate must be appropriate for the definition of cash flow used.**
- 5.14.2.1.3 **Capitalisation rates and discount rates are derived from the market and are expressed as a price multiple (derived from data on publicly traded businesses or transactions) or an interest rate (derived from data on alternative investments).**
- 5.14.2.2 **Anticipated income or benefits are converted to value using calculations**

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 6

that consider the expected growth and timing of the benefits, the risk associated with the benefits stream, and the time value of money.

- 5.14.2.2.1 Anticipated income or benefits should be estimated considering the capital structure and historical performance of the business, expected outlook for the business, and industry and economic factors.
- 5.14.2.2.2 The *income approach* requires the estimation of a capitalisation rate, when capitalising income to arrive at value, or a discount rate, when discounting cash flow. In estimating the appropriate rate, the Valuer should consider such factors as the level of interest rates, rates of return expected by investors on similar investments, and the risk inherent in the anticipated benefit stream.
- 5.14.2.2.3 In capitalisation methods that employ discounting, expected growth is explicitly considered in the estimate of the future benefit stream.
- 5.14.2.2.4 In capitalisation methods that do not employ discounting, expected growth is included in the capitalisation rate. The relationship, stated as a formula, is discount rate minus long-term growth rate equals capitalisation rate ($R=Y-\Delta a$ where R is the capitalisation rate; Y is the discount, or yield, rate; and Δa is the annualised change in value).
- 5.14.2.2.5 The capitalisation rate or discount rate should be consistent with the type of anticipated benefits used. For example, pre-tax rates should be used with pre-tax benefits; net after-income-tax rates should be used with net after-income-tax benefit streams; and net cash flow rates should be used with net cash flow benefits.
- 5.14.2.2.6 When the forecast income is expressed in nominal terms (current prices), nominal rates must be used, and when the forecast income is expressed in real terms (level prices), real rates must be used. Similarly, the expected long-term growth rate of income should be documented and clearly expressed in nominal or real terms.
- 5.14.3 *Asset-based business valuation approach*
- 5.14.3.1 In business valuation the *asset-based approach* may be similar to the cost approach used by Valuers of different types of assets.
- 5.14.3.2 The *asset-based approach* is founded on the principle of substitution, i.e., an asset is worth no more than it would cost to replace all of its constituent parts.
- 5.14.3.3 In the execution of the *asset-based approach*, the cost basis balance sheet is replaced with a **balance sheet that reports all assets, tangible and intangible, and all liabilities at Market Value or some other appropriate current value**. Taxes may need to be considered. If market or liquidation values apply, costs of sale and other expenses may need to be considered.
- 5.14.3.4 The *asset-based approach* should be considered in valuations of controlling interests in business entities that involve one or more of the following:
- 5.14.3.4.1 An investment or holding business, such as a property business or a farming business
- 5.14.3.4.2 A business valued on a basis other than as a going concern
- 5.14.3.5 The *asset-based approach* should not be the sole valuation approach used in assignments relating to operating businesses appraised as going concerns unless it is customarily used by sellers and buyers. In such cases, the Valuer must support the selection of this approach.
- 5.14.3.6 If the valuation of an operating business is not on a going concern basis, the assets should be valued on a *Market Value* basis or on a basis that assumes a shortened time period for exposure in the market, if that is appropriate. All costs related

to the sale of the assets or the closing of the business need to be taken into account in this type of valuation. Intangible assets such as goodwill may not have value under these circumstances, although other intangible assets such as patents, trademarks, or brands may retain their value.

5.14.3.7 If the holding business simply holds property and receives investment income from the property, *Market Values* should be obtained for each property.

5.14.3.8 If an investment holding business is to be valued, the securities (both quoted and unquoted), the liquidity of the interest, and the size of the interest may be relevant and may lead to a deviation from the quoted price.

5.15 Reconciliation processes

5.15.1 The value conclusion shall be based upon

- 5.15.1.1 the definition of value;
- 5.15.1.2 the purpose and intended use of the valuation; and
- 5.15.1.3 all relevant information as of the valuation date necessary in view of the scope of the assignment.

5.15.2 The value conclusion shall also be based on value estimates from the valuation methods performed.

- 5.15.2.1 The selection of and reliance on the appropriate approaches, methods and procedures depends on the judgment of the Valuer.
- 5.15.2.2 The Valuer must use judgment when estimating the relative weight to be given to each of the value estimates reached during the Valuation Process. The Valuer should provide the rationale and justification for the valuation methods used and for the weighting of the methods relied on in reaching the reconciled value.

6.0 Effective Date

6.1 This International Valuation Guidance Note became effective 31 July 2007.

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CONSIDERATION OF HAZARDOUS AND TOXIC SUBSTANCES IN VALUATION

1.0 Introduction

- 1.1 The objective of this Guidance Note (GN) is to assist Valuers in preparing valuations when specific hazardous or toxic substances may influence property values.
- 1.2 Hazardous and toxic substances are included among a number of possible environmental factors that, when appropriate, are specifically considered by Valuers. This GN is limited to consideration of hazardous and toxic substances because other environmental factors that may be encountered in valuations typically have less involvement with scientific and associated technical issues, including related law.
- 1.3 This GN addresses general concepts, principles, and considerations that guide Valuers in preparing valuations when hazardous or toxic materials that may influence property values are present. It also discusses concepts that must be understood by accountants, regulatory authorities, and other users of valuation services.
- 1.4 Valuers rarely have special qualifications in legal, scientific, or other technical areas that involve evaluating risks associated with hazardous or toxic substances. When considering the market effects of such risks in property valuations, Valuers commonly rely upon other experts' advice. As specified in the IVSC Code of Conduct, paras. 5.2 and 6.6, significant reliance upon other experts' advice must be disclosed and explained in the context of the property addressed in the Valuation Report.
- 1.5 Fundamental to the application of this GN are the Valuer's adherence to market-based valuations, objectivity, and full disclosure of relevant matters. Similarly, Valuers are obliged to write Valuation Reports that may be reasonably understood by clients and others. The obligation for clarity and full disclosure is particularly important when scientific, technical, and legal issues are involved.

- 1.6 This GN also provides for proper treatment and disclosure of hazardous and toxic substance issues when valuing specialised properties and in other situations, which preclude the application of *Market Value* concepts.

2.0 Scope

- 2.1 This GN applies to all valuations of property including plant and equipment. Special provisions of the GN should be observed when hazardous or toxic substances that may influence the property's *Market Value* or other defined value are known or reasonably believed to be present.

3.0 Definitions

- 3.1 *Hazardous or toxic substances* within the context of this GN involve specific materials that, by their presence or proximity, may have adverse effect on property value because of their potential to cause harm to life forms. Such materials may be incorporated into improvements to or on the site, or they may be found in or on the land. They may also be offsite, but nearby. In some instances they may be airborne.
 - 3.1.1 In a more general use beyond this GN, environmental factors may be characterized as influences external to the property being valued which may have positive effect, negative effect, or no effect at all on the property's value. Hazardous or toxic substances may be found either on or off the site of the property valued.
 - 3.2 Hazardous substance within the context of a valuation is any material within, around, or near the property being valued that has sufficient form, quantity, and bio-availability to create a negative impact on the property's Market Value.
 - 3.3 Toxic describes the status of a material, whether gas, liquid, or solid, that in its form, quantity, and location at the date of valuation has capacity to cause harm to life-forms. Toxicity refers to the degree or extent of such capacity.

4.0 Relationship to Accounting Standards

- 4.1 While the expressions Market Value and Fair Value may not always be synonymous (see International Valuation Standards 1 and 2 [IVS 1 and 2] and International Valuation Application 1 [IVA 1]), each type of value reflects market behaviour under conditions contained within the respective definitions. To the extent that property values reported under either type of value may be affected by hazardous or toxic substances, proper disclosure and the application of proper valuation procedures to the circumstances are necessary in making and reporting valuations.
- 4.2 This GN is applicable to all circumstances involving public disclosure of property values, whether reported individually or in the aggregate, when hazardous or toxic substances may have adverse effect on such values. In addition to the possible effect of such considerations on the properties valued, it is possible that there are other accompanying issues such as curative or restoration costs, maintenance or monitoring costs, third-party or regulatory liabilities, and the like. Thus, proper disclosure and handling are essential in valuations used for preparation of financial statements and related accounts.
- 4.3 In the ordinary course of conducting an asset valuation, the Valuer will be instructed by the Directors of the entity as provided in IVA 1. Any special instructions to the Valuer concerning the handling of hazardous or toxic substance issues that may have negative impact upon property value are, under IVA 1, important disclosures to be discussed by the Valuer in the Valuation Report. Such disclosures shall be accompanied by the Valuer's explanation of how the issues are handled in the Valuation Process; any assumptions that are made; and the effect, if any, such considerations have upon the value reported.
- 4.4 Although the value effects of hazardous or toxic substances are derived from the market in a Market Value assignment, such effects may not be as readily discerned when valuing property for which a Depreciated Replacement Cost method is appropriate. To comply with IVA 1 when applying the DRC method, Valuers should apply the principles of this GN to the extent possible and should fully disclose the extent of their analysis and the basis for their conclusions.

- 4.5 The accounting definition of impairment loss is the amount by which the carrying amount of an asset or a cash-generating unit exceeds its recoverable amount (IAS 36, para. 6). The negative impact of hazardous or toxic materials that are present in a property may contribute to its impairment. The impairment loss incurred by a property where such substances are present may include the adverse effect of those substances upon property value. (See para.5.4 below.)

5.0 Guidance

- 5.1 In dealing with a client or prospective client in matters pertaining to the valuation of property when known or reasonably discoverable environmental conditions that may have adverse influence on property values are present, the Valuer should disclose to the client the extent of his or her knowledge, experience, and competency to deal with the situation.
- 5.1.1 If the environmental factors are known or are suspected to exist at the time the Valuer and prospective client are discussing the potential engagement, the Valuer should satisfy himself or herself that the client understands the Valuer's competency and disclosure obligations and that undertaking the engagement will in no way compromise these obligations.
- 5.1.2 If the environmental factors are discovered after commencing the engagement, the Valuer should make known to the client the knowledge, experience, and competency disclosures specified by this Guidance, and should then comply with all other IVS disclosure requirements.
- 5.2 Recognising that many environmental situations will require advice on physical, legal, scientific, and other technical issues, if the engagement is otherwise acceptable to both the client and the Valuer, the Valuer should take the necessary steps to complete the assignment competently. These steps may include appropriate personal study; association with another Valuer who has the requisite knowledge, experience, and competency; or obtaining the professional assistance of others who possess the requisite knowledge, experience, and competency.
- 5.3 Disclosure of the existence of any hazardous or toxic substance that may have adverse effect upon a property's value is included among the general reporting requirements of IVS 1, 2, and 3. Also required is the Valuer's disclosure regarding

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 7

- how that factor has been dealt with in the engagement. If the engagement calls for valuation of the property as though no such environmental factor existed, full disclosure must be made of the limiting assumption, and reporting must comply with the statements above. (See para. 5.1 and 5.2.) The requirements for valuation reports are addressed in the Code of Conduct and IVS 3, Valuation Reporting.
- 5.4 Where impairment is present in a property, the Valuer should estimate the value of the property as if the impairment had been removed. Where possible, the Valuer should identify the cost of remediation; but if this is not possible, the Valuer should disclose the fact that the property is impaired.
- 5.5 If a property is valued as if unaffected by hazardous substances, and such substances are known or suspected to exist, the Valuation Report should contain a qualification that clearly limits the scope of the valuation, an appropriate statement of purpose, properly qualified conclusions, and a restriction against use of the valuation conclusion without accompanying disclosure of the qualification and its explanation.
- 5.6 The names and nature of expert assistance of others who contributed specific information concerning effects of environmental factors on the property valued should be acknowledged in the Valuation Report.
- 5.7 When there are no known environmental factors that may have adverse effect on property value, the Valuer should, as a matter of routine practice, include within the Valuation Report a contingent and limiting condition or other disclaimer affirming that the valuation was made on the assumption that no such factors were known to exist at the date of valuation, but if such factors did exist they could well have an adverse effect on value.
- 5.8 There is growing worldwide concern about the effects of hazardous and toxic substances upon lives and property. Many potential hazards have been recently identified, and others are likely to be added over time as new and additional discoveries are made and subsequent controls are invoked by governments or are required by the market.
- 5.9 Some hazardous or toxic substances can have material effect on property values. However, as Valuers normally deal with Market Values, it is the market's reaction to these substances that is at issue in Market Value engagements. Over time, substances once believed to have no adverse effect on property value may be determined to have such an effect. Conversely, materials once believed to have substantial effect may be found to have little or no property value effect, or to have such effect only under certain market conditions.
- 5.10 The handling of physical, legal, scientific, and technical issues involved with hazardous or toxic substances is frequently beyond the skill of the Valuer. However, the Valuer's role in consideration of such factors will be facilitated if
- 5.10.1 situations involving environmentally sensitive substances are recognised and dealt with in accordance with this Guidance, whether they are encountered prior to undertaking an engagement or subsequent to its commencement;
- 5.10.2 proper reliance is placed upon the professional advice and assistance of others when special skills, knowledge, training, and experience are required, and any such assistance is acknowledged and explained in the Valuation Report;
- 5.10.3 proper treatment is given to the influence of hazardous or toxic substances in the Valuation Process, or alternatively, if the Valuation Process is to exclude consideration of such matters, proper disclosure is made of any assumptions made, the purpose of the analysis, and the likely effect of the assumptions on the defined value;
- 5.10.4 reasonable effort is made to ensure that reports and the value estimates they contain are not misleading and can be reasonably used only for the purpose for which they are intended.
- 5.11 Valuers are expected to correctly apply those recognised methods and techniques that are necessary to comply with this Guidance. When valuing property subject to some hazardous or toxic substance that adversely influences property value, the Valuer should apply those processes necessary to adequately reflect any such value losses, taking care to neither over- or understate the value effects. In a Market Value engagement, it is the Valuer's responsibility to reflect the market effect of the particular condition or circumstance.
- 5.12 Valuers are cautioned that there can be considerable controversy among legal, scientific, and other technical experts upon whose advice the Valuer may need to rely. Particular differences may be found in the methods experts use to determine the extent of clean-up, maintenance, or monitoring that may be associated with hazardous or toxic substances and the costs required to accomplish such clean-up, maintenance, or

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 7

monitoring.

- 5.12.1 Engagements may require valuation of the affected property under an assumption that any value effect of the hazardous or toxic substances is excluded from the reported value. Such engagements are acceptable, provided that the resulting valuation is not misleading, that the client is informed of and agrees to this limiting assumption, and that the Valuation Report clearly sets forth the limitation and the reasons therefore.
- 5.12.2 Because of technical issues frequently involved in environmental matters, it is common for Valuers, directly or through the client, to seek the counsel of and rely upon the opinions of those who hold appropriate qualifications to evaluate problems involving hazardous or toxic substances. Valuers should disclose the level and nature of reliance placed upon such opinions.
- 5.13 Valuers and users of valuation services should recognise that the effect of a particular hazardous or toxic substance may vary widely with differences in properties, locations, and markets. Adverse value effects may range from none to those that are more than costs of cure and remediation. The latter may occur, for example, where highest and best use of the property affected is changed by the condition and where marketability or other usefulness of the property is altered. In any case, it is the role of the Valuer to research and reflect the effects of the environmental factor on a particular property in its market.
- 5.14 In the typical valuation engagement, the Valuer will not have the skills to make legal, scientific, or technical findings regarding hazardous or toxic substances, or other environmental factors that may have adverse effect on value. It is important to the credibility and usefulness of the reported value that if any such conditions exist, they be properly considered and reported.
- 5.14.1 When the Valuer knows that a hazardous or toxic substance is present in the property specified in a valuation engagement, the Valuer should follow all requirements of this Guidance. Normally, any technical experts upon whose advice the Valuer may rely will be engaged by the client or by others.
- 5.14.2 When the Valuer has some reason to believe that a potentially adverse hazardous or toxic substance may be present, the Valuer should immediately make the client aware of the concern and request that the client take steps to resolve pertinent questions. By handling this concern on a private, confidential basis, the Valuer keeps information confidential that in itself could affect the property involved.
- 5.15 Guidelines for Valuers' responsibilities to observe, locate, and identify hazardous or toxic substances or circumstances may vary from time to time within and among jurisdictions. In general, determination of the nature, extent, and physical effects of environmental conditions is beyond the scope of service of Valuers.
- 5.16 In dealing with hazardous or toxic substances, the Valuer should research all related issues in a confidential manner so as not to raise undue speculation concerning the property.
- 5.17 It is not uncommon for individuals unfamiliar with hazardous or toxic substances issues to assume that if there is a physical effect of such substances, there must be an adverse economic reaction. Market experience shows there can be, and frequently are, important differences between general public perceptions and actual market effects of the presence of such substances. The Valuer's role is to avoid such generally held but possibly erroneous assumptions and to carefully consider all significant factors, perform competent market research, and reflect relevant market attitudes towards the situation in Valuation Reports.

AUSNZ 5.18 Qualification if No Obvious Matters

If there are no obvious matters of contamination evident on inspection of a site and no environmental expert's report is made available to the Member, then the Member's report should be suitably qualified to reflect the limited extent of the Member's expertise in relation to environmental factors and to place the onus upon parties relying upon the report to make their own enquiries. Although any qualification used should be specifically worded to suit the particular circumstances of the valuation or report, the following clause provides an example of the type of qualification that should be made:

'A visual site inspection and (detail other enquiries, eg. enquiries of local government authorities) has not revealed any obvious pollution or contamination. Nevertheless, we are not experts in the detection or quantification of environmental problems and, accordingly, have not carried out a detailed environmental investigation. Therefore, the valuation (or report as applicable) is made on the assumption that there are no actual or potential contamination issues affecting:

- The value or marketability of the property; (or...)
- The site (... as applicable).
- Verification that the property is free from contamination and has not been affected by pollutants of any kind may be obtained from a suitably qualified environmental expert. Should subsequent investigation show that the site is contaminated this valuation (or report) may require revision.'

AUSNZ 5.19 Four Main Approaches

Once a Member becomes aware of contamination or suspects a property has contamination, there are four main approaches to choose from:

- Unaffected Valuation Basis;
- Affected Valuation Approach;
- Environmental Balance Sheet Approach;
- Comparative Approach.

AUSNZ 5.20 Unaffected Valuation Basis

Provide an assessment on an unaffected basis, together with an outline of the preliminary indication of actual or possible contamination and the inclusion of a qualification in the report indicating that the valuation assumes that the land is not contaminated and recommending that expert advice be obtained before reliance is placed upon the valuation.

AUSNZ 5.21 Affected Valuation Approach

Assuming the client's approval is first obtained, have the extent of contamination assessed by appropriate environmental consultants with inclusion of costing for various remedy options and then calculate the property's discounted value. This process would include consideration of the liability for cleaning up adjoining properties that may be affected, plus the influence of any residual market 'stigma' after the anticipated contamination remedy.

AUSNZ 5.22 Detail on How Valuation Reached

Where a discount for environmental factors is applied by a Member, it is always preferable to give the client information as detailed as possible as to how the final assessment is reached. Therefore, the use of the Environmental Balance Sheet Approach described below is generally to be preferred. Nevertheless, in some circumstances it may not be possible to adopt that method. In such circumstances the Member should state clearly in the report that the discount applied was arrived at based upon information obtained from an environmental expert and that the Member has not formed an opinion as to the veracity of that information. A copy of the environmental expert's report should be annexed to the Member's report

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 7

AUSNZ 5.23 Environmental Balance Sheet Approach

This is a method to build-up a profile of the property's attributes in terms of positive and negative factors affecting the property's current market value, and is complimentary to the Affected Valuation Approach detailed above. For instance, the asset entry would be the value of the property as if it had no environmental impairments whilst the liability entries would be environmental offsets to value including:

- the cost of determining if a problem is likely to be present, ie. a full or partial environmental investigation before purchase;
- costs associated with quantifying the magnitude of the problems from an environmental consultancy viewpoint and developing alternative courses of action, from which an owner can choose to thoroughly identify and remedy a problem situation;
- the estimated cost of putting an appropriate management plan and remediation strategy into place;
- the actual cost of pumping-out or of locating pollutants and so on;
- the cost of liabilities imposed on the owner as a result of prior actions, such as licensing breaches, etc;
- the calculated present value of future remediation, management, and related costs affecting future cash flows to be derived from the property;
- an estimate of offset to value resulting from perceptive effects, ie. the stigma or negative intangible offset which can prove difficult to quantify.

The net worth under this method is represented by the owner's impaired position. As some of the above negative effects will have a time deferment factor, it is suggested that Members consider a discounted cash flow approach where appropriate. An example of an Impaired Value Opinion Balance Sheet is shown in Appendix 4, while Appendix 5 provides A Method of Assessing Stigma.

AUSNZ 5.24 Obtain Expert's Environmental Cost Estimates

Members should not provide their own estimates of environmental costs. These figures should be obtained from a suitable environmental specialist and a copy of that expert's report should be clearly annexed to the valuation. The Member should make it clear in the report that these figures have been obtained from an environmental expert and that the Member has not formed an opinion as to the accuracy of those figures. A failure to include a qualification to this effect could result in the Member being held to have adopted these figures. A qualification in the following form or to a similar effect may be appropriate where this method is adopted:

'The Impaired Valuation Opinion contained herein has been calculated by subtracting the Total Environmental Liabilities of the property from the Unimpaired Valuation Opinion. It has been provided in this form for convenience only. The figures which comprise the Total Environmental Liabilities, have been obtained from (stage name of the environmental expert) on instructions from you. A copy of (the environmental expert's) report is annexed to this valuation as Annexure 'X'. (The Member) has not formed an opinion as to the accuracy of these figures and accepts no responsibility for them. Any enquiries in relation to these figures should be directed to (the environmental expert) directly.'

AUSNZ 5.25 Comparative Approach

A Comparative Approach may be possible in limited circumstances where this type of sales data is available.

AUSNZ 5.26 Where Sales are Available

Assessment of the 'unaffected value' indicated above would, where sales are available, involve the comparative approach. It is also advisable to use the comparative approach in the assessment of environmentally contaminated property. There are only limited instances where direct comparison of contaminated property sales can be made, but efforts should be made to establish whether this sales data is available just in case the comparative approach can be applied. Members should, however, use great caution to ensure that the properties being compared are truly comparable. Members should not make judgements as to the comparability of contaminated sites without access to the reports of suitable environmental experts in relation to both the subject property and any properties sought to be used as comparables.

AUSNZ 5.27 Valuation Qualification

Where a member has relied upon contamination reports and costings provided by other experts, the Member should advise the client of such reliance and that the assessed value is qualified to the extent of the veracity of that information. The Member should also advise the client that should the information relied upon vary, then the valuation should be referred back to the Member for further comment as there is the potential for the valuation figure to alter.

AUSNZ 5.28 Negative Land Value

There have been instances where the cost of remediation exceeds the market value (unaffected) of the land and this infers a negative land value. The established practice is to adopt a figure no less than zero value. However, in these instances, the member should advise that the cost of remediation or liability for clean up costs required for the land results in a negative figure.

AUSNZ 5.29 Future Liability

Members should consider potential and value impacts future liability, particularly in terms of highest and best use, when completing these valuations or reports.

AUSNZ 5.30 Client Considerations

Client considerations are also important. For, example mortgagees and purchasers (where advising for acquisition purposes), can be particularly worried by the prospect of contamination and should be informed about the suspicion of contaminants on any property.

6.0 Effective Date

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

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THE COST APPROACH FOR FINANCIAL REPORTING-(DRC)

REVISED 2007

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 that may be used in arriving at the value of specialised assets for financial reporting purposes. *Depreciated replacement cost* may be the more applicable approach when comparable sales data is insufficient but sufficient market data exists concerning costs and accrued depreciation. 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).

3.0 Definitions

3.1 *Depreciated Replacement Cost*. The current cost of replacing an asset with its modern equivalent asset less deductions for physical deterioration and all relevant forms of obsolescence and optimisation.

3.2 *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

3.3 *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.

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

3.5 *Plant and Equipment*. Tangible assets, other than *realty*, that:

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

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

3.7 *Specialised Property*. A *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.

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*.
- 4.2 The application of *Fair Value* under accounting standards is discussed in IVA 1. In accounting standards, *Fair Value* is normally equated to *Market Value*.

5.0 Guidance

- 5.1 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 if sufficient direct market evidence exists to undertake a valuation of the specialised property using the sales comparison approach and/or the income capitalisation approach.**
- 5.2 In the absence of sufficient direct market evidence, *depreciated replacement cost* is regarded as an acceptable method of arriving at the value of specialised assets but must incorporate market observations by the Valuer with regard to current costs and depreciation rates. The method is based on the same theoretical transaction between rational informed parties as the Market Value concept.
- 5.3 The Valuer estimates the cost of a *modern equivalent asset* at the relevant valuation date. This may involve estimating the cost of having a suitable asset commissioned to order. The replacement cost needs to reflect all incidental costs that would be incurred, for example for design, delivery, installation and commissioning.

In the case of *specialised property*, the cost of acquiring land suitable for the development of an equivalent specialised facility in the market should be included, together with the cost of all *improvements* that would be required to the land.

- 5.4 The Valuer then estimates depreciation by comparing the *modern equivalent asset* with the asset being valued. Depreciation rates may be all-encompassing or analysed separately for:
- Physical deterioration
 - Functional obsolescence
 - External obsolescence
- 5.4.1 In estimating the physical deterioration of the actual asset resulting from wear and tear over time, including 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.
- 5.4.2 Functional obsolescence can be caused by advances in technology that result in new assets being capable of a 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. The application of the optimisation process will account for many elements of functional obsolescence.
- 5.4.3 Obsolescence resulting from external influences may affect the value of the asset. External factors include changed economic conditions, which affect the supply of and demand for goods and services produced by the asset or the costs of its operation. External factors also include the cost and reasonable availability of raw materials, utilities, and labour.
- 5.4.4 When valuing *specialised property* it is not appropriate to depreciate the cost of replacing the land element.
- 5.5 In the application of depreciated replacement cost, the Valuer shall ensure that the key elements of a market transaction have been considered. These include:
- 5.5.1 an understanding of the asset, its function, and its environment;

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 8

- 5.5.2 research and analysis to determine the remaining physical life (to estimate physical deterioration) and economic life of the asset;
- 5.5.3 knowledge of changes in preferences, technical innovations, and/or market standards that may affect the asset (to estimate functional obsolescence);
- 5.5.4 an analysis of potential external changes that may affect the asset (to estimate external obsolescence);
- 5.5.5 familiarity with the class of property through access to available market data;
- 5.5.6 knowledge of construction techniques and materials (to estimate the cost of a *modern equivalent asset*); and
- 5.5.7 sufficient knowledge to determine the impact of external obsolescence on the value of the improvements.
- 5.6 Depreciation rates and estimates of future economic life are influenced by market trends and/or the entity's intentions. Valuers should identify these trends and intentions and be capable of using them to support the depreciation rates applied. The application of depreciated replacement cost should replicate the deductive process of a potential buyer with a limited market for reference.
- 5.7 In the final stage of the process Valuers should consider if the actual asset has any additional features not reflected in the cost of the *modern equivalent asset* and make any appropriate further adjustments. An example would be a *specialised property* where there is the possibility of a more valuable use in future when the *improvements* have reached the end of their economic life.
- 5.8 If it is clear that the result based on the depreciated replacement cost method is materially lower than a readily identifiable alternative use that is both financially and legally feasible at the date of valuation, the *Market Value* based on that alternative use shall be reported. This should include a statement that the value for the alternative use takes no account of matters such as business closure or disruption and any associated costs that would be incurred. The alternative use value will be evident from sales comparison and its valuation is not part of the depreciated replacement cost application but a separate valuation.
- 5.9 If the Valuer considers that the value of the asset would be materially different if it ceases to be part of the going concern, a statement to this effect should be included in the report.
- 5.10 Where the value of a specialised asset is estimated by the *depreciated replacement cost* method, a statement should be made that it is subject to a test of adequate profitability in relation to the whole of the assets held by a for-profit entity or the cash generating unit. The reasons why this statement is necessary are explained in Addendum A.
- 5.11 For not-for-profit public sector entities, the reference to a test of adequate profitability is replaced by a test of adequate *service potential*, which should be justifiable by the entity. 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 application of *depreciated replacement cost* to the valuation of public sector assets and the test of adequate service potential are discussed at greater length in IVA 3, Valuation of Public Sector Assets for Financial Reporting in paragraphs 5.4, 6.1, 6.5 and 6.8.4.)
- 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 justified service potential, a test which is the responsibility of the entity.
- 5.12.2 In reporting the value the Valuer shall identify the valuation method as depreciated replacement cost noting 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 July 2007.

ADDENDUM A: Profitability Test When Reporting DRC

- 1 Accounting standards require entities to periodically review their assets for "impairment", which is a permanent loss in the value of the asset to the entity. The appropriate figure to be included in the balance sheet for an asset following an "impairment review" is the higher of either its "Value in Use" or its "Fair Value" less costs to sell. In simple terms this means that the amount in the balance sheet should be written down to the higher of either the current value of the future benefits that will be derived by the entity from the continued use of the asset or the proceeds it would derive from the asset's immediate retirement and disposal.
- 2 The Market Value of an asset derived by reference to the sales of similar assets will usually approximate to the sum that the entity could obtain from the retirement and sale of the asset. If the Value in Use of the asset is lower than a Market Value based on sales comparisons, the latter figure can safely be relied upon as the base figure for inclusion in the accounts; it is an amount recoverable by the entity regardless of whether it continues to use or retire the asset.
- 3 In contrast, DRC is used to value assets, which are rarely, if ever, sold except as part of a sale of the entire operation of which they form part. The assumption that there will be demand for the use for which the asset is currently employed is an inherent feature of the approach. As a consequence, a Market Value derived using this approach will often not equate to the figure that would be obtained if the asset were retired and sold. If the Value in Use is lower than a Market Value arrived at using a DRC approach, the latter figure cannot be relied upon as the base figure, as it may not bear any relation to the amount that would be received following a cessation of operations.
- 4 Although the possibility that a valuation derived using a DRC approach would be materially affected by a cessation of operations is covered by the disclosure requirement in 5.9, the requirement in 5.12.1 to indicate additionally that the valuation is subject to "adequate profitability" emphasises to the entity that even if the Value in Use of the asset is lower than the reported Market Value, it may still be higher than the Net Realisable Value on cessation. It may therefore be necessary to write the reported Market Value down to the Value in Use in an impairment review.
- 5 The need to consider impairment is also a requirement of public sector accounting. However, in the public sector, assets are held for service delivery rather than profit. A valuation of a public sector asset using the cost approach has to be reported to be subject to a continuing requirement to use the asset for the provision of the service in question, i.e. that it has adequate service potential. This requirement may arise from political or social considerations rather than purely economic criteria. Combined with any appropriate disclosure under 5.9, this emphasises to users that the valuation cannot be relied upon as an indication of the amount that could be recovered if the service was discontinued and the asset retired.

DISCOUNTED CASH FLOW ANALYSIS FOR MARKET VALUATIONS AND INVESTMENT ANALYSES

REVISED 2007

1.0 Introduction

- 1.1 *Discounted cash flow (DCF)* analysis is a financial modelling technique based on explicit assumptions regarding the prospective income and expenses of a property or business. Such assumptions pertain to the quantity, quality, variability, timing, and duration of inflows and outflows that are discounted to present value. DCF analysis, with appropriate and supportable data and discount rates, is one of the accepted methodologies within the *income capitalization approach* to valuation. DCF analysis has gained widespread application due in part to the advancement of computer technology. DCF analysis is applied in valuations of real property, businesses and intangible assets; in investment analyses; and as an accounting procedure to estimate value in use. The use of DCF analysis has increased substantially in institutional, investment property and business valuation sectors and is frequently required by clients, underwriters, financial advisers and administrators, and portfolio managers.
- 1.2 DCF valuations, as with other income-based valuations, are established on analysis of historical data and assumptions about future market conditions affecting supply, demand, income, expenses, and the potential for risk. These assumptions determine the earning capability of a property or business upon which the pattern of its income and expenditures/outgoings is projected.
- 1.3 The objective of this Guidance Note (GN) is to prescribe Generally Accepted Valuation Principles (GAVP), best practice, and due diligence measures for Valuers to follow in performing DCF analysis for market and non-market based valuations and to distinguish between applications of DCF analysis in these two different types of valuation assignments.

2.0 Scope

- 2.1 This GN applies to market and non-market valuations developed by means of DCF analysis. It discusses the structure and components of DCF models and the reporting requirements for valuations based on DCF analysis.
- 2.2 The scope of this GN extends to the reasonableness and supportability of the assumptions upon which the DCF analyses are based. Assumptions made in any valuation directly affect the value conclusion. In accordance with the IVSC Code of Conduct, all assumptions underlying a valuation should be likely, reasonable, and supportable.

3.0 Definitions

- 3.1 *Discount Rate*. A rate of return used to convert a monetary sum, payable or receivable in the future, into present value. Theoretically it should reflect the opportunity cost of capital, i.e., the rate of return the capital can earn if put to other uses having similar risk.
- 3.2 *Discounted Cash Flow Analysis (DCF)*. A financial modelling technique based on explicit assumptions regarding the prospective cash flow to a property or business. As an accepted methodology within the *income approach* to valuation, DCF analysis involves the projection of a series of periodic cash flows either to an operating property, a development property, or a business. To this projected cash flow series, an appropriate, market-derived discount rate is applied to establish an indication of the present value of the income stream associated with the property or business. In the case of operating real properties, periodic cash flow is typically estimated as gross income less vacancy and collection losses and less operating

expenses/outgoings. The series of periodic net operating incomes, along with an estimate of the reversion/terminal value/exit value, anticipated at the end of the projection period, is then discounted. In the case of development properties, estimates of capital outlays, development costs, and anticipated sales income are estimated to arrive at a series of net cash flows that are then discounted over the projected development and marketing periods. In the case of a business, estimates of periodic cash flows and the value of the business at the end of the projection period are discounted. The most widely used applications of DCF analysis are the Present Value (PV), or Net Present Value (NPR) and the Internal Rate of Return (IRR) of cash flows.

- 3.3 *Financial Modelling.* The projection of a business' or property's periodic income or cash flow pattern from which measures of financial return can be calculated. Income or cash flow projections are generated through the use of a financial model that takes into account historical relationships between income, expense, and capital amounts as well as projections of those variables. Financial modelling may also be used as a management tool to test expectations for property performance, to gauge the integrity and stability of the DCF model or as a method to replicate the steps taken by investors in making decisions involving the purchase, sale, or holding of a property or business.
- 3.4 *Internal Rate of Return (IRR).* The discount rate that equates the present value of the net cash flows of a project with the present value of the capital investment. It is the rate at which the Net Present Value (NPV) equals zero. The IRR reflects both the return on the invested capital and the return of the original investment, which are basic considerations of potential investors. Therefore, deriving the IRR from analysis of market transactions of similar properties having comparable income patterns is a proper method for developing market discount rates for use in valuations to arrive at *Market Value*.
- 3.5 *Investment Analysis.* A study undertaken for the purposes of development and investment, the evaluation of investment performance, or the analysis of a transaction involving investment properties. Investment analyses are variously called (economic) feasibility studies, market or marketability analyses, or financial projection studies.

- 3.6 *Net Present Value (NPV).* The measure of the difference between the discounted revenues, or inflows, and the costs, or outflows, in a discounted cash flow analysis.

There is little real distinction between NPV and Present Value (PV). NPV is normally used to describe the difference between all discounted inflows and outflows while PV is often used where the initial outlay or price is not included in the cash flow. In a valuation that is done to arrive at *Market Value*, where discounted cash flows and the discount rate are market derived, the resulting NPV should be indicative of the *Market Value* and is often termed PV rather than NPV.

4.0 Relationship to Accounting Standards

- 4.1 Discounting is a standard procedure employed by accountants in considering the time value of money.
- 4.2 The International Financial Reporting Standards (IFRSs) prescribe a discounting procedure to estimate the value in use of an asset. An estimate of the value in use involves a) estimating the future cash inflows and outflows to be derived from the continuing use of the asset and from its ultimate disposal and b) applying the appropriate discount rate to these future cash flows. (IAS 36, para. 31)
- 4.3 IAS 36, para.55 states that "the discount rate (rates) shall be a pre-tax rate (rates) that reflect(s) current market assessments of: (a) the time value of money; and (b) the risks specific to the asset for which the future cash flow estimates have not been adjusted". It is also true that other measures of income or cash flow may be used so long as the discount rate(s) are appropriately matched with the income flow(s).

5.0 Guidance

- 5.1 Discounted cash flow methods are structured upon a specified term, or duration. In real property analysis, although events such as rent reviews, lease renewal/reletting, redevelopment, or refurbishment can affect the analysis term, this term is typically driven by market behaviour that is characteristic of the class of property and its market sector. For example, the analysis term for investment properties typically runs between five and ten years. The Valuer, however, should be fully aware of the implications of different holding

periods, e.g., a short holding period makes the appraisal conclusion more dependent upon the estimate of the terminal value at the expense of the periodic cash flow.

The frequency of inflows and outflows (monthly, quarterly, annually) should also be market derived. As with other accepted methodologies, inflows and outflows should be appropriate and reasonably supported. The correct discount rate needs to be applied to the cash flow. If the frequency of the time points selected for the cash flow are, for example, quarterly, the discount rate must be the effective quarterly rate and not a nominal rate. As each time period within a cash flow is in fact set off by time points, the Valuer must seek to place the various cash flows at the correct point in time within the cash flow. Often the frequency of the cash flow is decided by the time points at which rent is collected. If other events take place at more frequent times, the Valuer must decide whether to include them at the time point before or after they actually occur. Expenses/outgoings may be placed at the accounting point in time rather than the point of time at which they are carried out. The obvious best solution is to have a cash flow frequency that matches the timing of the most frequent aspect of the periodic cash flow.

The initial period (time interval) of a real property cash flow study is described as period 0 and this period is not discounted. Any inflows or outflows that are expected to occur within this time period should be included in period 0. Net income or expenses can be placed in period 0 and should be incorporated in this period if the cash receipts or payments take place during this period. For example, many investment properties receive net income monthly. Therefore, if annual intervals are used, the net income receivable in the initial year must be placed in period 0, regardless of whether a beginning or end period calculation is adopted.

Selection of the method for calculating the reversion/terminal value/exit value depends upon practices in the subject market as normally, it represents an estimate of the *Market Value* of the property at the termination date. Valuers should mirror those market practices and fully disclose the chosen method(s) and its(their) application. *Market*

Value is understood as the present value of the future benefits of ownership. Thus, for an investment property, this normally means that cash flows/values at the time point of the terminal valuation (or depending on the method adopted, beyond the terminal valuation date) should be used rather than those in the period up to that date. A reversion/terminal value/exit value can be based on a projection of the net income for the year following the last year of the DCF analysis.

As with all other components of DCF analysis, the discount rate should also reflect market data, i.e., other market derived discount rates. Discount rates should be selected from comparable properties or businesses in the market. In order for these properties to be comparable, the revenue, expenses, risk, inflation, real rates of return, and income projections for the properties must be similar to those of the subject property.

- 5.1.1 Present value calculations of cash flows are most often calculated using appropriate discount rates for each class of cash flows. When non-annual time interval studies, such as monthly or daily intervals, are used, the annual discount rate must be adjusted to an effective and equivalent discount rate for the selected time interval. A reversion/terminal value/exit value is capitalised at a terminal capitalisation rate, or reversion yield, and discounted to present value at an appropriate discount rate. In many instances, a single discount rate is used for all cash flows.
- 5.1.2 The cash flows and sale prices of comparable properties may be analysed to derive market discount rates or internal rates of return (IRR).
- 5.1.3 DCF model cash flow can be developed both gross or net of tax and gross or net of debt financing, and in real (inflation or cost-index deflated) or nominal terms. The discount rate will therefore be based on the assumptions of the cash flow, gross or net of tax and gross or net of debt financing, and in real or nominal terms. Analyses of the market evidence to determine discount rate or cash flows must be based on the same assumptions.
- 5.2 In keeping with the IVSC Code of Conduct, it is incumbent on the Valuer to identify the components of DCF analysis, including the following:

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 9

- 5.2.1 a projection period wherein the commencement date of cash flow and the number and term of periods are specified;
- 5.2.2 the components of cash inflow and cash outflow grouped by category and the reason behind their selection;
- 5.2.2.1 For real property valuation, cash inflow includes income from rents and tenant services adjusted for collection, incentives and vacancy loss in the case of completed or built properties, and for income from sales, adjusted for cost of sales, in the case of development properties.
- 5.2.2.2 For real property valuation, cash outflow includes fixed and variable expenses, replacement allowance/renewal fund, and capital expenditures, where applicable; for development properties, the hard and soft costs should be identified.
- 5.2.2.3 For business valuation, the cash flow most often includes all cash inflows and outflows, of both an operating nature and a capital nature. The discounted cash flow then represents the money that an investor could remove from the business while leaving adequate cash to fund its operation and growth.
- 5.2.3 debt finance or debt service (payment of interest and principal) per period and the annual effective rate at which periodic interest is calculated, if applicable;
- 5.2.4 net cash flows per period (the sum of inflows less the sum of outflows);
- 5.2.5 the discount rate or rates that are applied to the net cash flows and the reasoning behind and support for their selection;
- 5.2.6 the terminal capitalisation rate/reversion yield that is applied to calculate the reversion/terminal value/exit value and the reasoning behind its selection; and
- 5.2.7 a list of all assumptions underlying the analysis.
- 5.3 DCF analysis makes use of available market evidence and typically reflects the thought processes, expectations, and perceptions of investors and other market participants. As a forecasting technique, DCF analysis should not be judged on the basis of whether or not the specific DCF forecast was ultimately realised but rather on the degree of market support for the DCF forecast at that time it was made.
- 5.3.1 When DCF is used to develop a *Market Value* estimate, the valuation should meet all criteria for *Market Value* estimates as set forth in IVS 1.
- 5.4 Where a client provides the Valuer with specific requirements that do not correspond to those for *Market Value* estimates as to holding period, financing terms, taxation, or discount rate, the resultant value estimate is to be considered *Non-Market Value*. The result is an estimate of investment value/worth specific to the assumptions provided rather than an estimate of *Market Value*.
- 5.5 DCF analysis may also be used to test the validity of conventional views by analysis of varying assumptions. The result of this type of sensitivity analysis is investment value/worth. If DCF is used in this way, the results should be identified as a *Value* other than *Market Value*, and the valuation should meet all criteria for non-market based valuations as set forth in IVS 2.
- 5.6 A Valuer should carry out sufficient research to ensure that cash flow projections and the assumptions that are the basis for the DCF model are appropriate and reasonable for the subject market.
- 5.6.1 As an example, the lease-by-lease analysis to support the cash flow projection for a multitenanted property should address contract/passing rent and market rent, lease expiration and lease review dates, rent escalations/stepped rents, operating expenses/outgoings, expense pass-throughs/recoverable costs, lease incentives, leasing costs, vacancy allowances, capital expenditures, and any other specific provisions that apply.
- 5.6.2 Assumptions of growth or decline in income must be premised on analysis of economic and market conditions. Changes in operating expenses/outgoings should reflect all expense trends and specific trends for significant expense items.
- 5.6.3 The results of a DCF analysis should be tested and checked for errors and reasonableness.
- 5.7 To derive discount and terminal capitalisation

- rates, a Valuer makes use of various sources of data and information on real estate and capital markets. In addition to data on the income streams and resale prices of comparable properties or businesses, surveys of investor opinion and rates of return are useful in selecting discount rates provided that the market for the subject property is consistent with the market for the property acquired by the investors consulted in the survey.
- 5.8 It is the responsibility of the Valuer to ensure that the controlling input is consistent with market evidence and the prevailing market outlook. Further, the Valuer who supervises the construction of the DCF model or selection of a proprietary model is responsible for the integrity of that model in terms of theoretical and mathematical correctness, the magnitude of the cash flows, and the appropriateness of all inputs. A Valuer must have suitable experience and market knowledge to structure cash flow and provide other inputs to the model.
- 5.9 In reporting the results of a DCF analysis, a Valuer shall follow the requirements of the IVSC Code of Conduct and IVS 3, Valuation Reporting.
- 5.9.1 Disclosure must be made under those circumstances described in IVS 3, paragraphs 5.1.10, 7.0, and 8.2.3.
- 5.9.2 Inherent in DCF analysis are the explicit assumptions that are used as inputs for the analysis. To provide users of valuation services the ability to replicate the results, the Valuer must disclose the assumptions and support for their use in developing the DCF model. Using real property examples, these include but are not limited to:
- 5.9.2.1 the commencement date, term, and frequency employed in the model;
 - 5.9.2.2 the projected rent and other income and the rate at which income is projected to change;
 - 5.9.2.3 the projected operating expenses and the rate at which expenses are projected to change;
 - 5.9.2.4 the treatment of lease expirations/ break costs, vacancies, and collection losses; and
 - 5.9.2.5 the discount rate and terminal capitalization rate or reversion yield.
- 5.9.3 The Valuer must:
- 5.9.3.1 indicate the annual effective rate at which periodic interest is calculated, where finance debt or debt service (payment of interest and principal) is a component of the projected periodic cash flow;
 - 5.9.3.2 specify the rate(s) of taxation used, where applicable;
 - 5.9.3.3 explain the reasoning behind any provision for lease incentives, where applicable;
 - 5.9.3.4 explain the treatment of any capital expenditures incurred in the acquisition or improvement of property or business assets;
 - 5.9.3.5 explain the basis for the adopted terminal capitalisation rate/reversion yield and the adopted discount rate or the effective, equivalent rate (if appropriate); and
 - 5.9.3.6 identify the cash flow model by name of the developer or, if proprietary software, by product name and version; describe the methods and assumptions inherent in the model; and specify the dates on which the model was developed and employed.

6.0 Effective Date

- 6.1 This International Valuation Guidance Note became effective 31 July 2007.

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VALUATION OF AGRICULTURAL PROPERTIES

REVISED 2007

1.0 Introduction

- 1.1 In many regions of the world, lands devoted to the production of agricultural commodities are the major economic asset and, frequently, the sole economic base of a region.
- 1.2 Lands devoted to agricultural use are thus a principal subject of valuation services for a multitude of reasons including private and public transfer of ownership, taxation, determination of collateral for financing, and economic, land-use, and investment studies. Reliable valuations of agricultural lands are essential to ensure the availability of capital necessary to support the continuity of the economic base, to promote the productive use of the land, to maintain the confidence of capital markets, and to meet the needs for general financial reporting.
- 1.3 Providing reliable and accurate valuation service for agricultural properties requires that the Valuer have a sound knowledge and understanding of the physical and economic elements that affect the productive capacity of agricultural lands and the value of the commodities produced thereon.
- 1.4 The physical and economic characteristics of agricultural lands differ from those of non-agricultural or urban environments in degree of importance.
- 1.4.1 Soils in an urban environment must be suitable for bearing the improvements that stand upon them. In agricultural properties, the soil is the principal agent in production, varying in its capacity to support a given amount of a particular commodity or class of commodities.
- 1.4.2 In urban environments, the economic use of a property and/or the amenities it provides may remain unchanged over a period of years and may even be guaranteed by contractual arrangements. While for some agricultural properties, the same use may extend over a long duration (e.g., forests harvested after 25 years), for others, the economic benefits can vary from year to year, depending

on the commodities the property is capable of producing.

- 1.4.3 The income stream associated with agricultural property will vary from year to year, depending on the type of agriculture for which it is used, the commodities produced, and the cyclical nature of the commodity markets.

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Agricultural and pastoral productivity relies on a critical relationship between soils, climate, water, management and commodity options. The valuation of agricultural and pastoral lands demands an understanding of the interrelationships between these critical factors.

2.0 Scope

- 2.1 This GN encompasses:
- 2.1.1 Those characteristics of value associated with agricultural properties, and
- 2.1.2 The basic requirements of the Valuation Standards and Applications as they apply to the valuation of agricultural properties.

3.0 Definitions

The agricultural uses of properties may be classified in several broad groups, definitions of which follow.

- 3.1 *Crop(ping) Farms.* Agricultural properties used for growing commodities that are typically planted and harvested within a twelve-month cycle. Properties used for annual crop production may grow more than one type of annual crop over the same period and may or may not make use of irrigation to produce the crops. Some commodities are annual crops that may be left in the ground beyond a twelve-month cycle, per contract provisions or in circumstances where market conditions are unfavorable. These crops will last for more than one year after harvest but are considered less than permanent. Also see *irrigated land, perennial plantings.*

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 10

- 3.2 *Dairy Farms.* Agricultural properties used for the production of milk from cows or for other dairy products. These properties usually have extensive structural improvements (barns, milking parlours, silos) and equipment (feed bins, milking machines). Feed may be produced on the property, imported, or supplied by both sources.
- 3.3 *Forestry/Timberland.* Agricultural property used for the growing of non-orchard trees that are periodically harvested over extended growing periods (10 to 20 or more years). Considered to be agricultural properties because they produce a *crop*, i.e., wood, even though that crop requires a long-term growing period. Also see perennial plantings.
- 3.4 *Irrigated Land.* Lands used to produce crops or forage for livestock and which require the application of water other than that from natural rainfall, are called *irrigated crop(ping) farms* or *irrigated grazing land*. Properties that lack a water source other than natural rainfall are referred to as *dry land agricultural properties*.
- 3.5 *Livestock Ranches/Stations.* Agricultural properties used to raise and feed animals such as cattle, sheep, pigs, goats, horses, or combinations thereof. The actual use of these properties can take many forms. The animals may be bred, raised, and sold within the operation of the property. Young animals may be acquired from outside the property and then raised within the property. The animals may be raised for consumptive use or for breeding stock. Feed for the animals may be produced on the property, imported, or supplied by both sources. Properties used for the production and feeding of livestock have significant capital investment in the structural improvements (pens, livestock shelters, sheds, division fencing) and the livestock, which may or may not be depreciable depending on the laws and regulations of the local jurisdiction.
- 3.6 *Perennial Plantings.* Crops grown from plantings that have a life extending beyond one year or one-crop cycle. Examples are vineyards and orchards. These types of properties can have significant capital investment in the plantings, which represent a depreciable asset. Also see *forestry/timberland*.
- 3.7 *Specialised Livestock Facilities.* See *dairy farms, livestock ranches/stations*.
- 3.8 *Specialised, or Special Purpose Properties.* Agricultural properties that do not typically produce a crop but are used for the handling,

processing, or storage of crops following harvest. These properties frequently have a small land base that is extensively developed with structural improvements (grain elevators) and equipment (lifting machinery). Properties may also be classified as *special purpose* by the nature of the commodity produced. Examples are truck farms, poultry farms, farms that produce certified crop seeds or fresh cut flowers, and racehorse breeding or training stables.

Other definitions

- 3.9 *Agricultural Activity.* Management by an entity of the biological transformation of biological assets for sale, into agricultural produce, or into additional biological assets. (See International Accounting Standard 41 [IAS 41], Agriculture., para. 5)
- 3.10 *Biological Asset.* A living animal or plant. (IAS 41, para. 5)
- 3.11 *Integrated Unit.* An agricultural entity that has common ownership of all or part of the processes involving the production and marketing of its products and/or commodities.

4.0 Relationship to Accounting Standards

- 4.1 International Accounting Standards 16 (Property, Plant and Equipment), 40 (Investment Property), and 41(Agriculture) apply to the valuation of agricultural property. An entity follows IAS 16 or IAS 40, depending on which standard is appropriate in the circumstances. IAS 16 requires that land be measured either at its cost less any accumulated depreciation and accumulated impairment losses or at a revalued amount. IAS 40 requires land that is investment property to be measured at its fair value, or cost less any accumulated depreciation and accumulated impairment losses. IAS 41, which establishes no new principles for land related to agricultural activity, requires that biological assets physically attached to land (e.g., trees in a plantation forest) be measured at their fair value less estimated point-of-sale costs, separately from the land.
- 4.2 IAS 41 acknowledges that there may be no separate market for biological assets attached to the land but that an active market may exist for the combined assets, i.e., the biological assets, raw land, and land improvements, as a package. An entity may, therefore, use information regarding the combined assets to determine fair value for

the biological assets. The fair value of raw land and land improvements may be deducted from the fair value of the combined assets to arrive at the fair value of the biological assets. (See IAS 41, para. 25.) IAS 41 also gives guidance on how to determine fair value for a biological asset or agricultural produce where an active market exists as well as in the absence of an active market.

4.3 Agricultural property assets can be classified as:

- Land
- Structural improvements
- Plant and machinery (attached to the land)
- Plant and machinery (not attached to the land)
- Biological assets (attached to the land)
- Biological assets (not attached to the land)

The *Fair Value/Market Value* of biological assets is the contributory, or added, value they give to the land. IAS 41 requires that biological assets be measured upon initial recognition and at each balance sheet date.

4.4 IAS 16 recommends frequent revaluations, stating that every three to five years may be sufficient. IAS 40 requires revaluation on an annual basis.

5.0 Guidance

5.1 **Diverse forms of commodity production and methods of operation are characteristic of agricultural properties. These properties may also represent various combinations of land, buildings, equipment, and crop plantings. Generally accepted valuation principles (GAVP) are as applicable to agricultural properties as they are to the valuation of other forms of real property.**

5.1.1 The Valuer must have competence in valuing the various assets that comprise the property. (See IVSC Code of Conduct, section 5, Competence.)

5.2 ***Market Value* must be recognised as the fundamental basis of valuation (IVS 1).**

5.2.1 The Valuer shall arrive at the *Market Value* for the agricultural property, ensuring that the valuation is market-derived.

5.2.2 For financial reporting, the Valuer shall apportion the *Market Value* in accordance with the requirements of the IAS. For guidance, the reader is referred to IVA 1.

5.3 **Where other bases of valuation are used, they must be distinguished from the *Market Value* basis.**

5.3.1 When estimating values other than *Market Value* as required for financial reporting, depreciation schedules, or tax purposes, the Valuer must ensure that the distinction is clearly defined and noted.

5.4 Non-Realty Elements

5.4.1 When the valuation is made of an agricultural property that may include *non-realty elements* such as livestock, stored crops, and equipment, the Valuer needs to understand when a crop or other commodity is real property and when it may become personal property. Timber for example, is part of the real property while growing but becomes personal property when it is removed from the land.

5.5 **The Valuer must understand the unique nature of agricultural productive factors, commodity markets, production practices, and cycles in the market region.**

5.5.1 In the valuation of agricultural properties, the physical and environmental aspects of the property assume special importance. These include features such as climate, soil types and their productive capability, the availability or absence of water for irrigation, and the feeding/carrying capacity for livestock. External factors to be considered include the availability and adequacy of support facilities required for storage, processing, and transportation. The relative importance of these factors will vary depending upon the type of agriculture for which the property is suited or used. The Valuer needs to consider both internal and external factors in making a determination of which class of agricultural use the property is best suited for.

5.5.2 In keeping with the definition of *Market Value*, a *highest and best use* analysis of the property should always be conducted in order 1) to warrant that an agricultural use is to be continued, especially when it appears that another land use, e.g., subdivision development occasioned by encroaching urban/suburban expansion, might be more appropriate, and 2) to determine whether the specific agricultural use is to be continued.

5.5.3 Where the Valuer is specifically instructed to ignore uses other than the current agricultural use, the resulting valuation will not necessarily indicate the *Market Value* of the property, and this should be fully disclosed.

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 10

5.6 **The estimate of stabilised income to the agricultural property must be based on the crop patterns and cycles in the market area.**

5.6.1 The cash flow to agricultural properties is a function of both the production cycle followed on the property and cyclical forces such as commodity markets. The Valuer should understand the impact of these cycles on cash flows. The valuation of the property must be based on the stabilised pattern of income that is consistent with the production cycles commonly practiced in the region in which the property is located.

5.7 **The Valuer of agricultural property that has more than one physical component or class of agricultural use must clearly state whether the value of each component or use is its value contribution as part of the whole property or its value as a separate, free-standing component.**

5.7.1 The various components of a whole property may have value as separate parts which is greater or lesser than their value as part of the whole. The Valuer must determine whether each component is to be valued individually or as part of the whole property.

5.7.2 Agricultural properties may be managed to simultaneously produce more than one class of commodity based on different physical conditions within the property or on management decisions. In the valuation of agricultural properties on which crops of more than one agricultural classification are cultivated and harvested at different times, the value of each agricultural classification must be based on its contribution to total property value and not its stand-alone value.

5.7.3 The agricultural use of the property may require extensive building improvements, e.g., barns, silos, dairy machinery. Such improvements, while requisite to the proper operation of the property, are frequently secondary to the principal land asset. Their value must be based on their contribution to the total value of the property regardless of their cost or other measure.

Typically, such improvements have a value-in-use, i.e., their contributory value to the enterprise/ entity. On those occasions where an allocation of value between the assets may be required, such an allocation is not to be taken as an indication of the individual value of the improvements as separate assets.

5.8 The requirements for valuation reports are addressed in the IVSC Code of Conduct and IVS 3, Valuation Reporting.

6.0 Date of Issue

6.1 This International Valuation Guidance note became effective 31 July 2007.

REVIEWING VALUATIONS

REVISED 2007

1.0 Introduction

- 1.1 A valuation review is a review of a Valuer's work undertaken by another Valuer exercising impartial judgment.
- 1.2 Because of the need to ensure the accuracy, appropriateness, and quality of Valuation Reports, valuation reviews have become an integral part of professional practice. In a valuation review, the correctness, consistency, reasonableness, and completeness of the valuation are considered.
- 1.2.1 A valuation review may call for input from experts with specialist knowledge of construction costs, property income, legal and tax matters, or environmental problems.
- 1.2.2 A valuation review provides a credibility check on the valuation under review, and tests its strength by focusing upon
- 1.2.2.1 the apparent adequacy and relevance of the data used and enquiries made;
 - 1.2.2.2 the appropriateness of the methods and techniques employed;
 - 1.2.2.3 whether the analysis, opinions, and conclusions are appropriate and reasonable; and
 - 1.2.2.4 whether the overall product presented meets or exceeds Generally Accepted Valuation Principles (GAVP).
- 1.3 Valuations reviews are performed for a variety of reasons, including:
- 1.3.1 Due diligence required of financial reporting and asset management;
 - 1.3.2 Expert testimony in legal proceedings and circumstances;
 - 1.3.3 A basis for business decisions; and
 - 1.3.4 Determination of whether a report complies with regulatory requirements, where
 - 1.3.4.1 Valuations are used as part of the mortgage lending process, especially mortgages insured or regulated by the government, and

- 1.3.4.2 It is necessary to test whether Valuers have met regulatory standards and requirements within their jurisdiction.

2.0 Scope

- 2.1 The requirements in this GN apply to the development and reporting of valuation reviews.
- 2.2 Compliance with this GN is incumbent upon any Valuer who, in a supervisory or managerial capacity, signs a valuation review, thereby accepting responsibility for the contents of that review.

3.0 Definitions

- 3.1 *Administrative (Compliance) Review.* A valuation review performed by a client or user of valuation services as an exercise in due diligence when the valuation is to be used for purposes of decision-making such as underwriting, purchasing, or selling the property. A Valuer may, on occasion, perform an administrative review to assist a client with these functions. An administrative review is also undertaken to ensure that a valuation meets or exceeds the compliance requirements or guidelines of the specific market and, at a minimum, conforms to Generally Accepted Valuation Principles (GAVP).
- 3.2 *Desk Review.* A valuation review that is limited to the data presented in the report, which may or may not be independently confirmed. Generally performed using a checklist of items. The reviewer checks for the accuracy of calculations, the reasonableness of data, the appropriateness of methodology, and compliance with client guidelines, regulatory requirements, and professional standards. Also see *field review*.
- 3.3 *Field Review.* A valuation review that includes inspection of the exterior and sometimes the interior of the subject property and possibly inspection of the comparable properties to confirm the data provided in the report. Generally performed using a checklist that covers the items examined in a desk review and may also include confirmation of market data, research to gather

additional data, and verification of the software used in preparing the report. Also see *desk review*.

- 3.4 *Technical Review*. A valuation review performed by a Valuer to form an opinion as to whether the analyses, opinions, and conclusions in the report under review are appropriate, reasonable, and supportable.
- 3.5 *Valuation Review*. A valuation assignment that covers a range of types and purposes. The principal characteristic all valuation reviews have in common is that one Valuer exercises impartial judgment in considering the work of another Valuer. A valuation review may support the same value conclusion in the valuation under review or it may result in disagreement with that value conclusion. Valuation reviews provide a credibility check on the valuation as well as a check on the strength of the work of the Valuer who developed it, as regards the Valuer's knowledge, experience, and independence.

In some States a valuation review may also be an update done by a Valuer of the same valuation firm that carried out the original valuation.

Valuation organisations around the world distinguish between various types of reviews, e.g., *administrative (compliance) reviews, technical reviews, desk reviews, field reviews*, reviews to ensure that a valuation has been carried out in accordance with professional standards (where the bases of valuation used in the valuation under review are accepted), reviews that muster general market information to support or contest the value conclusion, and reviews that examine the specific data in the valuation under review with comparable data from a sample group.

4.0 Relationship to Accounting Standards

- 4.1 The relationship between accounting standards and valuation practice is discussed in IVA 1.

5.0 Guidance

- 5.1 In developing a valuation review, the Review Valuer shall:
 - 5.1.1 identify the client and intended users of the Valuation Review, the intended use of the Review Valuer's opinions and conclusions, and the purpose of the assignment;
 - 5.1.2 identify the subject property, the date of the valuation review, the property and ownership

interest valued in the report under review, the date of the report under review, the effective date of the opinion in the report under review, and the Valuer(s) who completed the report under review;

- 5.1.3 identify the scope of the review process to be performed;
- 5.1.4 identify all assumptions and limiting conditions in the valuation review;
- 5.1.5 develop an opinion as to the completeness of the report under review within the scope of work applicable to the assignment;
- 5.1.6 develop an opinion as to the apparent adequacy and relevance of the data and any adjustments;
- 5.1.7 develop an opinion as to the appropriateness of the methods and techniques used and develop the reasons for agreement or any disagreement with the report under review; and
- 5.1.8 develop an opinion as to whether the analyses, opinions, and conclusions in the work under review are appropriate, reasonable, and supportable.
- 5.2 In reporting the results of a valuation review, the Review Valuer shall:
 - 5.2.1 state the identity of the client and intended users, the intended use of the assignment results, and the purpose of the assignment;
 - 5.2.2 state the information that must be identified in accordance with paragraphs 5.1.1-5.1.4 above;
 - 5.2.3 state the nature, extent, and detail of the review process undertaken;
 - 5.2.4 state the opinions, reasons, and conclusions required in paragraphs 5.1.5-5.1.8 above;
 - 5.2.5 indicate whether all known pertinent information is included; and
 - 5.2.6 include a signed Compliance Statement in the review report.
- 5.3 The Review Valuer shall not consider events affecting the property or market that occurred subsequent to a valuation, but only information that was readily available in the market at the time of the valuation.
- 5.4 Reasons for agreement or disagreement with the conclusions of a valuation report should be fully explained by the Review Valuer.

- 5.4.1 Where the Review Valuer agrees with the conclusions of a valuation report, reasons for such agreement should be fully explained and disclosed.
- 5.4.2 Where the Review Valuer does not agree with the conclusions of a valuation report, the reasons for such disagreement should be fully explained and disclosed.
- 5.4.3 Where the Review Valuer is not in possession of all the facts and information on which the Valuer relied, the Review Valuer must disclose the limitations of his or her conclusions.
- 5.5 Where the scope of the work undertaken is sufficient to constitute a new valuation, such valuation must conform to the requirements of the International Valuation Standards and IVS Code of Conduct.

6.0 Effective Date

- 6.1 This International Valuation Guidance Note became effective 31 July 2007.

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VALUATION OF TRADE RELATED PROPERTY

REVISED 2007

1.0 Introduction

- 1.1 Trade Related Properties (TRPs) are individual properties, such as hotels, fuel stations, and restaurants that usually change hands in the marketplace while remaining operational. These assets include not only land and buildings, but also fixtures and fittings (furniture, fixtures and equipment) and a business component made up of intangible assets, including transferable goodwill.
- 1.2 This Guidance Note provides direction on the valuation of TRPs as operating assets as well as the allocation of TRP value into its main components. Component values are usually required for depreciation and tax purposes. This Guidance Note should also be read in conjunction with the Guidance Notes cited in para. 2.1 below.
- 1.3 Some concepts involved in the valuation of a business not classed as a TRP (see GN 6, Business Valuation) must be distinguished from those involved in the valuation of *Trade Related Property*. (Also see paras. 5.6 and 5.7.2 below.)

2.0 Scope

- 2.1 This Guidance Note focuses on TRP valuation. For further insight into the application of valuation principles, the following IVSs Guidance Notes should be consulted:
- 2.1.1 GN 1, Real Property Valuation,
- 2.1.2 GN 3, Valuation of Plant and Equipment,
- 2.1.3 GN 4, Valuation of Intangible Assets,
- 2.1.4 GN 5, Valuation of Personal Property,
- 2.1.5 GN 6, Business Valuation,
- 2.1.6 GN 10, Discounted Cash Flow Analysis for Market Valuations and Investment Analyses.

3.0 Definitions

- 3.1 *Capitalisation*. At a given date the conversion into the equivalent capital value of net income or a

series of net receipts, actual or estimated, over a period.

- 3.2 *Discounted Cash Flow*. A financial modeling technique based on explicit assumptions regarding the prospective cash flow to a property or business. The most widely used applications of DCF analysis are the Internal Rate of Return (IRR) and Net Present Value (NPV).

3.3 Goodwill.

- 3.3.1 Future economic benefits arising from assets that are not capable of being individually identified and separately recognised. (IFRS 3, Appendix A)

- 3.3.2 *Personal Goodwill*. The value of profit generated over and above market expectations, which would be extinguished upon sale of the trade related property, together with those financial factors related specifically to the current operator of the business, such as taxation, depreciation policy, borrowing costs and the capital invested in the business.

- 3.3.3 *Transferable Goodwill*. That *intangible asset* that arises as a result of property-specific name and reputation, customer patronage, location, products and similar factors, which generate economic benefits. It is inherent to the trade related property, and will transfer to a new owner on sale.

- 3.4 *Reasonably Efficient Operator, or Average Competent Management*. A market based concept whereby a potential purchaser, and thus the Valuer, estimates the maintainable level of trade and future profitability that can be achieved by a competent operator of a business conducted on the premises, acting in an efficient manner. The concept involves the trading potential rather than the actual level of trade under the existing ownership so it excludes personal goodwill.

- 3.5 *Trade Related Property*. *Certain classes of real property, which are designed for a specific type of business and that are normally bought and sold in the market, having regard to their trading potential.*

4.0 Relationship to Accounting Standards

- 4.1 Under International Financial Reporting Standards (IFRSs), like other types of real property, a TRP may be carried on an entity's balance sheet at either cost or at fair value (see IVA 1). It may be necessary to allocate the value of a TRP between its different components for depreciation purposes.

5.0 Guidance

- 5.1 This Guidance Note describes that category of property referred to as TRPs and explains how TRPs are valued in accordance with International Valuation Standard 1, Market Value Basis of Valuation.
- 5.2 When performing a TRP valuation, the Valuer may also find relevant guidance in the six Guidance Notes cited in para. 2.1 above. If the valuation is for inclusion in a Financial Statement, the Valuer should refer to IVA 1, Valuation for Financial Reporting.
- 5.3 TRPs are considered as individual trading concerns and typically are valued on the basis of their potential Earnings Before Interest, Taxes, Depreciation and Amortisation (EBITDA), as adjusted to reflect the trading of a reasonably efficient operator and often on the basis of either DCF methodology or by use of a capitalisation rate applied to the EBITDA.
- 5.4 Valuations of TRPs are usually based on assumptions that there will be a continuation of trading by a Reasonably Efficient Operator, with the benefit of existing licences, trade inventory, fixtures, fittings and equipment, and with adequate working capital. The value of the property including transferable goodwill is derived from an estimated maintainable level of trade. If the valuation is required on any other assumption, the Valuer should make such assumption explicit through disclosure. While the actual trading performance may be the starting point for the assessment of the fair maintainable level of trade, adjustments should be made for atypical revenues or costs so as to reflect the trade of a reasonably efficient operator.
- 5.5 Profit generated, in excess of market expectations that may be attributed to the manager is not included. The manager's particular tax position, depreciation policy,

borrowing costs and capital invested in the business are not considered for the purpose of establishing a common basis to compare different properties under different managers.

- 5.6 Although the concepts and techniques are similar to those often used in the valuation of a large-scale business, to the extent that the valuation of a TRP does not usually consider tax, depreciation, borrowing costs and capital invested in the business, the valuation is based on different inputs from those of a valuation of a sizable business.
- 5.7 The valuation conclusion may need to be broken down between the different asset components for the purposes of financial reporting, for property taxation or, when required, for property lending purposes.
- 5.7.1 The components of TRP entity value are typically:
- 5.7.1.1 land;
 - 5.7.1.2 building(s);
 - 5.7.1.3 fixtures and fittings (furniture, fixtures and equipment), including software;
 - 5.7.1.4 inventory, which may or may not be included (this should be disclosed);
 - 5.7.1.5 intangible assets, including transferable goodwill; and
 - 5.7.1.6 any licences and permits required to trade.
- 5.7.2 Items such as working capital and debt are considered in valuing equity for businesses, but equity is not valued for TRPs. TRPs may, however, comprise part of a business.
- 5.7.3 An estimation of the individual values of the components can only represent an apportionment, unless direct market evidence is available for one or more of these components to isolate component value from the overall TRP value.
- 5.8 TRPs are by their nature, specialist assets that are usually designed for a specific use. Changes in market circumstances, whether structural to the industry or due to the local competition or another reason, can have a material impact on value.
- 5.9 It is necessary to distinguish between the asset value of a Trade Related Property and the ownership value of the business. In order

to undertake a valuation of a TRP, a Valuer will require sufficient knowledge of the specific market sector so as to be able to judge the trading potential achievable by a Reasonably Efficient Operator, as well as knowledge of the value of the individual component elements.

6.0 Effective Date

- 6.1 This International Valuation Guidance Note became effective 31 July 2007.

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MASS APPRAISAL FOR PROPERTY TAXATION

1.0 Introduction

- 1.1 The objective of this Guidance Note is to provide a framework for the performance of *Mass Appraisal* assignments for *Ad Valorem Property Taxation* throughout IVSC Member States. The Guidance Note provides assistance in understanding recognised Mass Appraisal methods, the design and implementation of property taxation systems and the relationship of Mass Appraisal to International Valuation Standards.
- 1.2 The *Mass Appraisal Process* may be utilised as a methodology for *Ad Valorem Property Taxation*, or statistical and economic studies under government administrative programs. The appraisal outputs facilitate revenue raising, revenue equalisation, and the distribution of financial benefits or grants to government authorities. In this Guidance Note, reference to Mass Appraisal implies Mass Appraisal for the above purposes.
- 1.3 For a property taxation system to be effective, the following elements must be in place:
- a legal system and legal infrastructure that define, support and protect property rights;
 - a recording and inventory system for all parcels of land, which represents the basis of taxation;
 - sufficient market data from which valuations may be determined;
 - sufficient resources and trained personnel to implement the system;
 - continued maintenance of the inventory and databases to ensure more refined data, more accurate valuations, and more equitable taxation; and
 - a process for sampling and testing developed models to ensure consistency in methodology and application.
- 1.4 The Mass Appraisal process includes:
- identifying properties to be appraised;
 - defining the market area in terms of consistent behaviour on the part of property owners and would-be purchasers;
 - identifying characteristics of supply and demand that affect the creation of value in the defined market area;
 - developing a model structure that reflects the relationship among the characteristics affecting value in the market area;
 - calibrating the model structure to determine, among other attributes, the contribution of the individual property features affecting value;
 - applying the conclusions reflected in the model to the characteristics of the property(ies) being appraised;
 - validating the adopted mass appraisal process, model, measurements or other readings including the performance measures, on an ongoing basis and/or at discrete stages throughout the process;
 - reviewing and reconciling the Mass Appraisal results.
- 1.5 The valuation basis for Mass Appraisal is *Market Value* as defined in *IVS 1, Section 3*, subject to any modification of the concept as specified under relevant instructions or legislation. If such instructions or legislation stipulate a valuation basis other than Market Value as defined above, Valuers should apply appropriate valuation methods to accomplish the objectives of IVSC Standards under these circumstances. See *IVS 2, Section 5*, and also para. 5.5.1 (e) below under Disclosure in Mass Appraisal Valuation Reports.
- 1.6 Mass Appraisals can be prepared with or without computer assistance. While computerised methodology has made the Mass Appraisal process more efficient and more widespread, it has not altered that process. Data banks and computerised applications are used in data storage, mapping, data analysis, and testing of the results.
- 1.7 The development of Mass Appraisal systems for Property Taxation should follow recognised scientific standards in statistical applications.
- 1.8 While local legal requirements will take precedence, observance of the *IVSs Code of*

Conduct is, nonetheless, incumbent upon assessment personnel, who carry out Mass Appraisals. The concept of Market Value is recognised as the assessment basis in most jurisdictions. The requirements of the *IVSs Code of Conduct* necessarily supplement those of local law. Requirements under the *Code of Conduct* apply to:

- (a) the mass valuation process itself; and
- (b) the use of computers and computer-generated models in the mass appraisal process.

AUSNZ 1.9

Members should also review ANZVGN 4 Valuations For Rating & Taxes.

2.0 Scope

- 2.1 The professional responsibility of Valuers is, in most instances, prescribed by statute or regulations affecting Mass Appraisal assignments. It is the professional duty of the Valuer to be familiar with, adhere to, and administer the provisions of the law established in the Ad Valorem property taxing jurisdiction.
- 2.2 The various outputs from Mass Appraisal programs have financial implications in government administration. For purposes of revenue raising, revenue equalisation, or the distribution of benefits or grants, any departure from an accurate basis of assessment will result in inequities. Local statutes prescribe the basis and definitions of values to be returned (i.e., the assessments and/or indices developed in Mass Appraisal assignments), the administrative procedures for the collection and delivery of valuation data, the time-frames between undertaking Mass Appraisals, and the processes for appeal of assessments or indices.
- 2.3 The scope of the completed assignment shall be consistent with:
 - (a) the expectations of participants in the market for the same or similar valuation services; and
 - (b) the requirements of IVSC Standards, Guidance Notes and Applications for the same or a similar assignment.

3.0 Definitions

- 3.1 *Ad Valorem Property Taxation*. A revenue-raising procedure, based on the assessed value of property related to a scale of charges defined by statute within a specified time-frame.

- 3.2 *Calibration*. The process of analysing sets of property and market data to determine the specific parameters operating upon a model.
- 3.3 *Mass Appraisal*. The practice of appraising multiple properties as of a given date by a systematic and uniform application of appraisal methods and techniques that allow for statistical review and analysis of results.
- 3.4 *Mass Appraisal Process*. The procedures applied in mass appraisal assignments for arriving at assessments and/or indices. This process includes the eight steps, identified in para. 1.4 above.

4.0 Relationship to Accounting Standards

- 4.1 Mass Appraisal does not fall under the governance of national or international accounting standards.
- 4.2 Valuers should be aware that revaluation procedures for financial reporting purposes are unrelated to Mass Appraisal procedures for Ad Valorem Property Taxation.
- 4.3 Legislative requirements and standards of appraisal level and uniformity in valuations for Ad Valorem Property Taxation are likely to produce variations in property values from those determined for financial reporting purposes.

5.0 Guidance

5.1 Data Collection and System Recording

- 5.1.1 A robust data collection system must be available to the Valuer. The recording of data has evolved from the use of manual methods to the creation of sophisticated data banks that facilitate computer-assisted appraisal, often incorporating geographic information systems (GIS). Property data may be quantitative (e.g., land areas, dimensions, building specifications) and/or qualitative (assessment of the physical condition, character, or market desirability of the improvements).
 - 5.1.1.1 Appraisal data banks are built around land tenure records, e.g., title deeds, transfer documents, and sales information, in national, federal, state or local government jurisdictions that define property ownership or interests in land.
- 5.1.2 Characteristics of the market that are relevant to the purpose and intended use of the Mass

Appraisal shall be recorded in the system including:

- (a) location of the defined market area;
- (b) physical, legal, and economic attributes of the properties;
- (c) time-frame of market activity; and
- (d) property interests reflected in the market.

5.2 The Development and Maintenance of Assessment Lists

- 5.2.1 Assessment Lists will contain information on property ownership, value definitions, details of the assessment, date of the assessment, and date on which the assessment comes into force.
- 5.2.2 Assessment Lists must allow for periodic adjustments or alterations to ensure the currency and consistency of assessed values.

5.3 Mass Appraisal Value Definitions

- 5.3.1 Where mass appraisal is undertaken for the purpose of Ad Valorem Property Taxation, value definitions are generally mandated by local statute. Specific valuation methodologies may be required under different value definitions.

5.4 Standards of Appraisal Level and Uniformity

- 5.4.1 In the interests of assessment equity, standards of appraisal level (the proximity between assessments and actual prices) and uniformity (the statistical measure of valuation consistency) must be observed in the application of mass appraisal systems.

5.5 Disclosure in Mass Appraisal Assignment Reports

- 5.5.1 Valuers undertaking Mass Appraisal assignments are subject to the provisions of *IVS 3, Valuation Reporting*. The Valuer shall disclose the following essential data that is specific to Mass Appraisal reporting:
 - (a) the client and other intended users;
 - (b) the purpose and intended use of the appraisal;
 - (c) the scope of work necessary to complete the assignment, including any special limiting conditions;
 - (d) any extraordinary assumptions and hypothetical conditions needed to carry out the assignment, provided these are reasonable and result in a credible analysis;

- (e) the relevant basis of valuation if, under reasonable terms and conditions, the value opinion to be developed is other than Market Value;
- (f) the characteristics of the properties that are relevant to the purpose and intended use of the Mass Appraisal;
- (g) a reference to each individual property in the Assessment List or grouping, indicating where information is stored in the property record relating to its identity;
- (h) the characteristics of the market that are relevant to the purpose and intended use of the Mass Appraisal (see para. 5.1.2).

5.6 Departure

- 5.6.1 Departure from the instructions in this Guidance Note should only result from required compliance with statutory provisions, administrative instructions, or the agreed or amended terms of appraisal contracts.
- 5.6.2 Further discussion on Departure provisions is set out in section 6.8 of the *IVSs Code of Conduct* and section 8.2 of *International Valuation Standard 3*.

6.0 Effective Date

- 6.1 This International Valuation Guidance Note became effective on 1 January 2005.

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VALUATION OF PROPERTIES IN THE EXTRACTIVE INDUSTRIES

1.0 Introduction

- 1.1 The purpose of this Guidance Note (GN) is to provide clarification and guidance on the valuation of assets or property interests (rights) held by entities involved in the Extractive Industries. It distinguishes among the various property interests that must be recognised, and discusses concepts that should be understood by financial reporting and regulatory authorities, courts, financiers, investors, participants in natural resource transactions, and other users of valuation services for property involved in the Extractive Industries.
- 1.2 Reliable valuations of Extractive Industries assets, including interests (rights) in natural resource properties, are essential to ensure the availability of capital necessary to support the continuity of the Extractive Industries component of the world's economic base, to promote the productive use of Mineral and Petroleum natural resources, and to maintain the confidence of capital markets.
- 1.3 Extractive Industries comprise the Minerals Industry and the Petroleum Industry, but do not include activities focused on the extraction of water from the earth.
- 1.4 The Minerals and Petroleum Industries are characterised by the extraction from the earth of natural resources, which may pass through a series of ownership, processing and measurement stages. It is important to Valuers and the users of valuation services that distinctions are made among real property, personal property, and business interests involved in these stages. Financial reporting requires the recognition of various asset classifications into which these interests may fall. Additionally, clear and precise understanding of these distinctions is necessary for valuations to be performed and used in the public interest, regardless of the application.
- 1.5 Valuations in the Extractive Industries often must rely heavily on information provided by (a) Technical Expert(s) or other accredited specialist(s) specific to the industry.
- 1.6 A typical characteristic of the Extractive Industries that sets them apart from other industries or economic sectors is the depletion or wasting of natural resources, that can be replaced in their original state by natural actions following extraction only in special cases. Special cases of natural replacement may occur for water transported minerals and geothermal fluid. The means of production is extraction from the earth of natural resources that form part of the Real Estate.
- 1.6.1 The ultimate quantity and quality of material of economic interest that might be extracted from an Extractive Industry natural resource property is often not known at the Effective Date of Valuation.
- 1.7 Examples of depleting or wasting natural resources include, but are not limited to:
- 1.7.1 metallic Mineral deposits containing metals such as copper, aluminium, gold, iron, manganese, nickel, cobalt, zinc, lead, silver, tin, tungsten, uranium, and platinum group metals;
- 1.7.2 non-metallic Mineral deposits such as coal, potash, phosphates, sulphur, magnesium, limestone, salt, mineral sands, diamonds and other gemstones;
- 1.7.3 construction materials such as sand, gravel, crushed stone, and dimension stone;
- 1.7.4 Petroleum deposits including oil, natural gas, natural gas liquids, other gases, heavy oil, and oil sands.
- 1.8 There are contrasts between the production and transportation phases of the Minerals and Petroleum Industries that must be understood:
- 1.8.1 Items 1.7.1, 1.7.2 and 1.7.3 above include products of the Minerals Industry, which extracts valuable mineralization, generally by mining in a surface mine (open pit, open-cast, open-cut, or strip mine; a quarry used to produce construction material is also considered a surface mine), or an underground mine. Some extraction is undertaken through wells, for example, sulphur extraction, and in situ leaching (solution mining) of various salts and uranium minerals. Some extraction is also done by dredging the floors of bodies of water, such as for gravel, mineral sands, diamonds, and alluvial gold. Extraction of mineral products

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 14

- from water, such as halite (common salt) and magnesium, is also part of the Minerals Industry.
- 1.8.2 The Minerals Industry generally has a planned extraction phase, though this phase is often extended through Mineral Reserve additions. Once extraction is completed, no more known economically recoverable asset remains in place at that time.
- 1.8.3 The raw materials cited in para.1.7.4 above are produced by the Petroleum Industry, which extracts valuable product generally through wells drilled into the earth's crust. Some extraction is also undertaken using mining methods, for example, open pit mining of oil sand and oil shale. The extraction of a solid asset is more labour intensive than the extraction of a fluid asset. A single person may operate oil and gas extraction by pumps or valves, with the occasional need for well maintenance or well work-over crews.
- 1.8.4 The Petroleum Industry frequently has more than one economical extraction phase for crude oil. At the conclusion of the initial (primary) extraction phase, much of the initial Petroleum Reserve of crude oil may remain. Secondary and/or enhanced recovery methods are often applied to recover more oil and natural gas. Generally, a large percent of the initial oil in place remains in place at the conclusion of production operations.
- 1.8.5 Another significant difference between the Minerals and Petroleum Industries relates to land surface requirements for processing plant and infrastructure. Relatively little surface area is required for oil or gas well operations. A mining operation often requires a larger land area for stockpiles and disposal of waste material, as well as an open pit if applicable.
- 1.8.6 Crude oil, natural gas, and refined Petroleum products are more often than not transported to market or port by pipeline. In contrast, a mined product is generally transported to market or port by rail or truck, resulting in differing start-up costs and environmental impacts.
- 1.9 The Minerals and Petroleum Industries are both major industries throughout the world. Their products are essential in all modern economies by provision of raw and refined materials for other downstream industries, such as energy generation, construction, manufacturing, transport and communications.
- 1.10 Exploration of Minerals and Petroleum properties is a high-risk activity. Considerable work and study must be undertaken to determine the technical and economic viability of production. The large majority of Mineral and Petroleum properties do not reach the production stage.
- 1.11 The projected net earnings derived or potentially derived from an Extractive Industry natural resource property is its main source of value. The net earnings may vary from year to year, depending on the type of natural resource commodity, the cyclical nature of the commodity markets and prices, and variations in production rate and costs.
- 1.12 Mineral and Petroleum natural resource properties are valued primarily based on the presence of Mineral or Petroleum Reserves, and Mineral or Petroleum Resources, or the potential for discovery of Resources. The quantity and quality of such Reserves/Resources may vary over time due to changing economic and technical advances, as well as exploration success. Nevertheless, they are ultimately finite and will deplete over time.
- 1.13 The fixed assets and specialised plant and equipment (see Glossary for definitions) used in the extraction and processing of raw products of the Extractive Industries, may retain relatively little or no value when separated from production at the site.
- 1.14 Exploration Properties have asset value derived from their potential for the existence and discovery of economically viable Mineral or Petroleum deposits contained within. Exploration Property interests are bought and sold in the market. Many of these transactions involve partial interest arrangements, such as farm-in, option or joint venture arrangements.
- 1.14.1 The value of an Exploration Property is largely dependent upon surface and subsurface geological and related information, and its interpretation. Little may be known about the characteristics of a deposit that may be contained within the property until the deposit is discovered and explored.
- 1.14.2 Extractive Industries deposits are often located in remote areas and are generally substantially or completely buried below the land surface, and sometimes below the floor of bodies of water or under the sea.
- 1.15 The residual value of the real property interest, plant and equipment as well as environmental reclamation requirements (as liabilities and property improvements), are pertinent factors in the valuation process for Extractive Industries properties.

2.0 Scope

- 2.1 This Guidance Note provides specific guidance for valuation of assets and interests of the Extractive Industries. It provides supplemental guidance for application of the International Valuation Standards (IVSs 1, 2, and 3), International Valuation Applications (IVAs 1, 2, and 3) and Guidance Notes (GNs). In doing so, it specifically supplements the following GNs for their application to the Extractive Industries;
- GN1 Real Property Valuation;
 - GN2 Valuation of Lease Interests;
 - GN3 Valuation of Plant and Equipment;
 - GN4 Valuation of Intangible Assets;
 - GN6 Business Valuation;
 - GN8 The Cost Approach for Financial Reporting-(DRC); and
 - GN9 Discounted Cash Flow Analysis for Market Valuations and Investment Analyses.
- 2.2 The ownership of, or rights to, an industrial water supply and water storage system, can form an important component in the valuation of Properties in the Extractive Industries. Water rights may attach to land or may be obtained elsewhere. Adequate rights and facilities for transportation and storage of off-site water may be required for a reliable water supply. Valuation of the contribution of such rights poses special problems that must be addressed by the Valuer. However, this GN does not provide specific guidance for valuation of water ownership, rights, transportation and storage.
- 2.3 Where mark-to-market financial reporting procedures apply or are contemplated, Valuers should observe the provisions of IVA 1, *Valuation for Financial Reporting*, in conjunction with this GN. In some States, securities exchanges and administrations may have specific reporting requirements for the Minerals and Petroleum Industries that override IVSs provisions.
- 2.4 While providing supplemental guidance for the conduct and reporting of valuations of Extractive Industries property and interests in accordance with para. 2.1 above, the provisions of this GN do not replace provisions elsewhere in the current edition of the International Valuation Standards.

3.0 Definitions

- 3.1 *Extractive Industries.* Those industries involved in the finding, extracting and associated processing of natural resources located on, in or near the earth's crust. They are composed of the Minerals Industry and the Petroleum Industry. They do not include the industry sector focused on extraction of water from the earth, but they do include extraction of geothermal fluid for its energy content.
- 3.2 *Exploration Property or Area.* A Mineral or Petroleum real property interest that is being actively explored for Mineral deposits or Petroleum accumulations, but for which economic viability has not been demonstrated.
- 3.3 *Feasibility Study in the Extractive Industries.* A comprehensive study of a Mineral deposit or Petroleum accumulation, in which all geological, engineering, operating, economic, marketing, environmental, regulatory and other relevant factors are considered in sufficient detail. The study could reasonably serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the prospective property for Mineral or Petroleum production. See also *Prefeasibility Study*.
- 3.4 *Mineral.* Any naturally occurring material useful to, and/or having a value placed on it by humankind, and found in or on the earth's crust. For the purposes of this GN, Minerals include metallic minerals, industrial minerals, aggregates, precious stones and fuel minerals; but Minerals do not include Petroleum, which is defined separately.
- 3.5 *Mineral Reserve.* As defined by the Combined [Mineral] Reserves International Reporting Standard Committee (CRIRSCO): "the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined. Appropriate assessments that may include Feasibility Studies, have been carried out, and include consideration of, and modification by, realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction is justified. Mineral Reserves are subdivided in order of increasing confidence into Probable Mineral Reserves and Proved Mineral Reserves."
- The United Nations Framework Classification (UNFC) similarly defines a Mineral Reserve and its

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 14

- subdivisions, applying the UNFC coding system. Entities electing to adopt the UNFC or other definitions of Mineral Reserve for public financial reporting purposes must reconcile the Mineral Reserves to the CRIRSCO Proved and Probable Mineral Reserve categories for valuation purposes.
- 3.6 *Mineral Resource*. As defined by CRIRSCO: “a concentration or occurrence of material of intrinsic economic interest in or on the earth’s crust (a deposit) in such form and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral Resources are subdivided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories. Portions of a deposit that do not have reasonable prospects for eventual economic extraction must not be included in a Mineral Resource.”
- The United Nations Framework Classification (UNFC) similarly defines a Mineral Resource and its subdivisions, applying the UNFC coding system. For the purposes of this GN, mineralisation classified into the UNFC’s G4 (“Reconnaissance Study”) category, is excluded from a Mineral Resource. Entities electing to adopt the UNFC or other definitions of Mineral Resources for public financial reporting purposes must reconcile the Mineral Resources to the CRIRSCO Inferred, Indicated and Measured Mineral Resource categories for valuation purposes.
- 3.7 *Minerals Industry*. Entities involved in exploration for Minerals, and the mining, processing and marketing of Minerals. This GN is not designed to cover assets downstream from the metals refineries or minerals processing plants, such as assets involved in the distribution of refined metals to metals fabricators, or mineral products to retailers or the final market.
- 3.8 *Petroleum*. Any naturally occurring hydrocarbon, whether in a gaseous, liquid or solid state. Raw Petroleum products are primarily crude oil and natural gas.
- 3.9 *Petroleum Industry*. Entities involved in exploration for Petroleum, and the extraction, processing, refining and marketing of crude Petroleum and associated gases. This GN is not designed to cover assets downstream from the petroleum refineries and natural gas processing plants, such as assets involved in the distribution of refined petroleum products to retailers.
- 3.10 *Petroleum Reserves*. As defined by the Society of Petroleum Engineers (SPE) and the World Petroleum Congress (WPC): “those quantities of Petroleum, which are anticipated to be commercially recovered from known accumulations from a given date forward. All (Petroleum) Reserve estimates involve some degree of uncertainty. The uncertainty depends chiefly on the amount of reliable geologic and engineering data available at the time of the estimate and the interpretation of these data. The relative degree of uncertainty may be conveyed by placing reserves into one of two principal classifications, either Proved or Unproved. Unproved Reserves are less certain to be recovered than Proved Reserves and may be further sub-classified as Probable and Possible Reserves to denote progressively increasing uncertainty in their recoverability.” Proved Reserves can be categorised as Developed or Undeveloped.
- The United Nations Framework Classification (UNFC) similarly defines Petroleum Reserves and their subdivisions, applying the UNFC coding system.
- 3.11 *Petroleum Resources*. For the purpose of this GN, petroleum resources comprise only Petroleum Reserves and Contingent Resources. Contingent Resources as defined by the Society of Petroleum Engineers (SPE)/World Petroleum Congress (WPC), in conjunction with the American Association of Petroleum Geologists (AAPG), are “those quantities of petroleum, which are estimated, on a given date, to be potentially recoverable from known accumulations, but which are not currently considered to be commercially recoverable.”
- The United Nations Framework Classification (UNFC) similarly defines Petroleum Resources and subdivisions, applying the UNFC coding system. For the purpose of this GN, petroleum accumulations classified into the UNFC’s G4 (“Potential Geological Conditions”) category are excluded from Petroleum Resources.
- 3.12 *Prefeasibility Study in the Extractive Industries*. A study of a Mineral or Petroleum deposit, in which all geological, engineering, operating, economic, environmental and other relevant factors, are considered in sufficient detail to serve as the reasonable basis for a decision to proceed to a Feasibility Study.
- 3.13 *Royalty or “Royalty Interest” in the Extractive Industries*. The landowner’s or lessor’s share of production, in money or product, free of charge for expenses of production. An “Overriding

Royalty” is a share of mineral or petroleum produced, free of the expense of production, paid to someone other than the lessor, over and above any lessor’s *Royalty*.

- 3.14 *Technical Expert in the Extractive Industries* (called *Technical Expert* elsewhere in this GN). A person, who is responsible for all or part of the *Technical Assessment* that supports an Extractive Industry Valuation. A Technical Expert must have appropriate experience relevant to the subject matter, and in States where required by statute or regulation, must be a member or license-holder in good standing of a professional organisation that has the authority to sanction members or licensees. An accredited specialist may not take responsibility for all or part of a Technical Assessment without also being a Technical Expert.
- 3.15 *Technical Assessment in the Extractive Industries*. A technical document, prepared by (a) Technical Expert(s) that supports the Extractive Industry Valuation and is appended to, or forms part of, a Valuation Report.

4.0 Relationship to Accounting Standards

- 4.1 Amongst national GAAPs there are currently several approaches to the measurement of “Upstream Activities” that include exploration for, discovery of, and acquisition or development of, Mineral or Petroleum Resources up to when the Reserves are first capable of being sold or used. The extreme high-risk element in expenditure on these activities has led to two main approaches to Historical Cost accounting for the Extractive Industries, those being:
- (a) all “exploration and evaluation costs” to be written off unless such costs are expected to be recouped, or the activities have not yet established whether the costs are economically recoverable (i.e., adaptations of a “successful efforts” approach). In applications of this approach, there are variations as to which types of cost are permitted to be capitalised and the treatment of costs prior to the determination of “success”, or otherwise, of the exploration and evaluation activities; and
- (b) all expenditures incurred in finding and developing Mineral and Petroleum Reserves to be capitalised and treated as a part of the cost of whatever Reserves may have been found (i.e., a “full cost” approach).

4.2 In December 2004, the International Accounting Standards Board (IASB) released IFRS 6 *Exploration for and Evaluation of Mineral Resources*. Under the provisions of the Standard, entities are permitted to recognise their exploration and evaluation expenditures as “exploration and evaluation assets”. The Standard requires such assets to be measured at cost at initial recognition. After initial recognition, an entity may choose to apply a cost or revaluation model (as outlined in either IAS 16 *Property, Plant and Equipment*, or IAS 38 *Intangible Assets*) to measure their exploration and evaluation assets.

4.2.1 The concept of exploration and evaluation assets, and the costs that make up those assets, apply equally to the cost and revaluation models described above.

4.3. IFRS 6 states at paragraph 9 that: “An entity shall determine a policy for which expenditures are recognised as *exploration and evaluation assets* and apply the policy consistently. In making this determination, an entity considers the degree to which the expenditure can be associated with finding specific mineral resources. The following are examples of expenditures that might be included in the initial measurement of *exploration and evaluation assets* (the list is not exhaustive):

- acquisition of rights to explore;
- topographical, geological, geochemical and geophysical studies;
- exploratory drilling;
- trenching;
- sampling; and
- activities in relation to evaluating technical feasibility and commercial viability of extracting a mineral resource.”

4.3.1 IFRS 6, paragraph 5(a), excludes “activities that precede the exploration for and evaluation of mineral resources” from the scope of the Standard.

4.3.2 IFRS 6, paragraph 10, additionally states that: “Once the technical feasibility and commercial viability of extracting a mineral resource are demonstrable, expenditures related to the development of that mineral resource shall not be recognised as *exploration and evaluation assets*. The *Framework* and IAS 38 *Intangible Assets* provide guidance on the recognition of assets arising from development (or the development phase of an internal project).”

4.3.3 When facts and circumstances stated in paragraph 20 of the Standard suggest that the carrying

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 14

amount of exploration and evaluation assets may exceed their recoverable amount, entities are required to measure and disclose any resulting impairment loss. The level at which such assets are assessed for impairment may comprise one or more cash-generating units, which is a higher level of aggregation than that otherwise allowed under IAS 36.

- 4.3.4 In the context of the IFRS 6, a minerals resource includes minerals, oil, natural gas and similar non-regenerative resources (see the Defined Terms in Appendix A to IFRS 6) and also in paragraphs 3.6 and 3.11 above.
- 4.4 IASB Standards that require value determinations to be provided under the provisions of this GN include:
- IAS 36 *Impairment of Assets* – for determining the recoverable amount of an asset (including assets that incorporate reserves and resources) in order to ascertain whether the asset is impaired. This process requires determination of “fair value less costs to sell” and/or “value in use” as defined in the Standard.
 - IFRS 3 *Business Combinations* – for determining the carrying amount of assets that were acquired in the acquisition of a business (including assets that incorporate reserves and resources); and
 - IAS 16 *Property, Plant and Equipment* – for the revaluation (if chosen) of property, plant and equipment that relates to extractive operations.
- 4.5 This Guidance Note recognises that the Historical Cost of finding and developing Mineral and Petroleum Reserves is usually not indicative of the realisable value of such Reserves once they have become established.

5.0 Guidance

5.1 Valuation Concepts

- 5.1.1 The provisions of this GN are designed to assure application of Generally Accepted Valuation Principles (GAVP) to Extractive Industries Valuations, in accordance with the valuation fundamentals expressed in the IVSs *Concepts Fundamental to Generally Accepted Valuation Principles*.
- 5.1.2 The standard of value is Market Value defined in IVS 1, *Market Value Basis of Valuation*. If some other type of value is

to be determined in accordance with IVS 2, *Bases Other Than Market Value*, a clear definition of that value should be provided by the Valuer and highlighted in the Valuation Report as prescribed in IVS 3, and a clear and conspicuous explanation provided.

- 5.1.3 The property type(s) involved in valuation of Minerals and Petroleum Industry property must be correctly identified in order to correctly select the applicable IVSC Standards and GNs. Naturally occurring *in situ* Minerals and Petroleum are a part of physical land and Real Estate. The ownership of such *in situ* Minerals and Petroleum, an interest in such natural resources, and the right to explore and extract such natural resources, are Real Property, except where otherwise defined by statute. Minerals and Petroleum are Personal Property during transportation and processing. The operation of a mine, quarry or petroleum well is a business activity, as is the transportation and processing of Minerals and Petroleum. Such business activity is generally conducted by an Extractive Industries business enterprise that owns real property and personal property assets, and the activity contributes to the Going Concern Value of the enterprise.
- 5.1.4 A key aspect of the valuation of an Extractive Industry natural resource property is that the property interests and related rights being valued must be properly identified.
- 5.1.5 A Market Valuation of an Extractive Industry property as Real Property must be based on the Highest and Best Use (HABU) of the property. This requires consideration of non-Minerals or non-Petroleum uses for the property, if such uses are possible. Consideration must also be given to a change in exploration, development or operating strategy, or potential for leasing the property, in order to maximise its economic benefit.
- 5.1.6 In determining the HABU, the Valuer should determine the most probable use that is physically possible, appropriately justified, legally permissible, financially feasible, and which results in the highest value of the property being valued.
- 5.1.7 In conducting a Market Valuation, the three Valuation Approaches are generally available for consideration:

- (a) Sales Comparison Approach (termed Market Approach for Business Valuations), generally by indirect means (see para. 5.3.1 below);
- (b) Income (Capitalisation) Approach, including market-related discounted cash flow;
- (c) Cost Approach (termed Asset-Based Approach for Business Valuations), including depreciated replacement cost and equivalent cost analysis.
- 5.1.8 Where one or more of the above Valuation Approaches has been applied in preference to others, the reason must be stated.
- 5.1.9 As applied to Mineral and Petroleum natural resource property interests, the appropriate Valuation Methods employed depend upon the stage of exploration or development of the property. For convenience, such Mineral and Petroleum properties can be categorised as four main types, though the categorisation is sometimes the subject of the opinion of a Valuer or Technical Expert.
- Exploration properties;
 - Resource properties;
 - Development properties;
 - Production properties.
- 5.1.10 Exploration Properties are defined at para. 3.2.
- 5.1.11 Resource properties contain a Mineral Resource or Petroleum Resource but have not been demonstrated by a Prefeasibility Study or a Feasibility Study to be economically viable.
- 5.1.12 Development properties, in general, have been demonstrated by a Feasibility Study to be economically viable but are not yet in production.
- 5.1.13 Production properties contain a Mineral or Petroleum producing operation active at the time of Valuation.
- 5.1.14 The different stages of exploration and development carry different levels of risk. The risk pertains to the likelihood of eventual or continued Mineral or Petroleum production. As an Exploration Property is advanced to a Resource property, to a Development property, and to a Production property, more technical information is collected, enabling technical analysis, including Prefeasibility and Feasibility Studies, to be carried out, and thereby reducing the risk factor, as the amount of capital investment at risk rapidly increases.
- 5.1.15 The results from the Valuation Approaches and Methods employed must be weighed and reconciled into a concluding opinion of value. The reasons for giving a higher weighting to one Approach or Method over another must be stated.
- ### 5.2 Competence and Impartiality
- 5.2.1 Valuations prepared under this Guidance Note shall comply with all provisions of the IVSC Code of Conduct.
- 5.2.2 To develop a Valuation of an Extractive Industry asset or interest, the Valuer must have competence relevant to the subject asset or interest, or retain the services of (an) appropriately skilled Technical Expert(s).
- 5.2.3 Providing a reliable and accurate valuation typically requires the Valuer to have specialised training, or assistance from (a) Technical Expert(s) or other accredited specialists(s), in geology, Resource and Reserve estimation, engineering, and economic and environmental aspects relevant to the subject natural resource type and geographic setting. The defined term Technical Expert includes “Competent Person”, “Independent Valuer”, and similar requirements that may apply in some States, if the intended use of the Valuation Report is related to public financial reporting or other regulatory purpose.
- 5.2.4 The Valuer is responsible for the decision to rely on a Technical Assessment, data, or opinion provided by other experts or specialists. This includes responsibility for conducting reasonable verification that those persons are appropriately qualified and competent and that their work is credible.
- ### 5.3 Special Considerations of Extractive Industries Valuations
- 5.3.1 Each Mineral deposit, Petroleum accumulation and Exploration Property is unique. Therefore, direct comparison of Mineral or Petroleum natural resource property transactions is often difficult or inappropriate. However, sales analysis is an important valuation tool. Sales adjustments or ratio analysis can frequently be applied for indirect sales comparison purposes. Sales analysis and other market analysis can often yield market factors such as a market discount rate, a risk factor or uncertainty factor that may be used in the Income Approach.

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 14

- 5.3.2 For a Valuation Report to provide an estimate of Market Value, the valuation analysis must be based on market evidence and current expectations and perceptions of market participants for the property valued, and such market evidence must be consistently applied in the Valuer's analysis.
- 5.3.3 The method most commonly used by businesses for investment decision-making within the Extractive Industries is net present value analysis/ discounted cash flow analysis (NPV analysis/ DCF analysis). The Valuer is cautioned that this and other methods, such as those based on option theory, will yield other than Market Value estimates of Investment Value or Value in Use, unless great care is taken to assure that a Market Value estimate is obtained. For the Valuer to report a Market Value estimate resulting from such an analysis, all inputs and assumptions must reflect available market-based evidence and current expectations and perceptions of market participants, in accordance with GN 9. Any departure from the requirements and analysis protocol of GN 9 must be specified.
- 5.3.4 The Market Value of Extractive Industries' natural resource properties and businesses are usually more or less than the value of the sum of their parts or component values. For example, the Market Value of a real estate tract owned in fee simple, that contains a Mineral deposit, is rarely the sum of the independent values of the Minerals, land surface, and plant and equipment. Similar situations may often occur in the Petroleum Industry.
- 5.3.5 For a producing Mineral or Petroleum Industry natural resource property, there may be separate ownership rights over component parts utilized by the enterprise, such as the Reserve, Royalties, and plant and equipment. It is important for a Valuer of the enterprise to correctly recognise these. There may also be a requirement to provide valuations of the separate ownership interests.
- 5.3.6 Material data relied on in developing the value estimate should be verified for accuracy whenever reasonable to do so. This may include selective review of drill hole information and samples and related analytical data for a subject natural resource property, and confirmation of published information pertaining to transactions of similar properties.
- 5.3.7 If there is more than one estimate of the quantity and quality of Resources and Reserves

for a subject natural resource property, the Valuer shall decide which estimates it is appropriate to disclose and discuss, and which estimate to use as the basis in the Valuation process, and shall state the reasons. A critique of alternative estimates may be submitted with the Valuation Report.

- 5.3.8 The Valuer shall take account of, and make reference to other matters that have a material impact on the Valuation. Dependent on the property type and rights being valued, these may include:
- the status of tenements, rights and other interests;
 - all Mineral or Petroleum deposits within the boundaries of the tenements or rights;
 - access to markets and the quality and quantity of product that can be sold;
 - services and infrastructure, and any toll arrangements, fees or liabilities related thereto;
 - environmental assessments and rehabilitation liabilities;
 - any Native Title aspects;
 - capital and operating costs;
 - timing and completion of capital projects;
 - residual value estimates;
 - material agreements and statutory/legal requirements;
 - taxation and Royalties;
 - liabilities and financial exposures;
 - site rehabilitation, reclamation and closure costs;
 - any other aspect that has a material bearing on the Valuation.

5.4 Disclosure in Extractive Industries Valuation Reports

- 5.4.1 The Valuation Report shall properly identify the property type(s), specific property interest(s) and related rights being valued as specified in IVS 3.
- 5.4.2 The Valuation Report shall disclose the name, professional qualifications and relevant industry experience of the Valuer, and other Technical Expert(s) whose Technical Assessment has been relied upon to support the Valuation.
- 5.4.3 The Valuation Report should be supported by disclosure of relevant Extractive Industries

Codes, Standards or Rules of Practice applicable to the Valuation and supporting Technical Assessment. All estimates of a Mineral or Petroleum Resource or Reserve disclosed in the valuation report or supporting Technical Assessment shall abide by the definitions provided in Section 3 above, and the classification systems referenced in those definitions, unless jurisdictional or other reasonable cause is disclosed.

- 5.4.4 Maps, geological sections, diagrams and photographs shall be included in the Valuation Report, if appropriate and possible, to aid the communication of information. Relevant technical information supporting the Valuation of a subject natural resource property(ies), including estimates of Resources and Reserves being valued, shall be disclosed and discussed in a Technical Assessment.
- 5.4.5 The Valuation Report shall disclose whether or not the entity employing/retaining the Valuer, or the owner of the subject asset or its operating management, has provided the Valuer with a statement that all available data and information requested by the Valuer or otherwise relevant to the Valuation have been supplied to the Valuer.

6.0 Effective Date

- 6.1 This International Valuation Guidance Note became effective on 31 July 2007.

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THE VALUATION OF HISTORIC PROPERTY

1.0 Introduction

- 1.1 Historic properties are assets that embody a cultural, historic, and/or architectural heritage.
- 1.2 Historic properties may have legal or statutory protection because of their cultural and economic importance. Many governments have enacted measures to safeguard specific historic properties or to protect whole areas of special architectural or historic interest.
- 1.3 Private organisations play a significant role in promoting historic preservation and education about historic properties. In some cases, historic properties also bring economic benefits through increased tourism in the communities where they are located.
- 1.4 The valuation of historic properties requires consideration of a variety of factors that are associated with the importance of these properties, including the legal and statutory protections to which they are subject; the various restraints upon their use, alteration and disposal; and possible financial grants or rate/tax exemptions to the owners of such properties in some jurisdictions.
- 1.5 The costs to restore and maintain historic properties may be considerable and these costs, in turn, affect the value of the properties.
- 1.6 The assessment of the highest and best use of historic properties will depend on the specific restrictions that apply to them. In some situations, the use of historic properties is limited to restoration for non-commercial use whilst in others, adaptation to some other use, including commercial use, is permissible.

2.0 Scope

- 2.1 This Guidance Note covers real property that has cultural and historic significance, specifically focusing upon historic buildings and sites. It does not address either natural heritage assets or heritage assets that are personal property, e.g., works of art. (Guidance Note 5 offers direction on the valuation of personal property.)

- 2.2 This Guidance Note applies to the valuation of historic properties in both public and private sectors. Historic properties owned either by public sector or private sector entities are distinguished by similar cultural characteristics, and share common problems in regard to restoration and/or adaptation. But the specific legal and statutory protections that apply to private and public historic properties and other restraints upon their use, alteration and disposal may differ.
- 2.3 Historic property is a broad term, encompassing many property types. Some historic properties have been restored to their original condition; some have been partially restored (e.g., the building façade); and others have not been restored. Historic property also includes properties partially adapted to current standards (e.g., the interior space), and properties that have been extensively modernised. All historic properties (buildings and/or sites) have some degree of historic character. This Guidance Note addresses properties having historic character to some degree or other.

3.0 Definitions

International Valuation Standards Definitions

- 3.1 *Historic House Owner Associations.* Not-for-profit membership associations that promote the preservation of historic properties and provide their owner-members with advice on matters such as the management, repair, maintenance, taxation and insurance of historic properties.
- 3.2 *Historic Property.* Real property publicly recognised or officially designated by a government-chartered body as having cultural or historic importance because of its association with an historic event or period, with an architectural style, or with the nation's heritage. Four characteristics are commonly associated with historic properties: 1) their historic, architectural and/or cultural importance; 2) the statutory or legal protection to which they may be subject; 3) restraints and limitations placed upon their use, alteration and disposal; and 4) the frequent obligation in some jurisdictions that they be accessible to the public.

INTERNATIONAL VALUATION GUIDANCE NOTE NO. 15

The terms, historic property and heritage asset, often overlap but are not in all cases equivalent. See also *Heritage Asset, Publicly Designated Historic Properties*.

- 3.3 *Listing of (Heritage) Buildings or Historic Properties Register*. A recording of officially designated historic properties. Not all historic properties are necessarily listed in registers. Many properties publicly recognised as having cultural and historic importance also qualify as historic properties.
- 3.4 *Preservation Incentives*. Incentives to the owners of historic properties, primarily fiscal in nature, to promote the restoration and maintenance of such properties. Examples may include exemptions on inheritance taxes for conservation properties gifted to heritage trusts, government subsidies, exemptions in municipal rates/taxes, investment tax credits to owners of historic properties, transferable development rights and deductions taken on conservation easements donated to nonprofit organisations.
- 3.5 *Publicly Designated Historic Properties*. Those properties, the historic status of which is officially recognised by government-chartered bodies to identify historic properties and to promote historic preservation. Such bodies may be established by national/federal, state/provincial, or county/municipal governments. Local non-governmental historical societies may also designate historic properties and maintain *private historic property lists* or *registers* that confer many of the same benefits whilst remaining exempt from government restrictions. See also *Listing of (Heritage) Buildings or Historic Register*.

International Public Sector Accounting Standards Definition

- 3.6 *Heritage Asset*. An asset having some cultural, environmental, or historical significance. Heritage assets may include historical buildings and monuments, archeological sites, conservation areas and nature reserves, and works of art. Heritage assets often display the following characteristics (although these characteristics are not necessarily limited to heritage assets):
- Their economic benefit in cultural, educational and historic terms is unlikely to be fully reflected in a financial value based purely on market price;
 - Legal and/or statutory obligations may impose prohibitions or severe restrictions on disposal by sale;

- They are often irreplaceable and their economic benefit may increase over time even if their physical condition deteriorates; and
- It may be difficult to estimate their useful lives, which in some cases could be hundreds of years.

The above definition is consistent with the description of heritage and conservation assets in IPSAS 17.9 (n.b., IPSAS 17 does not currently contain a formal definition of heritage assets).

Definitions from the UNESCO Glossary of World Heritage Terms

- 3.7 *Cultural Heritage*. Three groups of assets are recognised:
- Monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science;
 - Groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science; and
 - Sites: works of man or the combined works of nature and man, and areas including archaeological sites, which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view.

World Heritage Convention, Article I, UNESCO, 1972.

- 3.8 *Cultural Property*. Property inscribed in the *World Heritage List* after having met at least one of the *cultural heritage criteria* and the *test of authenticity*. (World Heritage Convention, Article II, UNESCO, 1972)

4.0 Relationship to Accounting Standards

- 4.1 International Public Sector Accounting Standard 17 (Property, Plant and Equipment) does not require an entity to recognise heritage assets that would otherwise meet the definition of, and recognition criteria for, property, plant and equipment. If an entity does recognise heritage assets, it must apply

the disclosure requirements of IPSAS 17 and may, but is not required to, apply the measurement requirements of IPSAS 17 (paras. 2 and 8). The IPSAS Discussion Paper on Heritage Assets (January 2006) requires the valuation of heritage assets where this is practicable. However, where valuation is impracticable, an entity would be required to make relevant disclosures, including reasons why valuation is not practicable.

AUS 4.1.2

“ In Australia, AASB116 requires that heritage assets be recognised unless their value cannot be reliably measured. In Australia therefore, where requested, valuers should seek to determine a value for heritage assets irrespective of the requirements of IPSAS 17.”

- 4.2 This Guidance Note considers historic structures as a category of heritage and conservation assets.

5.0 Guidance

- 5.1 The valuation of historic properties involves special considerations dealing with the nature of older construction methods and materials, the current efficiency and performance of such properties in terms of modern equivalent assets, the appropriateness of methods used to repair, restore, refurbish, or rehabilitate the properties, and the character and extent of legal and statutory protections affecting the properties.
- 5.2 The sales comparison, cost and income capitalisation approaches may be employed in the valuation of historic properties. The selection of the approach or approaches to be used depends on the availability of data required to apply that or those approaches.
- 5.2.1 In applying the sales comparison approach, the historic nature of the property may change the order of priority normally given to attributes of comparable properties. It is especially important that the Valuer find comparable properties with historic features similar to those of the subject. Criteria for the selection of comparable properties include similarity in location (i.e., in zoning, permissible use, legal protection, and concentration of historic properties), architectural style, property size, and the specific cultural or historic associations of the subject property. A variety of adjustments may have to be made to the comparable sales. These involve differences in location, costs of restoration or rehabilitation, or specific encumbrances. Adjustments are made in the following situations:
- 5.2.1.1 when costs must be incurred to restore or rehabilitate the subject property, but not the comparable sales; and
- 5.2.1.2 where the specific encumbrances upon the subject, e.g., restrictive covenants or preservation easements, differ from those upon the comparable properties.
- 5.2.2 Historic properties having a commercial use are often valued by means of the income capitalisation approach. Where the distinctive architecture and ambiance of an historic property contribute to its drawing power under an income-producing use and that income-producing use is considered to be the highest and best use of the historic property, the valuation will address the following:
- 5.2.2.1 All work proposed to restore, adapt or rehabilitate the historic property must meet existing zoning requirements and covenant obligations.
- 5.2.2.2 Where listed building consents or a zoning variance and/or building code exemptions are required, the projected timeframe to obtain such authorisation needs to be taken into consideration.
- 5.2.2.3 The income capitalisation approach should consider the cost effectiveness of an income-producing historic property in terms of the rental and/or commercial income the property is able to generate. In particular, it should address the additional costs involved in maintaining the property, especially those costs incurred due to functional obsolescence or reserves set aside for any required sinking fund.
- 5.2.3 When applying the cost approach to historic property, the Valuer needs to consider whether the historic features of a building would be of intrinsic value in the market for that property. Some historic buildings will be of value simply because of their symbolic status, for example a famous art gallery where the building is as, or more, important than the function it fulfils. In other words, the service potential of such a building is inseparable from its historic features. The modern equivalent of

such properties would need to reflect either the cost of reproducing a replica, or if this is not possible because the original materials or techniques are no longer available, the cost of the modern building with a similarly distinctive and high specification.

In many cases the historic features will add no value, or be viewed as an encumbrance by a purchaser in the market, for example a hospital operating in an historic building. In such cases the modern equivalent would reflect the cost of a new building constructed to a conventional modern specification.

In all cases the adjustments for physical deterioration and functional obsolescence will need to reflect factors such as the higher cost of maintenance associated with historic property and the loss of flexibility for adapting the building to the changing needs of an occupier.

The land or site, upon which an historic property stands may be subject to constraints upon its use. In turn, any such constraints will affect land and overall property value.

- 5.3 Historic, or heritage assets, for which there is no reliable or relevant sales evidence, which have no potential for generating income, and which would or could not be replaced may be incapable of reliable valuation. An example could be a partially ruined building with no income generating potential. Where a reliable assessment of value is not possible, the Valuer must disclose the reasons for this conclusion in the report.
- 5.4 Legal measures to safeguard historic properties may limit or restrict the use, intensity of use, or alteration of an historic property. Examples include restrictive covenants that run with the land regardless of the owner; preservation easements that prohibit certain physical changes, usually based on the condition of the property at the time the easement was acquired or immediately after proposed restoration of the property; and conservation easements that limit the future use of a property so as to protect open space, natural features, or wildlife habitat.
- 5.4.1 Restrictive covenants and preservation easements, whether existing or proposed, may have a major influence on the highest and best use of an historic property, and thereby

have a significant effect on property value. Preservation easements can be donated, purchased, or obtained by compulsory acquisition/eminent domain.

- 5.5 The valuation conclusion shall be reported in accordance with IVS 3, Valuation Reporting.

6.0 Effective Date

- 6.1 This International Valuation Guidance Note became effective on 31 July 2007.