



GUIDANCE NOTE 552

ECONOMIC VALUATIONS

PURPOSE

This Guidance Note sets out the considerations that bear on the work involved in carrying out economic valuations of *economic assets*. It describes general principles and procedures for carrying out and reporting on the economic valuation.

APPLICATION

This Guidance Note applies to any economic valuation performed by a Member of the Institute of Actuaries of Australia.

LEGISLATION

The Member should consider the implications of relevant legislation or standards including:

- Corporations Act 2001
- Financial Services Reform Act 2002
- Taxation law
- ASIC regulations and practice notes
- Accounting standards

DEFINITIONS AND CONCEPTS

For the purposes of this Guidance Note the following terms will be used with the meanings indicated. When used, they will appear in italics.

Economic asset: Any resource, property, right or interest that can potentially generate future cashflows and/or value (positive or negative).

Economic value: The present value or cash equivalent at the valuation date (allowing for time and risk) of all the future cashflows and/or other measures of value that are expected to be derived from ownership or use of an *economic asset* for a specified purpose.

Principal: The person(s) or organisation(s) that commissions the economic valuation.

Uncertainty: Any uncertainty about future outcomes. In this Guidance Note, the term uncertainty is used to encompass both quantifiable uncertainty and unquantifiable uncertainty.

FIRST ISSUED

July 2004

1 INTRODUCTION

1.1 Role of economic valuations

Economic valuations are carried out for many purposes including but not limited to:

- providing management information for an organisation;
- contributing to the assessment of the value of a business (or part of a business) for the purpose of sale or acquisition;
- disclosure in the accounts of an organisation or elsewhere;
- supporting a cost-benefit analysis of a project or opportunity;
- supporting capital budgeting work;
- supporting social, health or environmental impact studies and assessments;
- capital raising and capital reconstruction; and
- supporting market valuation of an *economic asset*.

1.2 General exclusions

This Guidance Note applies to a Member performing an economic valuation of an *economic asset*.

This Guidance Note does not apply to a Member:

- undertaking an assessment only of liabilities or prudential reserves in accordance with another professional standard or guidance note of the IAAust; or
- pricing products or services, or determining funding rates for liabilities.

Where an economic valuation is used to support a market valuation or a fair valuation, this Guidance Note applies to the determination of the *economic value* but not the determination of the market value or fair value.

2 PROFESSIONAL CONSIDERATIONS

2.1 Interpretation of this guidance

The degree of detail and precision in an economic valuation performed by the Member should be appropriate to the context in which it is being performed.

For example, the guidance will be applied differently in the context of a limited scope valuation than it would in the context of a full scope valuation. This is particularly relevant in respect of:

- guidance on the selection of appropriate models
- guidance on communication and disclosures.

2.2 Market valuations, fair valuations and other economic valuation applications.

Members may from time to time be asked to provide advice on the market value or fair value of an *economic asset* or on the *economic value* of an *economic asset* in the context of a project evaluation or wider economic appraisal.

A market value may differ significantly from an *economic value*, with many factors affecting the market value that are not necessarily encompassed within an *economic value*. These include, but are not limited to:

- the current state of markets including supply and demand factors for both relevant *economic assets* and capital;
- the current sentiment of markets including consumer and business confidence, and political and economic events and uncertainty; and
- transaction specific factors such as the impact of a transaction on earnings ratios, earnings growth, balance sheet strength and the perception of the market of these and the strategic rationale for a transaction.

Fair value is a key concept in emerging international accounting standards and is typically defined as the price at which an asset could be sold or a liability settled between knowledgeable and willing parties on an arm's length basis.

An economic valuation may be an element in determining a market value or fair value, or as part of a project evaluation. Where a Member prepares an economic valuation that may be expected to be used in that way, the Member should take steps to ensure that any qualifications or limitations on the use of the *economic value* for that purpose are communicated to

the *Principal* and disclosed in the Member's written report. The Member should note any material factors which are not considerations in performing the economic valuation but which are likely to be important given the purpose of the assessment (such as non-traded, non-cashflow costs and benefits or indirect costs and benefits).

2.3 Interaction with Institute guidance and legal or regulatory requirements

Where appropriate for a particular actuarial practice area, more detailed IAAust guidance may exist that is supplementary to the general framework set out herein. In the event of any ambiguities or inconsistencies between such IAAust practice area guidance and this Guidance Note, this Guidance Note will prevail.

For certain types of valuations, minimum standards are laid down by law or regulation, for example ASIC regulations regarding Independent Expert's Reports. This Guidance Note supplements any such laws, regulations or standards and should not be interpreted in any way that is inconsistent with them.

Where there is a conflict between this Guidance Note and relevant non-IAAust codes or guidelines, the Member is encouraged to consider his or her general professional responsibilities under the Code of Conduct.

2.4 Working with others

Where a Member is asked to perform an economic valuation as a component part of a larger exercise, this Guidance Note applies to the component part of the larger exercise for which the Member takes responsibility.

This Guidance Note applies to an economic valuation made jointly by a Member and another person or firm. In such cases the Member retains overall professional responsibility for the economic valuation, including any delegated component, and this Guidance Note applies to the entire economic valuation. This does not preclude the Member from relying on specific expertise of another professional, for example tax expertise.

3 GENERAL FRAMEWORK

3.1 Valuation framework

The fundamental steps which are generally undertaken when performing an economic valuation are:

1. Understand the purpose, use and scope of the economic valuation
2. Understand the *economic asset*
3. Select appropriate methods and models
4. Determine data requirements, research and analyse available data
5. Set the assumptions
6. Build, calibrate and test models
7. Calculate the results
8. Analyse the results
9. Communicate the results

3.2 Models used to perform an economic valuation

There are four major types of models commonly used by Members in undertaking economic valuation work:

Cash flow models: A model of the future cashflows expected to be generated by the economic asset.

Probability models: A model of contingencies that affect the economic asset. These may include models of event occurrence, claim incidence, contract termination and take-up of product features and options.

Economic models: A model of the economic variables and their interrelationships that are expected to materially affect the economic asset. These typically include factors such as future investment earnings and rates of inflation.

Risk allowance models: A model used to generate the assumptions required to allow for the impact of uncertainty on the economic value.

The economic valuation of an economic asset may involve the use of a combination of models.

3.3 Transparency

The models, methods and assumptions used for the economic valuation should, as far as practical, be transparent, enabling valuation results and sensitivities in the results to changes in particular assumptions to be understood by the intended users of the economic valuation.

The Member should be satisfied that the method and models will, if appropriate data and assumptions are used, produce credible economic

valuation results given the operating environment of the economic asset being valued.

4 PURPOSE, USE AND SCOPE CONSIDERATIONS

4.1 Needs of the Principal

Before commencing the economic valuation, the Member should:

- review with the *Principal* the purpose and context of the economic valuation; and
- seek to understand the intended use(s) and user(s) of the valuation results and any constraints the intended use(s) might impose on the Member in undertaking the economic valuation.

4.2 Scope of economic valuation

The Member should understand the scope of the economic asset that is to be valued.

This will usually involve consideration of:

- the components of the *economic asset* to be valued; for example, to what extent an economic valuation should make allowance for business which is yet to be transacted, goodwill or particular business units / products; and
- the extent to which the economic valuation is to make allowance for the indirect impact of the use of the *economic asset* on the value of other relevant assets in which the intended users of the report have an interest (for example, synergy benefits, remediation costs etc).

The Member should ascertain the materiality limits that apply to the economic valuation bearing in mind:

- the quality of the data;
- the intended use(s) of the economic valuation;
- the degree of *uncertainty*; and
- the sensitivity of the overall result to different assumptions.

4.3 Nature of economic asset

The Member should understand the aspects of the nature and behaviour of the economic asset relevant to the economic valuation.

This may involve becoming familiar with:

-
- the financial drivers of the *economic asset* and its environment;
 - the accounting treatment used for the *economic asset*; and
 - relevant features of the industry(s) in which the *economic asset* operates.

5 VALUATION METHODS

5.1 Common valuation methods

Common economic valuation methods likely to be used by Members include:

- Ratio methods
- Risk premium methods
- Risk neutral or certainty equivalent methods
- Asset replication methods

Key aspects of these methods are discussed in the following subsections.

The Member should be satisfied that the method(s) used to perform the economic valuation are appropriate for the particular circumstances. The method(s) used will depend on the size and/or materiality of the economic asset, the complexity of the operations of the asset, the quality of data available, the intended use(s) of the economic valuation and the needs expressed by the Principal.

The economic value determined should not depend on the method(s) selected as all methods are ultimately derived from the same theoretical foundation. Certain methods may be easier to apply appropriately in particular situations than other methods.

5.2 Allowing for uncertainty

The valuation method(s) used by the Member should allow for the impact of uncertainty in realising the projected cashflows on the economic value of the economic asset.

The Member should be satisfied that the form of the allowance for uncertainty adopted is appropriate for the particular circumstances and consistent with the type of uncertainty involved. For example, if uncertainty grows the further out in time one looks, it may be appropriate to allow for it in a discount rate. On the other hand, if it is concentrated in the short term or diminishes over time, then it may be more appropriate to allow explicitly for the range of possible cashflows and their associated

probabilities.

The value and allowance for uncertainty may vary depending on whether, and the extent to which, the uncertainty can efficiently be diversified. The valuation method and assumptions should have regard to the implied value markets place on diversifiable and non-diversifiable risk.

Where the assumptions contributing to the allowance made for uncertainty are set to be appropriate in aggregate, the Member's written report should disclose that these assumptions will not necessarily give rise to appropriate allowance for uncertainty for a segment of the business.

When using more than one form of allowance for uncertainty, the Member should be satisfied that the allowance made avoids potential double counting or omission of significant sources of uncertainty.

5.3 Stochastic valuation techniques

In applying stochastic valuation techniques, the Member should be satisfied that the economic and probability models are reasonable and make appropriate allowance for the impact of correlations and that the tails of distributions are suitably modelled.

5.4 Dealing with options

In undertaking the economic valuation, the Member should be satisfied that appropriate allowance has been made for any material optionality or non-linear outcomes in the cashflows being modelled.

The Member is encouraged to make explicit allowance for options and non-linear outcomes when the impact of optionality or non-linear outcomes is likely to be material to the economic valuation result. This may be achieved by using approaches such as option pricing techniques or stochastic modelling.

5.5 Ratio methods

Commonly used ratio methods include:

- earnings ratios (eg price earnings ratios)
- stock ratios (eg percentage of funds under management)
- flow ratios (eg percentage of new business flows)

Ratio methods rely on:

- a high level of stability and predictability in the ratio between the *economic value* and the value driver from past periods to future

periods; and

- an ability to derive multiples that adequately allow for growth and *uncertainty*.

Ratio methods are most useful:

- for approximate valuations;
- in circumstances where the *economic asset* is simple, has no asymmetry and the net cashflows flowing from it are expected to grow uniformly;
- as a rule of thumb check on the results of more sophisticated methods; and
- to assist in the communication of economic valuation results.

Ratio methods are least useful:

- where the *economic asset* or its operating environment have a complex nature;
- where there is an asymmetry of potential outcomes; and
- where variations in business mix can have a material impact on the *economic value*.

When using a ratio method, the Member should consider the limitations inherent in the method and be satisfied that they are appropriate given the scope of the economic valuation being performed.

The Member should be satisfied that any parameter on which the ratio method valuation is based is appropriate and is not unduly distorted as at the valuation date. For example, in applying a price earnings ratio it would be usual to adjust earnings to a level that is considered maintainable.

The Member should be satisfied that the ratio chosen is appropriate to the business characteristics and risk profile of the economic asset being valued.

5.6 Risk premium methods

Risk premium methods allow for market uncertainty through the interaction of a risk adjusted discount rate, the expected earning rate on capital, and the quantum of capital employed in the economic asset.

The key advantages of risk premium methods are that they:

- produce projected cashflows that align with real world cashflows and hence are relatively easy to understand and validate;

-
- generally utilise well established techniques and modelling practices;
 - facilitate analysis and explanation of the progression of value over time particularly in the context of comparison of actual versus expected experience;
 - allow complex cash flows and interrelationships between cash flows to be reflected in the valuation model(s); and
 - facilitate roll-forward/roll-backward valuations and the projection of *economic value* at future or past dates.

When using a risk premium method, the Member should be satisfied that the overall allowance for uncertainty in the economic valuation is appropriate given the characteristics of the business being valued and does not produce misleading economic valuation results. Misleading results can arise when changes in the risk profile of an asset are reflected in the projected future cashflows without appropriate adjustment to the risk discount rate.

The Member should consider the appropriateness of applying risk premium methods in circumstances where:

- material mismatches exist between the business liabilities and any assets supporting them;
- material mismatches exist between the drivers of business revenues and the drivers of business expenses; or
- the potential cash flows being valued have an asymmetric distribution and the existence of this asymmetry could have material impact on prospective costs or benefits.

In these situations, selection of an appropriate single risk adjusted discount rate may be difficult.

5.7 Risk neutral or certainty equivalent methods

Risk neutral methods allow for market uncertainty in the probability distribution associated with cash flows. Certainty equivalent methods allow for market uncertainty by adjusting the cash flows. In either case, the discount rate used is a risk free rate.

Risk neutral methods are particularly applicable where investment or market related gearing exists, be it:

- a material mismatch between liabilities and backing assets, for example, guaranteed liabilities backed by equities; or
- a material mismatch between revenue and expenses, for

example, where fee revenue is related to investment markets but expenses are not.

- for determining an appropriate charge for *uncertainty* in respect of individual segments of business with different characteristics.

These methods will not produce cash flow projections on a realistic basis. This means that projected cash flows will not be suitable for other purposes, such as business planning. It also means that the communication of the projection results to users and the validation of the risk neutral cash flows may be challenging, as they will not necessarily reconcile to real world cash flows.

In applying these methods, the Member should be satisfied that the degree to which each cash flow is market related can be reasonably ascertained or approximated and that the risk neutral probabilities or certainty equivalent cashflows are appropriate.

5.8 Asset replication methods

Asset replication methods can be usefully applied wherever a replicating asset, or basket of assets, can be found for projected individual cash flows or a group of cash flows of the economic asset. They may have particular application for assessing the value of market related guarantees or options embedded within the economic asset.

In applying such methods the Member should be satisfied that replicating assets appropriately reproduce the cash flows being valued and that all of the relevant valuation cash flows are either reproduced by the replicating assets or otherwise dealt with.

Asset replication methods can be difficult to apply in practice because of difficulty in locating well traded market assets that have the duration and shape of the cashflows of the economic assets being valued.

5.9 Approximate valuations

Members may be asked to provide rough indications of economic value, based on a limited analysis of the key drivers of the economic value.

Where such limited scope valuations are carried out or approximations are used, the Member should confirm the limited scope of the economic valuation with the Principal and should adequately disclose the limitations of the methods, models and data used in the written report.

5.10 Roll-forward valuations

In some circumstances it may be appropriate to provide an economic valuation for a date different to that at which key data has been captured and detailed models produced. Such an economic valuation is commonly referred to as a roll-forward or roll-backward valuation.

The roll-forward/roll-backward method should be consistent with the use to which the economic valuation will be put and with the overall materiality requirements of the economic valuation.

Appropriate allowance should be made for material business experience and cashflows that have occurred over the roll-forward/roll-backward period, including:

- the time value of money over the roll forward/roll-backward period;
- differences between actual experience and the expected experience implied by the base economic valuation;
- any release of value from, or injection of value into, the *economic asset* (eg dividend payments or capital transfers) or material contracts or guarantees entered into or cancelled during the period; and
- changes to the environment in which the *economic asset* operates which were not anticipated in the base economic valuation and that would have a material effect on the assumptions used to derive the *economic value*.

Appropriate allowance should be made for the impact of correlation effects between assumptions in determining any adjustments.

6 DATA

6.1 Introduction

Key data regarding the operations and experience of the economic asset is likely to come from:

- internal management reports;
- interviews with management;
- board reports;
- financial statements; and
- published industry data.

The data available and its quality will influence the choice of the method(s)

and model(s) used for the economic valuation.

The Member should be mindful of possible distortions in the data, for example arising from:

- recent acquisitions, disposals or mergers;
- changes to systems, reports, or classifications;
- consolidation or segmentation across entities;
- changes in the business or management of the *economic asset*;
- market or competitive changes;
- regulatory changes; or
- random fluctuations.

6.2 Relevant data

All data used should be relevant to the purpose of the economic valuation. Where relevant data is not available, the Member should explain the implications for the economic valuation in the written report.

6.3 Data reliance and review

The Member should review the data obtained for reasonableness, internal consistency and completeness.

In doing so, the Member should consider whether distortions exist in the data and whether adjustments to the data are appropriate to eliminate possible distortions in the economic valuation or to allow for expected changes in future conditions under which the economic asset will be operating.

6.4 Consistency of data, methods and models

The data used to populate the chosen model(s) should be consistent with the method(s) chosen and the design of the model(s) used for the economic valuation. If the data does not, or is insufficient to, support the use of a particular method or model, the Member should consider whether a more appropriate approach should be used.

7 VALUATION MODELS

7.1 Choice of model

The Member should:

- choose models for the economic valuation that are appropriate to the valuation being performed and the purpose for which the results of the valuation will be used;
- ensure that there is consistency between the economic framework in which the valuation is being performed and the models chosen;
- understand the limitations of the models chosen for the economic valuation; and
- use models that are consistent within themselves and with each other.

Where models are not consistent and this has the potential to materially affect results, the Member should disclose the inconsistency in the report on the economic valuation.

7.2 Cash flow model

The cash flow model chosen by the Member should appropriately reflect all cashflows that are material to the economic valuation. In determining the cash flows to be modelled, consideration should be given to the key drivers of the economic value of the economic asset.

The cash flow model chosen by the Member should appropriately allow for options, guarantees or other asymmetric features of the cashflows, where these are material to the economic valuation.

The Member should be satisfied that the cashflows taken into account when performing an economic valuation are consistent. In particular, benefits that are mutually exclusive or which can only be realised by incurring additional costs should be properly allowed for in the economic valuation.

The cash flow model chosen by the Member may use terminal values where the Member is satisfied that this is appropriate taking into account the purpose of the economic valuation, the materiality of the terminal value and the nature and reliability of future cash flow projections.

The cash flow model should project cash flows over appropriate time intervals and should allow for the timing of the cashflows within the chosen intervals with appropriate accuracy. Time intervals should generally not exceed one year and shorter intervals may be appropriate.

7.3 Probability model

Some of the cashflows being modelled may be contingent on the occurrence of particular events. This is particularly true for economic assets within the field of insurance.

In such situations the Member should be satisfied that probability distributions or point estimates used in the models are reasonable and sufficiently accurate for the purpose of the economic valuation, paying particular attention to outcomes that may have a low probability of occurrence, but a high economic impact should they occur.

7.4 Economic model

Some of the cashflows in the cashflow model may be dependent on the value of certain economic variables. These typically include variables such as future investment earnings, rates of inflation and the impact of taxation although other relevant influences on the economic asset may need to be modelled such as demographic, social, technological or environmental trends.

The economic model should, where material to the valuation result, appropriately reflect:

- relationships and correlations between economic and other variables;
- market volatility; and
- the period over which cashflows material to the economic valuation are expected to occur

7.5 Risk allowance model

A range of models exist to allow for uncertainty within the economic valuation. These will often be particular to the valuation method chosen, for example:

- Capital Asset Pricing Model (CAPM) or similar models for determining risk adjusted discount rates;
- state price deflator models for converting cash flows to the valuation date cash equivalent using 'real world' probabilities;
- explicit risk models for determining appropriate margins to apply to cash flows.

The risk allowance model chosen by the Member should:

- take into account observed market data and relationships;

-
- be consistent with the other models and assumptions used in the economic valuation;
 - be appropriate to the nature and extent of the *uncertainty*; and
 - be appropriate to the business characteristics of the *economic asset*.

8 SETTING ASSUMPTIONS

8.1 Responsibility for assumptions

The Member is responsible for the selection of all assumptions used in the economic valuation, other than those assumptions which are mandated by statute or regulation or which are set by the Principal, provided that the Member reports their status appropriately.

If there are assumptions for which the Member does not take responsibility, the Member should disclose any material implication for the economic value of using those assumptions.

8.2 Choice of assumptions

There will often be a range of assumptions that the Member could determine as being acceptable for a particular economic valuation.

The Member should use a set of assumptions in the economic valuation that is internally consistent, free of intentional bias by the Member and appropriate to the purpose, scope and proposed use of the economic valuation. Material correlations between assumptions should be appropriately reflected.

The Member is also encouraged to use assumptions that:

- are explicit rather than implicit where these have a material impact on the assessment of *economic value*;
- make allowance for expected future changes in the operating environment such as pricing cycles, experience improvements, margin squeeze, inflation etc;
- take account of the recent operating experience of the *economic asset*, where this is available; and
- are reflective of the key drivers of the value of the *economic asset*.

8.3 Stratified sampling (model points)

Where the Member uses stratified sampling (also known as model points), the Member should use a sufficient number and distribution such that the economic value will be fit for its intended use given the nature, homogeneity and complexity of the economic asset.

9 CHECKING AND ANALYSIS OF RESULTS

9.1 Responsibility for valuation results

The Member should be satisfied as to the material accuracy of the results given the purpose, scope and proposed use of the economic valuation.

The Member should perform appropriate validation tests and reasonableness checks on the valuation result and key intermediate results.

9.2 Analysing and portraying uncertainty

The Member should identify the material elements of uncertainty in the economic valuation results. These should be drawn to the attention of the Principal and disclosed in the Member's written report.

Methods that may be used by the Member to convey the degree of uncertainty in the economic valuation include:

(a) Stochastic modelling and simulations

In undertaking stochastic modelling or simulations the Member should:

- be satisfied that the underlying distributions assumed are reasonable; and
- perform a statistically significant number of simulations, particularly where uncertainty in the 'tail' of a distribution or process is being considered.

(b) Sensitivity testing

In undertaking sensitivity testing the Member should:

- choose sensitivities which focus on the assumptions which are most material to the results, have high degrees of uncertainty and/or are likely to be of most interest to the *Principal* and intended users;

-
- choose assumption variations that are reasonably likely without being extreme (unless variations in the ‘tail’ of a distribution or process are being considered);
 - if possible, vary each of the key assumptions so as to examine roughly equivalent confidence levels around each of those assumptions, or derive the required change in each key assumption for a given change in value;
 - have regard to non-symmetrical outcomes, and cusp points; and
 - treat correlated assumptions (for example, inflation, interest, lapses) consistently.

(c) *Scenario testing*

In undertaking scenario testing the Member should:

- choose scenarios which are internally consistent;
- choose scenarios which represent a range of operating conditions to which the *economic asset* could reasonably be expected to be exposed; and
- include scenarios where any material non-symmetrical features of the *economic asset* will be appropriately tested.

(d) *Stress testing*

In undertaking stress testing the Member should:

- choose sets of conditions which appropriately examine the stress scenarios that are likely to be material to the economic valuation or of interest to the *Principal* and intended users;
- treat correlated assumptions appropriately; and
- consider the extent to which the behaviour or management of the *economic asset* may change under conditions of stress.

9.3 Components of value

Where appropriate given the scope and intended use(s) of the economic valuation, component parts of the economic value should be separately disclosed. Depending on the economic asset and valuation method, the components considered might include:

- future new business, separate from existing business;
- lines of business;
- net assets (however defined by the model);
- market or customer segments;

-
- distribution channels;
 - synergy benefits;
 - value of franking credits and other taxation effects; or
 - any other items (for example, guarantees or contracted rights) to which intended users of the *economic value* may ascribe particular significance.

9.4 Analysis of change in value

Where a prior economic valuation exists and sufficient information concerning its composition and determination is available to the Member, the Member should analyse the change in economic value since the most recent valuation unless the scope of the assignment explicitly excludes this task.

The analysis of change would generally identify:

- the change in value expected since the prior valuation date using the method, data and assumptions that were applied in the prior valuation;
- the effect of changes in the valuation method;
- the effect of changes in the valuation model;
- the effect of changes in the valuation assumptions. Detail of the effect of the more material individual assumption changes will usually be shown separately;
- the effect of operating experience during the period; and
- the effect of capital movements and dividends.

10 COMMUNICATION AND DISCLOSURES

10.1 General principles

The Member should take reasonable steps to ensure that the results of the economic valuation are communicated to the Principal and intended users in an appropriate manner and not in a manner likely to give a misleading impression.

The Member should ensure that any significant implications or limitations of the economic valuation are disclosed.

Where the Member expects that the results of the economic valuation may be disclosed to a third party, the Member should take reasonable steps to

support disclosure to the third party that will be appropriate given the scope of the economic valuation and not be misleading.

The appropriate level of disclosure is ultimately a matter of judgement and will depend on many factors, including:

- the complexity of the *economic asset* being valued;
- the scope of the assignment given to the Member; and
- the preferred communication style of the *Principal* and the intended users of the economic valuation.

10.2 Written report

The Member should provide a written report addressing each of the following:

- a statement of the identification and qualifications of the Member and the capacity in which the Member is acting;
- a statement of the purpose of the economic valuation, the identity of the *Principal*, and the intended use of the valuation report;
- a description of the scope of the *economic asset*;
- the valuation date;
- a description of the scope of the assignment given to the Member;
- identification of key data used;
- a description of the primary methods and models used;
- a description of the material assumptions;
- a statement where the method(s), model(s) and/or assumptions used were not chosen by the Member but either selected by the *Principal* or required by relevant codes or legislation;
- the results of the economic valuation along with any limitations attaching to the results;
- a statement of the materiality limits used;
- a description of any material *uncertainty* surrounding the economic valuation result; and
- a statement of compliance with this Guidance Note or a list of any departures from this Guidance Note.

10.3 Purpose of the valuation

Where the Member believes the economic valuation might be used for

purposes other than those intended, the Member should disclose any qualifications or limitations on its usage. For example, where the result of an economic valuation could reasonably be construed to be a market value or fair value when this was not the intended purpose, the Member must include in the report a statement to that effect.

10.4 Scope of the assignment

The Member must include in the report's description of the scope of the economic valuation reference to the terms of engagement including relevant instructions given to the Member and any limitations imposed by the Principal.

The Member should state clearly in the report any aspects of the economic valuation that were explicitly excluded from the scope of the Member's work, but which would usually be expected to have been included in an economic valuation.

The Member should comment in the report on any matters that have come to the Member's attention which may make the economic valuation result inappropriate for the Principal's purpose or that of the intended users including any explicit exclusions in the scope or other constraints placed on the determination of the economic value.

10.5 Data and reliances

The Member should:

- identify in the report the information, documents and data used and upon which the Member relied;
- disclose in the report the degree of independent verification of the data and any shortcomings or limitations of the data for the purpose of an economic valuation;
- disclose in the report the extent of reliance on advice prepared by a third party, including advice about matters beyond the training or experience of the Member;
- disclose any significant data problems that give rise to *uncertainty* in the results of the economic valuation and assess the materiality of that *uncertainty*; and
- specify in the report the extent of and rationale for any material adjustments to the underlying data and discuss the materiality of such adjustments to the overall results.

10.6 Methods and models

If data was obtained at a date other than the valuation date, the Member should include in the report a description of how the data was adjusted to reflect the expected position at the valuation date together with commentary on the effect of any approximations involved.

10.7 Assumptions

The Member should set out the economic valuation assumptions and describe the basis for determining each material assumption. This may be in the main body of the report, in an appendix to the report or by reference to other documentation that is available to be provided to the Principal if required.

10.8 Results and limitations

In some situations the Member may consider it more appropriate to disclose a range in which the economic value may lie rather than a single economic value. Where a range is disclosed, the Member should provide advice on how to interpret the range, for example by explaining the factors that might be likely to result in an economic value towards the higher or lower end of the range.

The Member should identify in the report any limitations attaching to the economic value and its interpretation.

The Member should consider whether to place any limitations on the distribution or use of the report.

END OF GUIDANCE NOTE 552