ANZVGN 12 MARKET VALUE OF PROPERTY, PLANT AND EQUIPMENT AS PART OF A GOING CONCERN BUSINESS

1 Introduction

1.1 Purpose

The purpose of this Guidance Note is to provide information, commentary, opinion, advice and recommendations to Members determining market values of property, plant and equipment where those assets are integral to a going concern business. These guidance notes cover various situations to assist Members in undertaking such valuations.

It is also intended this Guidance Note will assist users of valuation reports to understand the basis upon which valuations of property, plant and equipment are undertaken in these circumstances.

This Guidance Note is not intended to repeat information already covered in Practice Standards and other Guidance Notes. Practice Standards and other Guidance Notes which should be read in conjunction with this Guidance Note include:

- o IVS 1 Market Value Basis of Valuation
- o IVS 2 Valuation Bases Other Than Market Value
- o IVA 1 Valuation for Financial Reporting
- o AVGN 1 Valuations for use in Australian Financial Reports
- o NZVGN 1 Valuations for use in New Zealand Financial Reports
- o IVA 2 Valuation for Lending Purposes
- o IVGN 1 Real Property Valuation
- o IVGN 3 Valuation of Plant and Equipment
- o IVGN 4 Valuation of Intangible Assets
- o IVGN 8 Depreciated Replacement Cost
- IVGN 9 Discounted Cash Flow Analysis for Market and Non-Market Based Valuations.

1.2 Status of guidance notes

Guidance notes are intended to embody recognised 'good practice' and therefore may (although this should not be assumed) provide some professional support if properly applied. While they are not mandatory, it is likely that they will serve as a comparative measure of the level of performance of a Member. They are an integral part of the Valuation and Property Standards Manual.

1.3 Scope of this guidance note

The scope of this guidance note is to provide guidance in any situation where a market valuation of property, plant and equipment forming part of a going concern business is required. This assumes that the assets would be sold as part of a going concern or continuing business. The market value determined for the property plant and equipment must be supported by the cash flows of the going concern business in which they operate.

Often these assets are specialised operational assets, the value of which cannot be readily assessed by reference to market prices.

Non-operational, surplus assets that will not continue to be used as part of the going concern business (e.g. assets which are approaching or at the end of their economic life) should be valued based on their market value assuming they will be sold separate from the going concern business. Such a value may be higher or lower than the value as part of the going concern business depending upon the specific circumstances, but should reflect the highest and best use of the assets assuming they will no longer be used as part of the going concern business.

This may include alternative use value in the case of real estate. In respect of plant & equipment such a value should assume that the assets will be sold for removal (commonly referred to as net realisable value).

1.4 Assets included

Where the income approach has been used to assess the market value of a going concern business, the value determined will include all the assets used in the business, including tangible and intangible assets and liabilities (to the extent they are used to derive income).

Tangible assets may include real property and plant and equipment, and intangible assets may include business licenses, patents, patterns, designs, intellectual property, goodwill, etc.

Depending upon the purpose of the valuation, an apportionment of value to the various asset classes may be required.

Test of adequate potential profitability/service potential

As a basic premise, the market value determined for the property plant and equipment should be supported by the cash flows of the business.

IVGN8 (which covers depreciated replacement cost valuations for financial reporting purposes) requires that:

"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 potential profitability in relation to the whole of the assets held by a for-profit entity or cash generating unit".

"For not-for-profit public sector entities, the reference to a test of adequate profitability is replaced by a test of adequate service potential."

This statement is important as it is intended to alert the reader of the valuation to the fact that the valuation assumes and is dependent upon (i.e. subject to) the reporting entity being profitable (i.e. having adequate potential profitability), or in the case of not for profit entities, continuing to provide the service for which the asset is used (i.e. having adequate service potential).

Valuations of assets contained in a business that assume continuation of the going concern business or service should not be construed as representing the market value of those assets in the event that the going concern business or service ceases to exist.

When assessing market value under the cost approach, the test of adequate potential profitability (or service potential) has traditionally been seen as the responsibility of the entity's directors or auditors.

However Members may complete the test of adequate potential profitability (or service potential) rather than reporting a value subject to that test being completed by others.

It should be noted that existing guidance provided in respect of the test of adequate profitability is restricted to valuations for financial reporting purposes completed using the cost approach (IVGN 8). The test of adequate profitability is effectively used as a means to identify the potential existence of economic obsolescence. However, economic obsolescence is a matter that should be considered in many valuations that are completed using the cost approach.

It should be noted therefore that if a Member does not include the statement that the valuation is reported subject to the test of adequate profitability (or service potential), the valuation may be construed as reflecting all forms of obsolescence (including economic obsolescence).

A valuation that reflects profitability or service potential as described in this guidance note will result in an opinion of market value. By implication therefore a valuation that does not consider and reflect profitability (economic obsolescence) or service potential will not result in an opinion that represents market value until such tests have been completed.

3. Highest and best use

In undertaking market valuations of property, plant and equipment as part of a going concern business Members should consider whether the current use of those assets represents their highest and best use.

If an asset potentially has a higher and better use, Members may need to assess and report the value of the asset for its alternative use, but in doing so Members should also consider the costs that may be incurred in changing use or decommissioning the asset as well as the potential impact on the future use and therefore value of other interdependent assets.

ANZVGN2 Valuations for Mortgage and Loan Security Purposes requires that where assets have a lower value for alternative uses the Member should report both values. It is noted however that circumstances may occur where the agreed scope of work does not include that requirement.

Valuation methods

In assessing valuations of property, plant and equipment as part of a going concern business, the sales comparison approach, cost approach and income approach are all considered appropriate methods of valuation depending on the nature of the assets and the information available.

4.1 Sales comparison approach

It is generally difficult to find and analyse sales of specialised property, plant and equipment. Such assets are usually sold as part of the going concern business along with all its other tangible and intangible assets and liabilities. They may also be sold as part of a group or portfolio of assets and as a result apportionment of the business acquisition price to the various assets may not be available or reliable

Where comparable sales evidence exists for real property being transacted as part of a going concern business, the sales comparison approach can be used to determine the value to an owner occupier. The value of the property for its alternative use or value with vacant possession may be different.

The implication for Members is that comparable sales of properties sold for redevelopment or with vacant possession may not provide a true indication of the value of a property for use as part of a going concern business.

In some cases the value as part of a going concern business may be lower than the property's value for its highest and best use. IVS 1, 2 & 3 require valuations to be assessed on a highest and best use basis, but Members should consider possible costs that may be incurred in changing the use of the asset as well as the potential impact on the use and therefore value of other inter-dependent assets.

For plant and equipment this may mean assessing the value of individual assets or production units on a comparable sales basis and weighting that value for installation and any enhancements/ modifications.

The comparables sales should be adjusted to reflect any variations from the subject asset.

In some cases it may be appropriate to use a combined approach to value: the sales comparison approach (where comparable sales can be found) and the cost approach for the installation component that brings those assets into use within the business.

In applying the cost approach to the installation component of an asset's value, Members should take into account any obsolescence in order to determine the depreciation to be applied to the installation cost component.

Members should also have regard to the market place by understanding the context of each

sale and should be aware of, but not rely upon, asking prices for equivalent assets in developing a complete understanding of the market place.

4.2 Cost approach

The cost approach is the most commonly used valuation method to determine the value of specialised assets. Under the cost approach the current replacement cost is calculated and then any loss in value caused by physical deterioration and functional and economic obsolescence is deducted to arrive at the market value of the asset.

4.2.1 Forms of obsolescence:

The Member should consider three forms of obsolescence:

- Physical deterioration. This is the loss in value resulting from the consumption of the useful life or service potential of the asset caused by wear and tear, deterioration, exposure to various elements, physical stresses, and similar factors.
 - a. It should be noted that the consumption of the useful life or service potential of an asset may be constant over the life of an asset and on other occasions this may occur more quickly at the beginning or at the end of the asset's life. This can result from variations in the intensity of use to which the asset is subjected at different stages of its life. These variations in the consumption of useful life or service potential of an asset will likely be reflected by variations in the level of maintenance costs.
 - b. The useful life of an asset may be expressed in terms of years of service but may also be expressed in terms of units of production. When assessing remaining useful life Members should have regard to the condition of the asset at the time of assessment which may alter the total life of the asset as compared to its expected life when new.
- Functional (sometimes called technological)
 obsolescence is the loss in value resulting from
 inefficiencies in the subject asset compared to
 a more efficient or less costly asset. Such excess
 operating costs and/or excess capital costs can
 be used to measure the extent of functional
 obsolescence.

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- 3. Economic obsolescence (sometimes called external obsolescence) is the loss in value caused by factors which are external to the asset itself. Such factors often relate to the economics of the industry in which the business operates or the business in which it is employed. New legislation (or fear/risks of it) may also contribute to economic obsolescence.
 - a. Economic obsolescence may result from over capacity. The replacement cost of a plant that has a capacity equal to need may be significantly lower than the reproduction cost of the plant as installed. The extent of economic obsolescence in these circumstances can be measured by comparing the reproduction cost of the subject assets to the replacement cost of the assets required to meet the expected demand. If the plant's capacity is limited by an asset within the plant rather than by external factors then the obsolescence may be regarded as technological (i.e. functional) and may be curable.
 - Economic obsolescence can also be a result
 of other external factors such as increased
 raw material costs or reduced product
 sales/value. These factors may be specific
 to a particular location or more generally
 experienced throughout an industry sector.
 - c. It is important when investigating the impact of economic obsolescence that Members understand and consider the connection with the profitability of the business. This might be evident from the acquisition price (in a business transaction scenario), or reported business value. To the extent that a contemporaneous transaction involving the sale of the going concern business indicates a lower value than that of the property, plant and equipment used by that going concern business, this may provide an indication of economic obsolescence.
 - d. Economic obsolescence may also be observed for some assets (predominantly real estate) by considering whether the going concern business could afford to pay a market rent for the assets and still return a profit.

Having regard to the various forms of obsolescence discussed above, Members should be wary of using depreciation tables which only reflect physical deterioration or methods which purport to represent all forms of obsolescence in one calculation without having regard to the circumstances and use of each asset.

In the case of new businesses, the sum of the market value of the assets may indicate the business is yet to achieve a level of profitability which provides an appropriate return on the assets employed and capital outlay. The test of adequate profitability (or economic obsolescence) will therefore necessarily have regard to a longer term projection of expected cash flows rather than those experienced in the start-up phase.

Observation and analysis of sales of comparable businesses may be helpful in determining whether the subject business can support the assessed values of the tangible assets.

It is recognised that Members may not have access to the information necessary to determine the value of a business as a going concern however it is prudent to investigate factors that may indicate economic obsolescence and discuss these with the client prior to drawing a conclusion as to the value of the assets. For instance it would be prudent for Members to inform themselves of the details of relevant discoverable information (such as a recent sale of the going concern business that owns the assets) which might alert the Member to the possible existence of economic obsolescence.

Members should be careful to individually assess all forms of obsolescence for each asset as different assets within the same business may be impacted differently by obsolescence.

Valuations determined having regard to all three forms of obsolescence under the cost approach will result in an unqualified opinion of market value of the asset.

In applying the cost approach to real property, the Member should assess the market value of the land and add the value of the improvements after assessing all forms of obsolescence (including economic obsolescence).

4.2.2 Guidance on the identification and quantification of obsolescence

Specialised assets are rarely leased and therefore, it is difficult to identify market rental income or income capitalisation rates from the market.

Whilst these assets are typically used to produce income, the income that is produced is consolidated in the overall business enterprise

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income and as such is produced by a combination of real estate, plant and equipment, and intangible assets functioning together as an integrated going concern business.

It is often difficult therefore to separate this business enterprise income into the particular components that represent income in respect of the individual tangible assets.

Specialised assets do not sell regularly in the secondary market and as a result it is difficult to identify and analyse comparable sale transactions.

Transactions involving the sale of specialised assets are relatively infrequent and when they do occur, the property, plant and equipment are sold as part of a going concern business. In such situations, the individual values attributable to the property, plant and equipment are typically not disclosed to the marketplace.

In some cases Members may have access to contracts of sale that provide an indication of the values attributed by the parties to the transaction to the individual assets. However such allocations may be arbitrary or influenced by other considerations such as tax and as a result may not be a true reflection of the value of each component.

For these reasons, the cost approach is commonly used to value specialised assets. The identification and quantification of all forms of obsolescence is a fundamental procedure in a cost approach valuation.

The quantification of functional and economic obsolescence is however often challenging for the following reasons:

- It is difficult to visually identify the existence and effects of functional and economic obsolescence.
- The data needed to quantify some forms of obsolescence are often only available from the owner of the assets and therefore independent verification may be difficult.
- With regard to economic obsolescence, the causes of the obsolescence are, by definition, factors that are external to the subject asset.
- The identification and quantification of some forms of obsolescence is often comparative in nature and therefore requires data in respect of both the subject asset and comparable assets.

Functional and economic obsolescence may be

identified from reviewing financial documents or operational reports but may also be identified from comparison with and knowledge of comparable assets.

With regard to economic obsolescence, it will most likely be necessary to analyse asset-specific financial data in order to identify the causes of obsolescence.

Negative movements in gross margin can also be an indicator of economic obsolescence. The gross margin is represented by the difference between a business' revenues and its cost of raw materials.

These inputs can be measured using units of production where the current year's gross margin can be compared to previous years.

Functional obsolescence

Common examples of functional obsolescence include:

- o excess operating/maintenance costs
- o excess capital costs

Examples of excess operating costs include:

- o the subject asset may require ten operators while a comparative asset only requires five.
- the subject asset may produce ten units per period while a comparable asset produces twenty units per period.
- o the subject asset may produce more scrap/ waste material than a comparative asset.

In each case the present value of the excess operating costs in terms of labour, efficiency or raw materials is used to arrive at a measure of functional obsolescence.

An example of excess capital costs is where the subject asset is considered to be over-engineered for its required function. This can arise where methods (and costs) of construction or materials of construction have improved (reduced) since the subject asset was originally put into service.

Functional obsolescence can be quantified and captured by:

- o reducing value by an amount equal to the present value of the excess operating costs embodied in the subject asset(s)
- reducing value by an amount equal to the excess capital cost embodied in the subject asset(s)

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 reducing value by an amount equal to the estimated capital costs to cure the functional deficiency embodied in the subject asset(s)

Economic obsolescence

Economic obsolescence relates to a decrease in the value of an asset due to influences that are external to the subject asset and occurs when the asset owner can no longer earn an appropriate rate of return on the ownership/operation of the subject asset, (i.e. the asset does not meet the test of adequate potential profitability).

It is acknowledged that economic obsolescence is typically the hardest form of obsolescence to identify and quantify.

Because economic obsolescence is usually a function of external factors that affect an entire going concern business (i.e. all tangible and intangible assets) rather than individual assets, it is sometimes measured using the income approach or by using the income approach to help identify the existence of economic factors that may be having an impact on value.

When the operating level of an asset is significantly lower than its capacity, and this situation is expected to continue for the foreseeable future, this form of economic obsolescence can be measured using the cost approach.

In its simplest form this can be measured by adopting the cost-to-capacity concept. The economic obsolescence penalty can be calculated on a percentage basis by comparing the actual operating level to the rated capacity using the cost-to-capacity concept. The penalty factor is deducted after physical deterioration and functional obsolescence because economic obsolescence is independent of the asset(s).

This is based on the logic that a prudent purchaser will only pay for capacity that can be used profitably.

It should be noted that the cost of assets of different capacities tends to vary exponentially rather than linearly because of economies of scale.

For example, in the case of plant & equipment, the cost of a conveyor of 100 metres in length will typically be less than twice the cost of a conveyor of 50 metres in length (all other things being equal) due to the economies of scale available in constructing a larger asset.

4.3 Income approach

In assessing valuations of real property assets as part of a going concern business, capitalisation and discounted cash flow analysis (cash inflows and outflows) may be appropriate methods of valuation.

Whilst direct market evidence of sale prices may not exist for specialised assets, Members may use other market evidence or benchmarks to assess the value of assets as part of a going concern business, either in their entirety or as individual components.

Examples may include assessment of rents of specialised assets having regard to likely returns required within the market for assets employed within similar industry sectors.

In other cases capitalisation of net profit may be appropriate to assess the value of the entity as a going concern however Members are cautioned that valuations assessed on this basis include both tangible and intangible assets, and an apportionment may be required (refer Section 1.4).

There are few instances where the income approach can be used to value individual plant and equipment assets without also capturing other assets such as intangibles and working capital. The income approach may be able to be utilised for leased plant and equipment assets that generate an income stream or a group of assets that can produce a saleable product.

It is recognised however 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 and equipment assets.

5 Effective Date

This Guidance Note is effective from 1 August 2011.