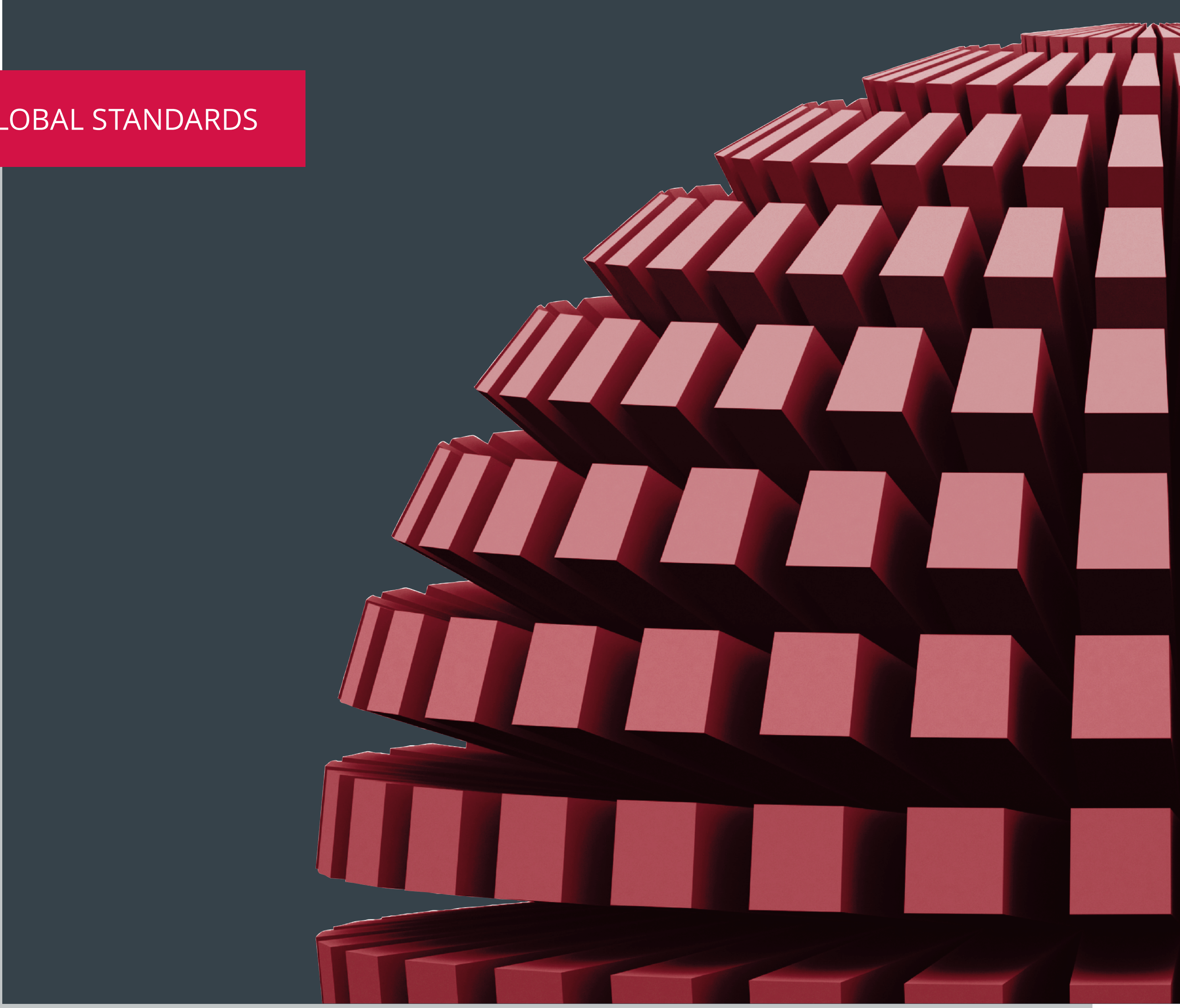
RED BOOK GLOBAL STANDARDS



RICS Valuation – Global Standards

Global, December 2024

Effective from 31 January 2025

RICS®

RICS Valuation – Global Standards

RICS professional standard, Global

December 2024

Effective from 31 January 2025

Published by the Royal Institution of Chartered Surveyors (RICS)
Parliament Square
London
SW1P 3AD

www.rics.org

No responsibility for loss or damage caused to any person acting or refraining from action as a result of the material included in this publication can be accepted by the authors or RICS.

ISBN 978 1 78321 538 6

© Royal Institution of Chartered Surveyors (RICS) December 2024. Copyright in all or part of this publication rests with RICS. Save where and to the extent expressly permitted within this document, no part of this work may be reproduced or used in any form or by any means including graphic, electronic, or mechanical, including photocopying, recording, taping or web distribution, without the written permission of RICS or in line with the rules of an existing licence.

This document applies globally. If any of the requirements contained in this document conflict with national legal requirements in the country or region in which the regulated member is operating, those national legal requirements take precedence and must be applied.

Contents

Part 1: Introduction **1**

Part 2: Glossary **6**

Standards and guidance naming conventions explained 13

Part 3: Professional standards **14**

PS 1 Compliance with standards where a written valuation is provided ... **14**

1 Mandatory application 14

2 Compliance within firms 16

3 Compliance with international standards 16

4 Compliance with jurisdictional or other valuation standards 17

5 VPSs 1–6 exceptions 18

6 Departures 21

7 Regulation: monitoring compliance with these global standards 22

8 Application to members of other valuation professional organisations 22

PS 2 Ethics, competency, objectivity and disclosures **23**

1 Professional and ethical standards 23

2 Member qualification 24

3 Independence, objectivity, confidentiality and the identification and management of conflicts of interest 25

4 Maintaining strict separation between advisers 28

5 Disclosures where the public has an interest or upon which third parties may rely 29

6 Valuation review 34

7 Responsibility for the valuation 35

Part 4: Valuation technical and performance standards **37**

VPS 1 Terms of engagement (scope of work) **37**

1 General principles 37

2 Terms of engagement format 38

3 Terms of engagement (scope of work) 38

VPS 2 Bases of value, assumptions and special assumptions **50**

1 Bases of value 50

2 General principles 50

3 Bases of value 51

4 Market value 52
5 Market rent 53
6 Investment value 53
7 Fair value 54
8 Transaction costs 54
9 Assumptions 55
10 Special assumptions 55
11 Valuations reflecting an actual or anticipated market constraint, and forced sales 57
12 Assumptions and special assumptions related to projected values and property risk advice 59

VPS 3 Valuation approaches and methods 60

VPS 4 Inspections, investigations and records 62

1 Inspections and investigations 62
2 Revaluation without reinspection of real property previously valued 64
3 Valuation records 64

VPS 5 Valuation models 66

VPS 6 Valuation reports 67

1 General principles 67
2 Report content 68

Part 5: Valuation practice guidance applications 81

VPGA 1 Valuations for financial reporting 81

1 Scope 81
2 Background 81
3 Compliance with valuation standards 82
4 Guidance on selected IFRS 84

VPGA 2 Valuations for secured lending 95

1 Scope 95
2 Background 95
3 Independence, objectivity and conflicts of interest 96
4 Taking instructions and disclosures 96
5 Basis of value and special assumptions 97
6 Reporting and disclosures 98

VPGA 3 Valuation of businesses and business interests 102

1 Scope 102

2 Introduction 102
3 Scope of work and terms of engagement 102
4 Businesses and business interests 103
5 Information 105
6 Valuation investigation 106
7 Valuation approaches and methodology 108
8 Reports 112
9 Confidentiality 113

VPGA 4 Valuation of trade related properties 114

1 Background 114
2 Terms used in this VPGA 115
3 Profits method of valuation 118
4 Valuation special assumptions 119
5 Valuation approach for a fully equipped operational entity 119
6 Assessing the trading potential 120
7 Valuation approach for a non-trading property 121
8 Apportionment 121
9 Valuation for investment purposes 122
10 Legal and regulatory matters including ESG 123

VPGA 5 Valuation of plant and equipment (including infrastructure) 124

1 Scope 124
2 Background 124
3 Plant and equipment included in real property valuations 125
4 Inspections, investigations and records 126
5 Plant and equipment and other asset types 126
6 Plant and equipment subject to finance, lease and collateral agreements .. 127
7 Key considerations 128
8 Regulatory measures 129
9 Valuation approaches and methodology 130

VPGA 6 Valuation of intangible assets 133

1 Scope 133
2 Introduction 133
3 Terms of engagement 134
4 Valuation concepts 135
5 Valuation due diligence 135
6 Valuation approaches 137

7 Discounted cash flow techniques 139
8 Reports 140
9 Confidentiality 141

VPGA 7 Valuation of arts and antiques 142

1 Introduction and scope 142
2 Terms of engagement 143
3 Identifying the market 143
4 Inspection, research and analysis 144
5 Valuation approaches and applications 144
6 Reports 146

VPGA 8 Valuation of real property interests 148

1 Inspection 148
2 Investigations and assumptions 149
3 Sustainability and environmental, social and governance (ESG) matters ... 151

VPGA 9 Valuing portfolios and groups of assets 158

1 Scope 158
2 Purpose of the valuation 158
3 Examples 160

VPGA 10 Material valuation uncertainty (MVU) 161

1 Scope 161
2 Examples 161
3 Reporting 162
4 Removal of MVU declarations 163

VPGA 11 Relationship with auditors 165

1 Scope 165
2 The role of the independent auditor 166
3 The valuer as management's expert 166
4 The valuer as auditor's expert 167
5 The auditor's requests and the valuer's response 168

Part 6: International Valuation Standards 170

Part 1: Introduction

Overall purpose

1 Consistency, accuracy, objectivity and transparency are fundamental to building and sustaining public confidence and trust in *valuation*. They depend crucially on *valuation* providers possessing and deploying the appropriate skills, knowledge, experience and ethical behaviour, both to form sound judgements and to report opinions of value clearly and unambiguously to clients and other *valuation* users, in accordance with globally recognised standards.

2 With its focus on practical implementation, this edition of *RICS Valuation – Global Standards* (Red Book Global Standards) applies the latest international standards and supplements them with additional requirements and best practice guidance. When combined, they provide the highest levels of assurance to promote and maintain public trust in valuation professionalism and quality.

3 This edition adopts and applies the *International Valuation Standards* (IVS) published by the International Valuation Standards Council (IVSC). IVS includes mandatory requirements that must be followed in order to declare that a *valuation* was performed in compliance with it. Changes since the last edition include:

- an updated glossary that clarifies alignment with IVS
- a revised ordering of VPSs to map to IVS and
- a new **VPS 5** covering *valuation models* to align with IVS.

4 The IVS are reproduced with kind permission from IVSC in Part 6. They were approved by the IVSC Standards Board with an effective date of 31 January 2025.

5 Members are reminded that IVSC reserves the right to make further amendments to IVS at any time. Any consequential amendments to Red Book Global Standards will be made in accordance with paragraphs 21–22 below.

6 Red Book Global Standards is delivered in a broader framework of RICS Rules of Conduct and professional standards covering ethics, skills and conduct – including express requirements regarding the maintenance of confidentiality and the avoidance of conflicts of interest. This RICS framework also has regard to the International Ethics Standards.

7 Compliance with professional, technical and performance standards is reinforced by a well-established process of regulation and, where necessary, enforcement; and through a system of practising RICS Valuer Registration. This ensures the positioning of RICS members and *RICS-regulated firms* as the leading global providers of IVS-compliant *valuations*.

Coverage

From the valuation provider's perspective

8 For members and firms *registered for regulation* by RICS, these global standards set out procedural requirements and guidance that:

a impose on individual valuers and firms *registered for regulation* by RICS certain mandatory obligations regarding competence, objectivity, transparency and performance

b establish a framework for uniformity and best practice in the execution and delivery of *valuation* assignments through the adoption of IVS, and

c expressly comply with RICS Rules of Conduct.

9 These global standards do not:

a instruct members on how to value in individual cases

b prescribe a particular format for reports; provided the mandatory requirements in these standards are met, reports should always be appropriate and proportionate to the task

c override standards specific to, and mandatory in, individual jurisdictions.

From the valuation user's perspective

10 For clients and other *valuation* users, these global standards ensure that *valuation* assignments are carried out in accordance with IVS. Furthermore, they promote and maintain a high level of public trust and confidence by providing assurance of:

a consistency in approach, aiding understanding of the *valuation* process and of the value reported

b credible and relevant *valuation* opinions by competently trained valuers with appropriate qualification and adequate experience for the task, including current knowledge and understanding of the relevant market

c independence, objectivity and transparency in the valuer's approach

d certainty and clarity regarding:

i *terms of engagement (scope of work)*, including matters to be addressed and disclosures to be made

ii the *bases of value*, including any *assumptions, special assumptions* or material considerations to be taken into account

e accuracy in reporting, including proper and adequate disclosure of relevant matters where *valuations* may be relied on by a *third party*.

Structure and status

11 Red Book Global Standards is grouped into six distinct Parts, as explained in detail in paragraphs 12 to 17 below. Parts 3 and 4 cover matters relevant to *valuation* assignments generally, while Part 5 relates to particular *valuation* applications. Parts 3 and 4 contain the mandatory material emphasised by the use of the emboldened term 'must', and Part 5 contains the advisory material, which includes best practice recommendations denoted by the term 'should' and optional matters using terms such as 'may'. Further detail is contained in the standards and guidance naming conventions in Part 2.

Professional standards – mandatory

12 Global professional and ethical standards as they specifically apply to valuers are denoted by a **PS** reference and are **mandatory** (unless otherwise stated) for all members providing written *valuations*. They define the parameters for compliance with Red Book Global Standards, including:

- adoption of IVS
- specifying associated RICS regulatory requirements, and
- clarifying the detailed application of the RICS Rules of Conduct when members are undertaking *valuation* work.

They comprise:

- PS 1 – Compliance with standards where a written valuation is provided
- PS 2 – Ethics, competency, objectivity and disclosures

Valuation technical and performance standards – mandatory

13 Global valuation technical and performance standards are denoted by a **VPS** prefix and contain specific **mandatory** (unless otherwise stated) requirements and related implementation guidance, with the aim of providing a *valuation* that is IVS-compliant. They comprise:

- VPS 1 – Terms of engagement (scope of work)
- VPS 2 – Bases of value, assumptions and special assumptions
- VPS 3 – Valuation approaches and methods
- VPS 4 – Inspections, investigations and records
- VPS 5 – Valuation models
- VPS 6 – Valuation reports

14 The current order of the VPSs corresponds with that of IVS General Standards, which the VPSs adopt and apply.

RICS global valuation practice guidance applications (VPGAs) – advisory

15 RICS valuation practice guidance applications are denoted by a **VPGA** prefix and provide further implementation guidance in the specific instances listed. They include *valuations* for specific purposes (of which financial reporting and secured lending are among the most widely encountered), and *valuations* of specific asset types, where particular issues and/or practical considerations expressly need to be taken into account. These VPGAs embody best practice – that is, procedures that in the opinion of RICS meet a high standard of professional competence.

16 While not themselves mandatory, the VPGAs do cross-reference the material in IVS and these global standards that is mandatory. This is intended to assist members in identifying material relevant to the *valuation* assignment they are undertaking.

17 The VPGAs comprise:

- VPGA 1 – Valuations for financial reporting
- VPGA 2 – Valuations for secured lending
- VPGA 3 – Valuation of businesses and business interests
- VPGA 4 – Valuation of trade related properties
- VPGA 5 – Valuation of plant and equipment (including infrastructure)
- VPGA 6 – Valuation of intangible assets
- VPGA 7 – Valuation of arts and antiques
- VPGA 8 – Valuation of real property interests
- VPGA 9 – Valuing portfolios and groups of assets
- VPGA 10 – Material valuation uncertainty (MVU)
- VPGA 11 – Relationship with auditors

National or jurisdictional standards

18 For jurisdictions with a high concentration of RICS members undertaking *valuations* and/or a particular regulatory need, RICS may also publish – separately from but supplementary to these global standards – national professional standards and practice information (commonly titled as national supplements, jurisdiction guides, National Association Valuation Standards or Application of RICS Valuation: Professional Standards) that address the application of these standards in individual jurisdictions and generally assist interpretation in local contexts. While remaining consistent with the relevant international standards overall, they are produced to cover specific statutory, regulatory or other standards requirements in those jurisdictions. Production and maintenance of national standards is at the discretion of RICS and subject to its governance process. Compliance with local jurisdictional standards is covered in more detail in PS 1.

Effective date and amendments

19 This edition takes effect from 31 January 2025 and applies to all *valuations* where the *valuation date* is on or after that day. Any amendments issued to take effect after that date will be clearly labelled.

20 The definitive RICS Red Book Global Standards text current at any given date is that on the RICS website. Any users of this publication should ensure they are aware of any amendments subsequently issued.

21 The content of these standards is under regular review, and amendments and additions will be issued as and when required. Members' attention will be drawn to any changes, including the effective date of those changes, using established RICS electronic communications channels.

22 Where amendments may have a significant effect, they will be publicly consulted on in most cases, with access to a consultation draft facilitated through the RICS website. Feedback on consultation drafts will be considered by the Global Valuation Standards Expert Working Group and the appropriate RICS governance, including the Knowledge and Practice Committee and Standards and Regulation Board, who give final approval for any changes.

Part 2: Glossary

This glossary defines terms used in these global standards that have a special or restricted meaning, or where clarification is required around alignment with IVS or other relevant standards. Words or phrases not appearing in the glossary follow their common dictionary meaning. Where a defined term is used in this volume, it is identified with *italic* font.

Members' attention is drawn to IVS' glossary (reproduced in Part 6), which has additional definitions specifically to assist with the understanding and application of IVS. This includes the convention used by IVSC to signal the status of individual IVS content, for example, whether it is mandatory, advisory, etc. These are not replicated here. The individual IVSC standards also contain definitions specific to the particular IVS, to which members should refer as appropriate.

RICS national or jurisdictional standards may have additional defined terms; these will be identified and defined in the context of the specific standard.

Term	Definition
Assumption	A supposition taken to be true. It involves facts, conditions or situations affecting the subject of, or approach to, a *valuation* that, by agreement, do not need to be verified by the valuer as part of the *valuation* process.
Basis of value	The fundamental premises on which the reported values are or will be based (examples are included in IVS 102 paragraph 20 and IVS 102 Bases of Value: Appendix).
Cost approach	An approach that provides an indication of value using the economic principle that a buyer will pay no more for an asset than the cost to obtain an asset of equal utility, whether by purchase or construction.
Date of the report	The date on which the valuer signs the report.
Date of valuation	See *valuation date*.
Departure	Advice provided by a valuer that is contrary to a specific provision in **VPSs 1–6** that is not mandatory within the relevant context or jurisdiction nor within the specific exceptions in **PS 1 section 5** (see **PS 1 section 6**).
Depreciated replacement cost (DRC)	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.

Term	Definition
Equitable value	The estimated price for the transfer of an asset or liability between identified, knowledgeable and willing parties that reflects the respective interests of those parties (see IVS 102 paragraph A30).
Environmental, social and governance (ESG)	The criteria that together establish the framework for assessing the impact of the *sustainability* and ethical practices, financial performance or operations of a company, asset or liability. *ESG* comprises three pillars: *environmental, social and governance*, all of which may collectively impact performance, the wider markets and society (IVS glossary). The definition above highlights that although *ESG* can refer to companies and investors, *ESG*-related factors are also used to describe the characteristics and, where relevant, operation of individual and groups of assets. It is used throughout these standards in this context. Also see *sustainability*. Both terms are used in conjunction throughout these standards; however, *ESG* is the assessment tool and framework, whereas *sustainability* is the goal and/or outcome.
External valuer	A valuer who, together with any associates, has no material links with the client, an agent acting on behalf of the client or the subject of the assignment.
Fair value	'The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.' (IFRS 13.) Other definitions may apply/exist.
Financial statements	Written statements of the financial position of a person or a corporate entity, and formal financial records of prescribed content and form. These are published to provide information to a wide variety of unspecified *third-party* users. *Financial statements* carry a measure of public accountability that is developed within a regulatory framework of accounting standards and the law.
Firm	The *firm* or organisation for which the member works, or through which the member trades.
Goodwill	Any future economic benefit arising from a business, an interest in a business, or the use of a group of assets that is not separable. The aspects of *goodwill* can vary depending on the intended use of the *valuation* (see IVS 210, para 20.09).
Income approach	An approach that provides an indication of value by converting future cash flows to a single current capital value.

Term	Definition
Inspection	A visit to a property or *inspection* of an asset to examine it and obtain relevant information in order to express a professional opinion of its value. However, physical examination of a non-*real estate* asset, for example, a work of art or an antique, would not be described as '*inspection*' as such.
Intangible asset	A non-monetary asset that manifests itself by its economic properties. It does not have physical substance but grants rights and/or economic benefits to its owner.
Internal valuer	A valuer who is in the employ of either the enterprise that owns the assets, or the accounting firm responsible for preparing the enterprise's financial records and/or reports. An *internal valuer* is generally capable of meeting the requirements of independence and professional objectivity in accordance with **PS 2 section 3**, but may not always be able to satisfy additional criteria for independence specific to certain types of assignment, for example under **PS 2 paragraph 3.4**.
International Financial Reporting Standards (IFRS)	Standards set by the International Accounting Standards Board (IASB) with the objective of achieving uniformity in accounting principles. The standards are developed within a conceptual framework so that elements of *financial statements* are identified and treated in a manner that is universally applicable.
Investment property	Property that is land or a building, or part of a building, or both, held by the owner to earn rentals or for capital appreciation, or both, rather than for: • use in the production or supply of goods or services, or for administrative purposes, or • sale in the ordinary course of business.
Investment value, or worth	The value of an asset to the owner or a prospective owner for individual investment or operational objectives (see IVS 102 paragraph A40).
Market approach	An approach that provides an indication of value by comparing the subject asset with identical or similar assets for which price information is available.

Term	Definition
Market rent	The estimated amount for which an interest in real property should be leased on the *valuation date* between a willing lessor and willing lessee on appropriate lease terms in an arm's-length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion (see IVS 102 paragraph A20).
Market value	The estimated amount for which an asset or liability should exchange on the *valuation date* between a willing buyer and a willing seller in an arm's-length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion (see IVS 102 paragraph A10).
Marriage value/ synergistic value	An additional element of value created by the combination of two or more assets or interests where the combined value is more than the sum of the separate values.
Personal property	Assets (or liabilities) not permanently attached to land or buildings: • **including**, but not limited to, fine and decorative arts, antiques, paintings, gems and jewellery, collectables, fixtures and furnishings, and other general contents • **excluding** trade fixtures and fittings, *plant and equipment*, businesses or business interests, or *intangible assets*. The boundaries between these categories are not always easy to define, and the criteria used may vary according to the particular market sector the assets serve, the purpose of the *valuation* and relevant national and international accounting conventions. In particular, the term *personal property* is used to describe *plant and equipment* (and other assets not forming part of real property) in certain jurisdictions, and additionally used to describe arts and antiques in other jurisdictions.

Term	Definition
Plant and equipment (including infrastructure)	This may be broadly divided into the following categories. • **Plant:** assets that are combined with others and that may include items that form part of industrial infrastructure, utilities, building services installations, specialised buildings, and machinery and equipment forming a dedicated assemblage. • **Machinery:** individual, or a collection or a fleet or system of, configured machines/technology (including mobile assets such as vehicles, rail, shipping and aircraft) that may be employed, installed or remotely operated in connection with a user's industrial or commercial processes, trade or business sector (a machine is an apparatus used for a specific process). • **Equipment:** an all-encompassing term for other assets such as sundry machinery, tooling, fixtures, furniture and furnishings, trade fixtures and fittings, sundry equipment and technology and loose tools that are used to assist the operation of the enterprise or entity. • **Infrastructure:** a collection of assets, systems and facilities dedicated to a specific production process requirement; this may include a significant quantity of different equipment, civil works, land improvements and structures.
Purpose of valuation/ valuation purpose	The reason(s) a *valuation* is performed. For the purpose of these standards, it is broadly equivalent to the IVS-defined term 'intended use'.
Real estate	Land and all things that are a natural part of the land (e.g. trees, minerals) and things that have been attached to the land (e.g. buildings and site improvements) and all permanent building attachments (e.g. mechanical and electrical plant providing services to a building), that are both below and above the ground. (Note that a right of ownership, control, use or occupation of land and buildings is defined as a real property interest in IVS 400 paragraph 20.2.)
Records/ valuation records/ documentation	A piece of information that is stored, either as a digital record or hard copy. This is referred to in IVS in different contexts as data, inputs and documentation. Data and input documentation is covered in IVS 104 paragraph 50.

Term	Definition
Regulated by RICS (RICS-regulated firm)/registered for regulation	A *firm* or individual that is *registered for regulation* by RICS under the RICS bye-laws.
Responsible valuer	A named valuer who accepts responsibility for the *valuation* and is appropriately qualified (defined at PS 2 paragraph 2.1).
Special assumption	An *assumption* that either assumes facts that differ from the actual facts existing at the *valuation date* or that would not be made by a typical market participant in a transaction on the *valuation date*. In some jurisdictions these are also referred to as hypothetical conditions.
Special purchaser	A particular buyer for whom a particular asset has a *special value* because of advantages arising from its ownership that would not be available to other buyers in a market.
Special value	An amount that reflects particular attributes of an asset that are only of value to a *special purchaser*.
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 the uniqueness arising from its specialised nature and design, its configuration, size, location or otherwise.
Sustainability	Carrying out activities without depleting resources or having harmful impacts. It includes matters such as (but not restricted to) environment and climate change, health and wellbeing, and personal and collective responsibility that can or do impact *valuation*. Also see *environmental, social and governance (ESG)*. Both terms are used in conjunction throughout these standards; however, *ESG* is the assessment tool and framework, whereas *sustainability* is the goal and/or outcome.
Terms of engagement (or scope of work)	Written confirmation of the conditions that either the member proposes or that the member and client have agreed will apply to the undertaking and reporting of the *valuation*. Referred to in IVS as 'scope of work' – see IVS 101 paragraph 10.01.
Third party	Any party, other than the client, who may have an interest in the *valuation* or its outcome.
Trade related property	Any type of real property, designed or adapted for a specific type of business, where the property value reflects the trading potential for that business.

Term	Definition
Trading stock	Stock held for sale in the ordinary course of business, for example, in relation to property, land and buildings held for sale by builders and development companies.
Valuation	An opinion of the value of an asset or liability on a stated basis, at a specified date. If supplied in written form, all *valuation* advice given by members is subject to at least some of the requirements of Red Book Global Standards – there are no exemptions (**PS 1 paragraph 1.1**). Unless limitations are agreed in the *terms of engagement,* a *valuation* will be provided after an *inspection*, and any further investigations and enquiries that are appropriate, having regard to the nature of the asset and the *purpose of the valuation*. IVS define *valuation* as a process: 'The act or process of forming a conclusion on a value as of a valuation date that is prepared in compliance with IVS.'
Valuation date	The date on which the opinion of value applies. The *valuation date* should also include the time at which it applies if the value of the type of asset can change materially in the course of a single day.
Valuation model	A quantitative implementation of a method in whole or in part that converts inputs into outputs used in the development of a value.
Valuation process review	A part or the whole of a *valuation review* (see definition below) that addresses compliance with IVS and/or compliance with Red Book Global Standards.
Valuation review	This is defined in the IVS glossary as either a *valuation process review* or a *value review*, or both. IVS 101 confirms that a *valuation review* is not a *valuation*, and that the scope of work must state whether the *valuation review* is a *valuation process review* or a *value review*, or both. However, IVS 106 paragraph 40.02 notes that if a value is provided as part of the *value review*, then this is a *valuation*.
Value review	A part of or the whole of a *valuation review* (see definition above). A *value review* is defined in the IVS glossary as an analysis by the valuer applying IVS to assess and provide an opinion on the value of another valuer's work. This does not include an opinion on the *valuation* process. IVS 101 confirms that a *value review* addresses the reasonableness of a value.
Worth	See *investment value*.

Standards and guidance naming conventions explained

Description	Status	Includes	Comments
Standards	Mandatory	Mandatory International Valuation Standards (IVS) as issued by the International Valuation Standards Council (IVSC). RICS professional standards – denoted by the prefix PS. RICS valuation technical and performance standards – denoted by the prefix VPS.	IVS are adopted and applied by RICS in Red Book Global Standards, being cross-referenced throughout. Members **must** comply with an RICS professional standard. Standards include mandatory requirements, which use the word 'must' and must be complied with.
Guidance	Advisory	RICS valuation practice guidance applications – denoted by the prefix VPGA.	VPGAs are advisory and not mandatory in content. However, they alert members (where appropriate) to relevant mandatory material contained elsewhere in Red Book Global Standards, including to the relevant IVS. Guidance includes recommended best practice, which uses the word 'should'. It is recognised that there may be acceptable alternatives to best practice that achieve the same or a better outcome.

In regulatory or disciplinary proceedings, RICS will take into account relevant professional standards when deciding whether an RICS member or *RICS-regulated firm* acted appropriately and with reasonable competence. It is also likely that during any legal proceedings a judge, adjudicator or equivalent will take RICS professional standards into account.

RICS also separately publishes professional standards and practice information covering specific specialist subjects and/or single jurisdictions.

Part 3: Professional standards

PS 1 Compliance with standards where a written valuation is provided

All members, whether practising individually or within an *RICS-regulated* or non-regulated *firm*, who provide a written *valuation* **must** comply with the mandatory standards set out below.

Members **must** also comply with the requirements of RICS Valuer Registration Scheme (VRS).

1 Mandatory application

1.1 Compliance with **PS 1**, PS 2 and the **VPSs** within these global standards is mandatory for any member of RICS or *RICS-regulated firm* involved in undertaking or supervising *valuation* services by the provision of written *valuation* advice, notwithstanding the exceptions to the **VPSs** covered at **PS 1 section 5**.

1.2 The phrase 'undertaking or supervising *valuation* services' includes any person who is responsible for, or accepts responsibility for, analysing and communicating a written opinion of value. This may include individuals who produce but do not sign *valuation* reports in their organisation, and conversely individuals who sign by way of supervision or assurance but do not produce *valuation* reports in their organisation. 'Written' for this purpose means conveyed by paper, any electronic or digital means, or form of recorded media (for purely oral opinions of value, see paragraph 1.8 below).

1.3 IVS 105, which addresses the selection and use of *valuation models* to be used in the *valuation* process, says 'No model without the valuer applying professional judgement, for example an automated valuation model (AVM), can produce an IVS-compliant valuation'. An AVM output that has not been subject to the application of professional judgement by a valuer is also not compliant with these standards. The provision of a *valuation* wholly or partly based on the output of one or more of:

- an automated valuation model (AVM)
- a *valuation modelling* tool or *valuation* calculation software

- a *valuation* process software tool or template automation tool
- a model and/or process assisted or produced by artificial intelligence (AI)

or their equivalent(s) is only regarded as the provision of a written *valuation* for the purpose of these standards if it has been subject to the additional application of professional judgement by a valuer, which **must** be applied in accordance with the mandatory requirements of these standards.

1.4 The use of open source and/or commercially available AI is not prohibited, subject to professional judgement, *terms of engagement*, investigations, reporting and *records* appropriately and proportionately considering:

- confidentiality
- intellectual property
- data and input verification
- appropriate assessment and professional judgement in relation to any process and/or model outputs (also see 1.3 above)
- transparency with the intended user(s) of the *valuation* and
- all other ethical, technical and legal matters referred to in these standards.

1.5 The use of data from some form of automated data gathering, such as but not limited to scraping tools (software programmed to sift through usually public databases and extract information) and application programme interfaces (APIs) is usually acceptable subject to 1.3 and 1.4 above, confidentiality, professional judgement, intellectual property rights and verification.

1.6 A specialist or service organisation may be used for any of the tasks or operations referred to at paragraphs 1.3–1.5; see IVS 104 Data and Inputs, section 20.

1.7 An estimated replacement cost figure for assets other than *personal property* that is provided either in a written report or separately, for the purpose of insurance, is not a 'written opinion of value' for the purpose of 'undertaking *valuation* services' as defined in paragraph 1.2 above.

1.8 For the avoidance of doubt, where – exceptionally – *valuation* advice is provided wholly orally, these standards should still be observed to the fullest extent possible. Members are reminded that the mere fact that advice is provided orally does not mean that it is therefore provided without liability – the member's responsibilities and obligations will always depend on the facts and circumstances of the individual case. In some jurisdictions, the provision of oral *valuation* advice is in any event subject to jurisdiction-specific standards requirements. In all jurisdictions, members acting as expert witnesses should be alert to the fact that both oral and written advice will be subject to the same criteria – see, for example, the current edition of RICS' Surveyors acting as expert witnesses.

1.9 These global standards have been written as they apply to the individual member. Where it is necessary to consider their application to a *firm registered for regulation* by RICS, they are to be interpreted accordingly.

2 Compliance within firms

2.1 There is an individual responsibility on the part of all *members* to comply with these global standards whether they practise as individuals or within *firms*. In the latter case, how this responsibility is put into practice will depend, to a certain extent, on the nature of the *firm*.

- *Firms regulated by RICS*: The *firm* and all RICS members in the *firm* **must** ensure that all processes and *valuations* are fully compliant with the mandatory requirements in these global standards. This includes *valuations* that are not the responsibility of an RICS member.
- *Firms* not regulated by RICS: While such *firms* may have their own corporate processes over which RICS cannot exert control, individual members in these *firms* who are responsible for *valuations* **must** comply with the mandatory requirements in these global standards.

2.2 Where the member contributes to a *valuation*, reference should also be made to **PS 2 section 2**.

3 Compliance with international standards

International Valuation Standards (IVS)

3.1 RICS recognises the International Valuation Standards Council (IVSC) as the setter of International Valuation Standards (IVS), which comprise internationally accepted *valuation* principles and definitions. These global standards adopt and apply IVS, setting out specific requirements for, together with additional guidance on, their practical implementation. IVS effective from 31 January 2025 are reproduced in full in Part 6 of these global standards.

3.2 Where there is a specific requirement in relation to an individual *valuation* assignment that the *valuation* complies with IVS, and this needs to be made clear both in the *terms of engagement* and in the report, then the form of endorsement in **VPS 1 paragraph 3.2(n)** and **VPS 6 paragraph 2.2(k)** may be adopted. Otherwise, the general form of endorsement in **VPS 1** and **VPS 6** may be used, namely that the *valuation* will be/has been undertaken in accordance with Red Book Global Standards (more formally, *RICS Valuation – Global Standards*).

3.3 Members are reminded that where a statement is made that a *valuation* will be or has been undertaken in accordance with IVS, it is implicit that all relevant individual IVS standards are complied with.

International Ethics Standards (IES)

3.4 RICS is a member of an international coalition of professional organisations that develop and implement globally recognised ethics standards for property and related professional services, known as the International Ethics Standards Coalition (IESC). The global standards in this edition are consistent with the 2021 IES, and also include additional and more detailed requirements that all members **must** observe. IES does not replace the RICS Rules of Conduct that are mandatory for RICS members and *RICS-regulated firms*.

International Property Measurement Standards (IPMS)

3.5 RICS is also a member of an international coalition of professional organisations that develop and implement consistent and transparent property (i.e. *real estate*) measurement standards. Where members are undertaking *valuation* work relating to *real estate* assets or liabilities, they should have regard to the International Property Measurement Standards (IPMS) wherever applicable.

4 Compliance with jurisdictional or other valuation standards

4.1 It is recognised that a member and/or *RICS-regulated firm* may be requested to provide *valuations* that comply with *valuation* standards other than those set out in Red Book Global Standards. This will normally arise in relation to the requirements that apply in individual jurisdictions. Members and *RICS-regulated firms* can comply with such requirements, which may include a *basis of value* not listed in **VPS 2**. In these cases, a statement **must** be included in the *terms of engagement* and in the report that the named *valuation* standards have been complied with. The *basis of value* adopted, and its definition, **must** also be included in the *terms of engagement* and report.

4.2 If compliance with *valuation* standards other than those set out in Red Book Global Standards is mandatory in the jurisdiction concerned, i.e. because of statutory, regulatory or other authoritative requirements, then this does not preclude the *valuation* still being declared as performed in accordance with Red Book Global Standards. Members are reminded that if supplied in written form, all *valuation* advice given by members is subject to at least some of the requirements of Red Book Global Standards – there are no exemptions (**PS 1 paragraph 1.1**).

4.3 RICS may publish national supplements to Red Book Global Standards to assist members in the application of the *valuation* standards in a local context. Where appropriate, these supplements may be produced as joint publications with local valuation professional organisations (VPOs) or published separately but reflecting those VPOs' requirements where not at variance with RICS requirements.

4.4 Where the compliance with other valuation standards is voluntary, i.e. not falling within either paragraph 4.2 above or this paragraph, this will involve a *departure* – see **section** 6 below. Note that compliance with other *valuation* standards cannot override the mandatory requirements of **PS 1** and **PS 2**, which members **must** at all times observe.

5 VPSs 1–6 exceptions

5.1 **PS 1** and PS 2 are mandatory and apply in all cases when members are providing *valuation* advice in a written form (see Introduction paragraph 12 and **PS 1 paragraph 6.1**). Similarly, where *valuation* advice is given wholly orally, the principles set out in Red Book Global Standards should still be observed to the fullest extent possible (**PS 1 paragraph 1.8**).

5.2 However, there are particular categories, phases or aspects of *valuation* activity where the mandatory application of **VPSs 1–6** may be unsuitable or inappropriate (see **PS 1 paragraph 5.4**). Even though not mandatory in such circumstances, the adoption of the relevant standards is nevertheless encouraged where not impossible.

5.3 Where **VPSs 1–6** have not been complied with, members **must not** state that the *valuation* was performed in accordance with IVS. However, they are able to advise that it was performed in accordance with Red Book Global Standards on an excepted basis.

5.4 The circumstances where **VPSs 1–6** are not of mandatory application are as follows.

a Providing an agency or brokerage service in respect of the acquisition or disposal of one or more assets.

Here, the current edition of RICS' Property agency and management principles applies. This exception covers the provision of advice in the expectation of, or during, an agency/broker instruction to acquire or dispose of an interest in an asset(s) and/or liability/liabilities. It also covers advice on whether a given offer should be made or accepted. However, the exception does not cover a purchase report that includes a *valuation*.

b Providing *valuation* advice expressly in preparation for, or during, negotiations or litigation, including where the valuer is acting on the behalf of others, representing their interests or needs.

The negotiations exception covers *valuation* advice on the likely outcome of current or impending negotiations, or requests for figures to be quoted in connection with such negotiations. It therefore recognises that:

- although there may not yet be an unresolved dispute, the advice is being provided expressly in preparation for, or during, negotiations that may lead either to agreement or to the creation of an unresolved dispute, triggering (where the context allows it) a formal process of resolution (for example, reference to the courts, to arbitration, etc.)
- the negotiation advice may, and often will, extend to advice on matters such as tactics and/or probable outcomes and/or options to achieve resolution without recourse either to litigation or to other formal procedures
- the precise circumstances in which a member (not necessarily solely a valuer) may be asked to advise a client on the purchase or disposal of a property or enter into negotiations on behalf of their client vary widely. It may be a 'passive' assignment, in which the member simply offers professional advice, or an 'active' assignment,

in which the member both gives initial advice and also acts for the client in the subsequent event itself. Either way, **VPSs 1–6** will apply to all *valuation* advice given by members in writing.

The litigation exception recognises that:

- there is a dispute in existence, however it arises, and the proceedings will therefore be subject to any relevant legislation, regulation, rules or court directions that may be in place or issued, which will always take precedence over Red Book Global Standards
- advice given to a client may extend to various matters going beyond the provision of advice on value, for example advice on tactics and/or the probable outcome of litigation and/or options regarding settlement of the dispute or mitigation of costs.

c Acting or preparing to act as an expert witness.

The rationale for the exception is to recognise that a member acting as an expert witness **must** follow the specific rules and procedures laid down by the court, tribunal or other judicial body before which the member will, or may, be appearing. In addition, the member **must** meet and observe very high standards of impartiality and objectivity. Reference may usefully be made to the current edition of RICS' Surveyors acting as expert witnesses.

d Performing statutory functions.

Statutory functions are most often, though not invariably, carried out by valuers employed by government, a public authority or a government-authorised agency, and involve exercise or enforcement of the law. However, the fact that a valuer may be employed in the public sector or may be acting for a public sector client does not mean that all work undertaken by that valuer involves the performance of a statutory function – in many cases it will not. In the absence of legislation specifying and defining a specific role or function, and an individual's express appointment to discharge it, the exception will not apply.

As illustrative examples (and not intended to comprise an exhaustive list), the 'statutory function' exception does not apply to:

- *valuations* conducted for the purpose of determining stamp duty on property transfers in Australia as required by the Duties Act, while generally following statutory rules determined at the state level, are undertaken by private valuers not acting in a statutory capacity
- mortgage lending *valuations* in Germany and other European countries that are required for mortgage approvals. In Germany, they are governed by Pfandbriefgesetz rules and undertaken by private valuers not acting in a statutory capacity
- *valuations* conducted for the assessment of inheritance tax under the Testo Unico delle Imposte sui Ridditi in Italy are undertaken by private valuers in accordance with statutory guidelines and not acting in a statutory capacity

- *valuations* in accordance with the Charities Acts in the UK undertaken by private valuers not acting in a statutory capacity
- *valuations* for national taxation purposes in the UK undertaken by private valuers not acting in a statutory capacity
- *valuations* for 'right to buy' cases in the UK undertaken by private valuers not acting in a statutory capacity (however, the exception does apply, for example, to a district valuer in England and Wales undertaking a determination, which is a statutory function of a quasi-judicial nature).

In terms of providing *valuations* for local taxation work, *valuations* undertaken by a member acting in a statutory capacity (e.g. as *valuation* officer or listing officer) fall within the statutory function exception. However, both statute and case law impose specific and extensive duties and obligations on those performing statutory functions, and they **must** also act in compliance with **PS 1** and PS 2.

e Providing *valuations* to a client purely for internal purposes, on express contractual terms that exclude the valuer's liability, and without communication to a *third party*.

In addition to *valuations* prepared by a valuer for the organisation that employs them, where this is solely for internal use by that organisation and where no part of any report or *valuation* will be seen by or communicated to any *third party*, this internal purposes exception is designed to also recognise that there are occasions where advice is sought from valuers not employed by a client. This could include, for example, providing additional services in connection with a regular portfolio *valuation* that will not be released to *third parties* (for example, a 'what if' scenario in connection with proposed asset management initiatives) and that will be provided on express contractual terms that exclude the valuer's liability.

For the avoidance of doubt, express contractual terms that exclude the valuer's liability **must** be more than a simple statement in the *terms of engagement* to fulfil this exception criteria – it must be both properly understood by the client and legally effective. Where members undertake such additional work, the *terms of engagement* and the written advice itself **must** be explicit about the prohibition on disclosure to any other party and use for any other purpose, and be clear about the exclusion of liability, for this exception to be valid. Often, such advice does not attract an additional fee. Where the provision of such additional 'ad hoc' *valuation* services is not explicitly referred to in the overarching *terms of engagement* for the regular portfolio *valuation*, an addendum to the *terms of engagement*, containing all the above caveats, will be required for this exception to be valid.

This exception is purely focused on:

- the purpose and use of the advice
- it being truly 'internal only' (regardless of who prepares it)
- express contractual terms that exclude the valuer's liability, and
- the client fully understanding the nature and extent of the advice.

If this is not the case, the exception is not valid.

A *valuation* provided by an external party for internal purposes (as opposed to a *valuation* carried out internally by an employee for their employer, which would not be subject to potential liability) does not automatically lead to the valuer being absolved of any potential liability, and in some countries such as the UK excluding liability may only be possible if it is reasonable to do so. If it is unreasonable, it could result in unlimited liability.

Given the material risk that an outright exclusion of liability would likely be unreasonable in some countries, it is advisable for members to cap their liability at an appropriate level (which will vary from case to case) as opposed to seeking to exclude liability completely – in which case, this exception would not apply. Members in the UK may wish to refer to RICS' **Risk, liability and insurance**.

5.5 The circumstances in which members are instructed to provide *valuation* reports and advice vary widely and may, in some cases such as in compulsory purchase, local taxation and arbitration/litigation-related work, take several years to reach a conclusion. During this time, the instruction may be significantly amended – resulting in an instruction that began as an 'exception' ceasing to be so. If a member's role changes during this process, their actions **must** be transparent, the application of Red Book Global Standards at any given point in time fully documented and the client made aware of any change to the member's role or undertaking.

5.6 Even though the content of VPS 1 may not be mandatory in 'exception' cases, *terms of engagement* are still required and they **must** be clear, unambiguous and appropriately documented. This is as much in the interests of the member as of the client, as it ensures there is no ambiguity about what is being requested and supplied.

5.7 *Valuations* are either compliant with Red Book Global Standards or not. Terms such as 'quasi–Red Book' or 'partial Red Book' – or even 'non-Red Book' – **must not** be used in *terms of engagement* or reporting, or even in conversation. Any appropriate exceptions to **VPSs 1–6 must** be explicitly stated and explained in the *terms of engagement* and *valuation* report.

6 Departures

6.1 No *departure* is permitted from **PS 1**, where a written *valuation* is provided, or PS 2 in these global standards, which are mandatory in all circumstances.

6.2 If, separately and independently from either the specific exceptions set out above or any assignment falling in the scope of sections 4 and 5 above, a valuer is requested to provide advice that is contrary to a specific provision in **VPSs 1–6** inclusive, then the client **must** be advised that this is a *departure* from these standards and a clear statement to that effect included in the *terms of engagement*, report and any published reference to it.

6.3 For the avoidance of doubt:

a If the *valuation* falls to be provided in compliance with prescribed statutory or legal procedures or other authoritative requirements then, provided those requirements are mandatory in the context or jurisdiction, compliance does not by itself constitute a *departure* – though the requirement to do so **must** be made clear.

b For most *valuation purposes*, one of the *bases of value* specified in **VPS 2 paragraph 2.2** will be appropriate. Where another basis is used, this **must** be clearly defined and stated in the report. If adoption of that basis is mandatory in the particular context or jurisdiction, then adoption does not by itself constitute a *departure*, though the mandatory requirement to do so **must** be made clear. RICS does not encourage the voluntary use of a *basis of value* not specified in **VPS 2**, and will always regard such voluntary use as involving a *departure* from Red Book Global Standards.

6.4 A member who makes a *departure* may be required to justify the reasons for this.

7 Regulation: monitoring compliance with these global standards

7.1 As a self-regulating body, RICS has a responsibility to monitor and seek assurance of compliance by its members and *RICS-regulated firms* with these global standards. It has the right under its bye-laws to seek information from members or *firms*. The procedures under which such powers will be exercised in relation to *valuations* are set out on the RICS website.

7.2 Members **must** also comply with the RICS Valuer Registration Scheme requirements where applicable.

8 Application to members of other valuation professional organisations

8.1 These global standards may also be formally adopted by other valuation professional organisations (VPOs) subject to the prior approval and agreement of RICS.

PS 2 Ethics, competency, objectivity and disclosures

As it is fundamental to the integrity of the *valuation* process, all members practising as valuers **must** have the appropriate experience, skill and judgement for the task in question and **must** always act in a professional and ethical manner free from any undue influence, bias or conflict of interest.

1 Professional and ethical standards

1.1 RICS members operate to the highest professional and ethical standards and **must** comply with the RICS Rules of Conduct. The criteria for RICS membership and for qualification and practice as a valuer, including the requirements of the RICS Valuer Registration Scheme where applicable (see **PS 1 section 1**), meet or exceed the standards for the conduct and competency of professional valuers promoted by RICS and IVSC.

1.2 These global standards are also consistent with the ethical principles published by the International Ethics Standards Coalition, of which RICS is a member.

1.3 As well as being required to conform to the RICS Rules of Conduct, all RICS members are subject to additional detailed requirements as set out below. Observance is monitored and enforced through RICS Regulation.

1.4 The requirements set out in these global standards are expressly focused on members undertaking *valuation* work, i.e. opinions of value prepared by a member having the appropriate technical skills, experience and knowledge of the subject of *valuation*, the market and the *purpose of the valuation*.

1.5 Members **must** act with integrity and avoid any actions or situations that are inconsistent with their professional obligations. They **must** bring the required levels of independence and objectivity to bear on individual assignments, applying professional scepticism to information and data where it is to be relied on as evidence. Professional scepticism is an attitude that includes a questioning mind, critically assessing evidence relied on in the *valuation* process and being alert to conditions that may cause information provided to be misleading. Members **must not** allow conflicts of interest to override their professional or business judgement and obligations, and **must not** divulge confidential information. All members **must** comply with the current edition of RICS' Conflicts of interest.

2 Member qualification

2.1 Members and *RICS-regulated firms* **must** ensure that services are provided by competent individuals who have the necessary expertise. An individual who is appropriately qualified to accept responsibility for, or supervise the inputs into, a *valuation* **must** satisfy the following criteria:

- appropriate academic/professional qualifications, demonstrating technical competence
- membership of a professional body, demonstrating a commitment to ethical standards
- sufficient current local, national and international (as appropriate) knowledge of the asset type and its particular market, and the skills and understanding necessary, to undertake the *valuation* competently
- compliance with any country or state legal regulations governing the right to practise *valuation* and
- where applicable, compliance with the RICS Valuer Registration Scheme (VRS) requirements.

2.2 As members are active across a wide range of specialisms and markets, membership of (including holding a qualification from) RICS or registration as a valuer does not of itself imply that an individual has the practical experience of *valuation* in a particular sector or market; this **must** always be verified by appropriate confirmation.

2.3 In some jurisdictions, valuers are required to be certified or licensed to undertake specific *valuations*. In such cases PS 1 section 4 will apply. In addition, either the client's or RICS' jurisdiction-specific requirements may stipulate more stringent requirements. In such cases, a statement **must** be included in the *terms of engagement* and in the report that the named standards have been complied with (see PS 1 paragraph 4.2).

2.4 If the member does not have the required level of expertise to deal with some aspect of the *valuation* assignment appropriately, they should decide what assistance is needed. With the agreement of the client and reference in the *terms of engagement* where appropriate, the member should then commission, assemble and interpret relevant information from other professionals, such as but not limited to specialist valuers, quantity surveyors, building surveyors, environmental surveyors, accountants and lawyers.

2.5 The personal knowledge and skill requirements may be met in aggregate by more than one member in a *firm*, provided that each meets all the other requirements of this standard.

2.6 The client's approval **must** be obtained if the member proposes to employ another *firm* to provide some or all of the *valuations* and related services, such as a building survey, that are the subject of the instruction (see also VPS 6 paragraph 2.2(a)).

2.7 Where more than one valuer has undertaken or contributed to the *valuation*, a list of those valuers **must** be retained with the working papers, even if they are not members, together with a confirmation that each named valuer has complied with the requirements of PS 1.

2.8 A member responsible for supervision (see PS 1 paragraph 1.2) **must** be able to demonstrate:

- an appropriate level of supervision throughout all stages of the *valuation* instruction, suitably evidenced and capable of standing up to scrutiny and challenge at a later date, particularly where the *valuation* assignment involves remote locations and/or more than one jurisdiction
- an acceptance of responsibility and accountability for the *valuation* report and its content, and the ability to explain and rationalise it if challenged – it is essential that the process is not seen as simply approving automatically without due diligence according to these standards.

3 Independence, objectivity, confidentiality and the identification and management of conflicts of interest

3.1 Independence and objectivity are inextricably linked to the proper observance of the confidentiality of information and to the wider issue of the identification and management of conflicts of interest. Members **must** follow the current edition of RICS' Conflicts of interest. The text in the remainder of this section is specifically directed to *valuation* work.

3.2 Members are reminded of two fundamental requirements contained in RICS' Conflicts of interest.

> 'An RICS member or regulated firm must not advise or represent a client where doing so would involve a Conflict of Interest or a significant risk of a Conflict of Interest; other than where all of those who are or may be affected have provided their prior Informed Consent. Informed Consent may be sought only where the RICS member or regulated firm is satisfied that proceeding despite a Conflict of Interest is:
>
> a in the interests of all of those who are or may be affected and
>
> b is not prohibited by law
>
> and that the conflict will not prevent the member or regulated firm from providing competent and diligent advice to those that may be affected.
>
> Every RICS member working independently or within a non-regulated firm or within a regulated firm must:
>
> a identify and manage Conflicts of Interest in accordance with this professional standard and
>
> b keep records of the decisions made in relation to whether to accept (and where relevant, to continue) individual professional assignments, the obtaining of Informed Consent, and any measures taken to avoid Conflicts of Interest arising.'

3.3 Members **must** bring the required levels of independence and objectivity to individual assignments, respecting and maintaining confidentiality, and identifying and managing potential or actual conflicts of interest. *Valuation* work often has a particular complexity or sensitivity concerning such matters and members **must** act strictly in accordance with the following general standards and *valuation*-specific criteria.

3.4 For some purposes, statutes, regulations, rules of regulatory bodies or clients' special requirements (such as for secured lending *valuations* – see VPGA 2) may set out specific criteria that the member **must** meet (i.e. they are additional to the general requirements below) to achieve a defined position of independence. Frequently, such additional criteria provide a definition of the acceptable level of independence and may use terms such as 'independent expert', 'expert valuer', 'independent valuer', 'standing independent valuer' or 'appropriate valuer'. The member should confirm compliance with these criteria both when accepting the instruction and in the report, so that the client and any *third party* relying on the report can be assured that the additional criteria have been satisfied.

3.5 Confidential information is defined in RICS' Conflicts of interest as 'confidential information, whether held or disseminated electronically, verbally or in hard copy'. There is a general duty to treat information relating to a client as confidential where that information becomes known due to the professional relationship and is not in the public domain. Information gathered during *valuation* work may be market sensitive and this duty is therefore of special importance.

3.6 Members **must not** breach required confidentiality when reporting to clients in compliance with **VPS 6 paragraph 2.2(h)** concerning reference to the 'key inputs used'. In accordance with RICS' Conflicts of interest, the duty of confidentiality will always take precedence over the duty of disclosure, subject to legal override.

3.7 The risk of disclosure of confidential information is also a material factor that the valuer should consider in identifying whether or not there is a potential conflict of interest, or in the terms of RICS' Conflicts of Interest a 'Confidential Information Conflict' (definition 4.2(c)). It is sometimes necessary to disclose some details of the valuer's involvement in the subject of the *valuation*. If an adequate disclosure cannot be made without breaching the duty of confidentiality, then the instruction should be declined.

3.8 The duty of confidentiality is continuous and ongoing, and includes current, past and potential clients.

3.9 While it is not possible to provide a definitive list of situations in a *valuation* context where a threat to a member's independence or objectivity may arise, the following should be regarded as presenting a potential or actual threat and therefore requiring appropriate action as specified in RICS' Conflicts of interest.

- Acting for the buyer and the seller of a property or asset in the same transaction.
- Acting for two or more parties competing for an opportunity.
- Valuing for a lender where advice is also being provided to the borrower or the broker.

- Valuing a property or asset previously valued for another client of the same valuer or *firm*.
- Undertaking a *valuation* for *third-party* consumption where the valuer's *firm* has other fee-earning relationships with the client.
- Valuing both parties' interests in a leasehold transaction.

Members are also reminded that the interest of any *third parties* in the *valuation*, and the reliance they may place on it, will also be a relevant consideration.

3.10 A risk to the member's objectivity can arise where the outcome of a *valuation* is discussed before its completion with either the client or another party with an interest in the *valuation*. While such discussions are not improper, and indeed may be beneficial to both the member and the client, the member **must** be alert to the potential influence that such discussions may have on their fundamental duty to provide an objective opinion. Where such conversations take place, the member **must** make a written *record* of any meetings or discussions, and whenever the member decides to alter a provisional *valuation* as a result, the grounds for doing so **must** also be carefully noted. Written *records* and file notes may be digital or based on a transcript of recorded meetings, but **must** be capable of being produced for appropriate *third parties* where needed.

3.11 The member may need to discuss various matters, such as the verification of facts and other relevant information (for example, confirming the outcome of rent reviews or clarifying the boundaries of a property) before forming a preliminary opinion of value. At any stage in the *valuation* process such discussions give the client an opportunity to understand the member's viewpoint and evidence. It is expected that the client would disclose facts or information, including information about transactions in the property, asset or liability, relevant to the *valuation* task.

3.12 In providing a client with preliminary advice, or a draft report or *valuation* in advance of its completion, the member **must** state that:

- the opinion is provisional and subject to completion of the final report
- the advice is provided for the client's internal purposes only
- any draft is on no account to be published or disclosed and
- if any matters of fundamental importance are not reflected, their omission **must** be declared.

3.13 Where discussions with a client occur after the provision of preliminary material or opinions, there **must** be a written record of them. This is to demonstrate that such discussions do not, and can be shown not to, lead to any perception that the member's opinion has been influenced by those discussions, other than to correct inaccuracies or incorporate any further information provided.

3.14 To demonstrate that the discussions have not compromised the member's independence, the written record of discussions with the client on draft reports or *valuations* should include:

- the information provided, or the suggestions made, in relation to the *valuation*
- how that information was used to consider a change in material matters or opinions and
- the reasons why the *valuation* has or has not been changed.

3.15 If requested, this record should be made available to auditors or any other party with a legitimate and material interest in the *valuation*, including RICS Regulation.

4 Maintaining strict separation between advisers

4.1 RICS has strict guidelines on the minimum standards that **must** be adopted once 'informed consent' has been obtained in accordance with RICS' Conflicts of interest, when separating the advisers acting for 'conflicting' clients. Any arrangement (known as an 'information barrier' in some jurisdictions) that is established **must** be robust enough to offer no chance of information or data passing from one set of advisers to another. This is a very strict test; taking 'reasonable steps' to operate an effective separation is not sufficient.

4.2 Accordingly, any arrangement agreed to by affected clients **must** be overseen by a compliance officer as described below, and **must** satisfy all of the following requirements.

a The individual(s) acting for conflicting clients **must** be different – note that this extends to secretarial and other support staff.

b Such individuals or teams **must** be physically separated, at least to the extent of being in different parts of a building, if not in different buildings altogether.

c Any information or data, however held, **must not** be accessible to 'the other side' at any time and, if in a written form, **must** be kept secure in separate, locked accommodation to the satisfaction of the compliance officer, or another senior independent person, in the *firm*.

d The compliance officer or other senior independent person:

   i should oversee the setting up and maintenance of the arrangement while it is in operation, adopting appropriate measures and checks to ensure it is effective

   ii **must** have no involvement in either of the instructions and

   iii should be of sufficient status in the organisation to be able to operate without hindrance.

e There should be appropriate education and training in the *firm* on the principles and practices relating to the management of conflicts of interest.

4.3 Effective arrangements are unlikely to work without considerable planning, as their management needs to be an established part of a *firm's* culture.

5 Disclosures where the public has an interest or upon which third parties may rely

5.1 Disclosure requirements

5.1.1 Certain types of *valuation* may be relied on by parties other than the client that either commissioned the report or to whom it is addressed. Examples of this type of *valuation* would include those for:

- a published *financial statement*
- a stock exchange, or similar body
- publication, prospectus or circular
- investment schemes (in the Americas, where applicable: investment programs), which may take a number of forms in individual jurisdictions
- takeovers or mergers.

Where the *valuation* is of an asset(s)/liability(ies) that has previously been valued by the member or the *RICS-regulated firm* for any purpose, the following disclosures **must** be made in the *terms of engagement*, the report and in any published reference to the *valuation*:

- reliance by *third parties*
- the relationship with the client
- previous involvement
- rotation policy
- time as signatory
- proportion of fees.

5.1.2 It is recognised that in cases such as, but not limited to, recurring *valuations* and *valuations* of portfolios (see VPGA 9) there may be practicalities around the above disclosures. Implementation of these disclosures is an important consideration at the outset of any *valuation* task. **VPS 1 paragraph 1.3** may also be of note as it considers circumstances in which *valuations* are undertaken through master service agreements.

5.1.3 The disclosures required by this standard may be modified or extended by requirements that apply to a specific country or state, or that are incorporated into the relevant national standards (where **PS 1 section 4** applies).

5.1.4 For modified or extended requirements in relation to *valuation* for secured lending see VPGA 2.

5.2 Reliance by third parties

5.2.1 Where reliance may be placed on a *valuation* by a *third party* who is identifiable from the outset, the disclosures in accordance with this section **must** be made promptly to that party before the *valuation* is undertaken. In addition, there **must** also be disclosure of any circumstances where the valuer or the *firm* will gain from the appointment beyond a normal fee or commission. This gives *third parties* the opportunity to object to the appointment if they feel that the member's independence and objectivity may be compromised.

5.2.2 However, in many cases the *third parties* will be a class of individuals, for example, the shareholders of a company, where disclosure at the outset to all interested *third parties* would clearly be impractical. In such cases, the earliest practical opportunity for disclosure will be in the report or any published reference to it. A greater onus lies on the member to consider, before accepting the instruction, whether those *third parties* relying on the *valuation* will accept that any involvement requiring disclosure does not unduly compromise the member's objectivity and independence. See section 5.8 below for further detail about disclosures in relation to specific categories of *valuation*.

5.2.3 *Valuations* in the public domain, or which will be relied on by *third parties*, are frequently subject to statute or regulation. There are often specific stipulations that the member must meet in order to be deemed suitable to provide a truly objective and independent view. Where that is not the case, the onus is on the member to ensure that there is an awareness of potential conflicts and other threats to independence and objectivity.

5.3 The relationship with the client and previous involvement

5.3.1 Although the requirement for the member to act with independence, integrity and objectivity as described above is clear, it does not necessarily require disclosure of all the working relationships between the member and the client. The member **must** consider and follow the principles set out in RICS' Conflicts of interest. When in doubt, it is recommended that a disclosure is made.

5.3.2 To expose any potential conflict of interest where the member, or the member's *firm*, has been involved with the purchase of one or more assets for the client within the period of 12 months preceding the date of instruction or date of agreement of the *terms of engagement* (whichever is earlier), or a specific longer period prescribed or adopted in a particular jurisdiction, the member **must** disclose in relation to those assets:

- receipt of an introductory fee or
- negotiation of that purchase on behalf of the client.

5.3.3 In considering the disclosures required by RICS' Conflicts of interest, it is necessary to identify the 'client' and 'firm'.

5.3.4 There are many different relationships that may be considered to fall within the identification of the client and *firm*. To be consistent with the minimum *terms of engagement* (see VPS 1) and reporting (see VPS 6), the client is the entity that agrees the *terms of engagement* and to which the report is addressed. The *firm* is the entity that is identified in the confirmation of the *terms of engagement* and the report.

5.3.5 Closely connected companies within a group should properly be regarded as a single client or *firm*. However, due to the often complex nature of modern business, it is frequently the case that the other entities have only a remote legal or commercial connection with the client for which the member's *firm* also acts. There may also be practical difficulties in identifying such relationships, for example, between the associates of the member's *firm* in other countries or states and the client. Sometimes it is the member's commercial relationship with a party other than the client that could create a perceived threat to independence.

5.3.6 The member is expected to make reasonable enquiries proportionate to the circumstances; it is not necessary to establish every potential relationship that there may be, provided the member adheres to the principles of this standard.

5.3.7 The following are examples of where the disclosure requirements will relate to and include parties other than the entity giving the *valuation* instruction:

- subsidiaries of an instructing holding company
- where instructions are from a subsidiary company, those other companies connected by the same holding company or
- a *third-party* issuing *valuation* instructions as an agent for different legal entities, for example, the managers of a property fund.

5.3.8 Similar considerations apply in identifying the extent of the member's *firm* for disclosure purposes, where there may be separate legal entities in different locations and/or undertaking different types of work. It may not be relevant to include all organisations connected with the *firm* undertaking the *valuation* where the activities are remote or immaterial – for example, they do not involve the provision of asset *valuation* or similar advice. However, if there is a series of closely connected entities trading under a common style, the extent of the client's relationship with all those entities should be disclosed – for example, a *firm* where one arm is undertaking *valuations* and another undertaking all other property advice and management.

5.3.9 National or jurisdictional valuation standards or local regulations may apply additional requirements.

5.4 Rotation policy

5.4.1 The obligation to disclose the *firm's* rotation policy will arise only where the member has provided a series of *valuations* over a period of time. Where it is a first or one-off instruction, it is not necessary to comment on any general rotation policy.

5.4.2 Where the member responsible for the *valuation* in accordance with this standard holds that responsibility for many years, familiarity with either the client or the asset valued could lead to the perception that the member's independence and objectivity has been compromised. This may be addressed by arranging for the rotation of the member who accepts responsibility for the *valuation*.

5.4.3 The method by which a *firm* arranges for any rotation of those responsible for *valuations* is for the *firm* to decide, after discussion with the client if appropriate. However, RICS recommends that the individual responsible for signing the report, no matter the standing of that *member* in the *firm*, has that responsibility for a limited number of years. The exact period will depend on:

- the frequency of *valuation*
- any control and review procedures in place such as 'valuation panels', which assist both the accuracy and objectivity of the *valuation* process and
- good business practice.

5.4.4 RICS considers it good practice, though not mandatory, to rotate the *responsible valuer* at intervals not exceeding seven years. National valuation standards or local regulations may require additional criteria.

5.4.5 If a *firm* is unable to rotate the *responsible valuer* in accordance with the above, they should consider whether it is correct to proceed with the *valuation*.

5.4.6 For some markets and *valuation purposes*, 'valuation panels' exist, where a client or their appointed *valuation*/panel manager will select a *firm* or valuer from an approved pool. *Firms* and, where appropriate, members may look to join available valuation panels as a way of improving *valuation* governance and instigating *firm* and valuer rotation.

5.5 Time as signatory

5.5.1 The purpose of this requirement is to provide any *third party* with information on the length of time that a member has continuously been the signatory to *valuations* for the same purpose. It also requires a similar disclosure as to the length of time the member's *firm* has been carrying out *valuations* of that asset for the same client, and the extent and duration of their relationship.

5.5.2 In relation to the member, the disclosure should relate to the continuous period of responsibility for the *valuation* up to the *date of the report*. It is possible that the member was the signatory to previous reports for the same purpose, but due to the *firm's* rotation policy (as set out above) there was a period of time when the member did not have that responsibility. There is no requirement to include that earlier period in the disclosure.

5.5.3 The member is not required to provide a comprehensive account of all work ever undertaken by the member's *firm* for the client. A simple, concise statement that discloses the nature of other work done and the duration of the relationship is all that is required.

5.5.4 If there is no relationship other than the *valuation* instruction in question, a statement to that effect should be made.

5.6 Previous involvement

5.6.1 The purpose of this requirement is to expose any potential conflict of interest where the member, or the member's *firm*, has valued the asset for the same purpose, or has been involved with the purchase of the same asset for the client either within the period of 12 months preceding the *valuation date,* or within such other period and criteria as may be prescribed or adopted in a particular state or country.

5.6.2 Where the *valuation* is provided for inclusion in a published document in which the public has an interest, or upon which *third parties* may rely, the member should make the following disclosures.

a Where a *valuation* is of an asset that has previously been valued by the member or the member's *firm*, for the same purpose:

- in the *terms of engagement*, a statement about the *firm's* policy on the rotation of the *responsible valuer* for the *valuation* and
- in the report, and published reference to it, a statement of the length of time the *responsible valuer* has continuously provided *valuations* to the client for the same purpose as the report and, in addition, the length of time the valuer's *firm* has continuously been carrying out the *valuation* instruction for the client.

b The extent and duration of the relationship of the valuer's *firm* with the client for any purpose.

c Where the report, and any published reference to it, includes one or more assets acquired by the client within the period applicable under paragraph 5.6.1 above, and the member or member's *firm* has in relation to those assets:

- received an introductory fee or
- negotiated that purchase on behalf of the client,

a statement should be made to such effect including, wherever relevant, endorsement of the report in accordance with paragraph 5.7.1 below.

5.6.3 National valuation standards or local regulations may require additional criteria.

5.6.4 For additional or modified requirements in relation to *valuation* for secured lending see VPGA 2.

5.7 Proportion of fees

5.7.1 A statement should be made that the proportion of the total fees payable by the client during the preceding year relative to the total fee income of the member's *firm* during the preceding year are minimal (less than 5%), significant (between 5% and 25%) or substantial (greater than 25%).

5.7.2 National valuation standards or local regulations may require additional criteria.

5.8 Other disclosures

5.8.1 Care should be taken to make sure that, in addition to the various disclosures required under **VPS 1**, **VPS 4** and **VPS 6**, all other disclosures required for a particular *valuation* or purpose are made. Disclosure requirements that may require more specific information related to the *purpose of the valuation* include:

- material involvement
- the status of the member
- specific requirements as to independence
- knowledge and skills of the member
- extent of investigations
- management of any conflicts of interest
- the *valuation* approach
- disclosures required by any regulatory body governing the *purpose of the valuation*.

6 Valuation review

6.1 *Valuation review* is defined in IVS 101 scope of work and the glossary. It may include either or both of a *valuation process review* and *value review*.

6.2 A valuer may be instructed to review all or part of a *valuation* prepared by another valuer in circumstances that include the following, although the list is not exhaustive:

- assisting the consideration of risk assessment
- providing comment on a published *valuation*, for instance in a takeover situation
- commenting on *valuations* produced for use in legal proceedings.

6.3 A *valuation review* **must** be undertaken in accordance with **PS 1**, **PS 2**, RICS' Conflicts of interest and all other relevant parts of these standards. A *valuation review* must also be compliant with IVS, noting that this may include either or both of a *value review* and *valuation process review*. IVS includes stipulation at IVS 101 and IVS 106 around the scope of work, reporting and *documentation* of a *valuation review*.

6.4 There is a distinction between a *valuation review* and an audit of a *valuation* (which may have separate practice and regulatory requirements not detailed here), or an independent *valuation* of a property, asset or liability included in another valuer's report.

6.5 A *valuation process review* may be part of or the whole of a *valuation review*. It addresses compliance with IVS and/or compliance with these Red Book Global Standards, and is therefore different in scope from a *value review* detailed below.

6.6 In carrying out a *value review* (which may form part or be the whole of a *valuation review*) a member is expected, by reference to the *valuation date* and to the facts and circumstances relevant to the asset at the time, to:

- form opinions as to whether the analysis in the work under review is appropriate
- consider whether the opinions and, where appropriate, conclusions are credible and
- consider whether the report is appropriate and not misleading in terms of its opinions and conclusions.

6.7 A *valuation review* **must** be undertaken in the context of the requirements applicable to the work under review, and the *member* **must** develop, record and report opinions and conclusions together with the reasons for any disagreement and/or lack of compliance.

6.8 A member **must not** undertake a *valuation review* prepared by another valuer that is intended for disclosure or publication, unless the member is in possession of all the relevant facts and information upon which the first valuer relied.

7 Responsibility for the valuation

7.1 For the avoidance of doubt, once the various preliminary issues above have been adequately addressed, each assignment to which these global standards apply **must** be prepared by, or under the supervision of, a named valuer who accepts responsibility for it and is appropriately qualified (defined at PS 2 paragraph 2.1). They are the *responsible valuer*.

7.2 Where the *valuation* has been prepared with input from other members or valuers, or a separate *valuation* report on some specific aspect is incorporated, the resultant *valuation* remains the responsibility of the named *responsible valuer* under **paragraph 7.1** above, but the others involved may be acknowledged, ensuring that any statements expressly required under VPS 6 paragraph 2.2(a) are made.

7.3 RICS does not allow a *valuation* to be prepared by a '*firm*' (even though this is permitted by IVS). However, the use of 'for and on behalf of' under the *responsible valuer's* signature is an acceptable substitution.

7.4 Members are discouraged from referring to any *valuation* or report as either 'formal' or 'informal', as these terms may give rise to misunderstanding, particularly regarding the extent of investigation and/or *assumptions* that the member may or may not have undertaken or made.

7.5 Members **must** exercise considerable caution before permitting *valuations* to be used for purposes other than those originally agreed. It is possible that a recipient or reader will not fully appreciate the restricted character of the *valuation* and of any qualifications in the report, and that it may be misquoted out of context. Furthermore, a conflict of interest may potentially arise that would not have been relevant to the original assignment. Therefore, it is essential that the *terms of engagement* and the reporting appropriately address this risk. See also **section 4** above.

Part 4: Valuation technical and performance standards

VPS 1 Terms of engagement (scope of work)

1 General principles

1.1 *Terms of engagement* describe the fundamental terms applying to the provision of a *valuation* and include (but are not limited to):

- the asset(s) and/or liability(ies) being valued
- the intended users of the report
- the intended use of the *valuation* and
- the principal responsibilities of the parties involved.

1.2 Normally, the *terms of engagement* will be agreed between the client and the valuer when instructions are first received and accepted (the initial confirmation of instructions), and in any event prior to providing any *valuation* advice, including the provision of a draft *valuation* or report. However, it is recognised that a *valuation* assignment may range from a single asset to a substantial portfolio, so the extent to which all the minimum requirements can be confirmed at the outset could vary.

1.3 A master service agreement may already be in place between a client and member or *RICS-regulated firm*. Where such an agreement exists, a member is not always required to complete separate additional *terms of engagement*. However, a member **must** confirm in writing and document any additional items required to meet the minimum requirements of VPS 1 paragraph 3.1.

1.4 Members should take care to fully understand their clients' needs and requirements, and appreciate that there will be occasions when they may need to guide clients in choosing the most appropriate advice for the given circumstances.

1.5 In brief, the *terms of engagement* should convey a clear understanding of the *valuation* requirements and process, and should be expressed in terms that can be read and understood by someone with no prior knowledge of the subject asset, nor of the *valuation* process.

1.6 The format and detail of the proposed *valuation* report and any supporting *documentation* is a matter to be agreed between the member and the client, and recorded in writing in the *terms of engagement*. It should be proportionate to the task and – as for the *valuation* itself – be professionally adequate and appropriate for the purpose and intended use. For clarity, the standards expressly to be met when issuing a *valuation* report are set out in VPS 6. These generally mirror the requirements set out here, but with some additional detail.

1.7 Whenever the valuer or client identifies that a *valuation* may need to reflect an actual or anticipated marketing constraint, details of that constraint **must** be agreed and set out in the *terms of engagement*. The term 'forced sale value' **must not** be used (see VPS 2 section 11).

1.8 By the time the *valuation* is concluded, but prior to the issue of the report, all relevant matters **must** have been fully brought to the client's attention and appropriately documented. This is to ensure that the report does not contain any revision of the initial *terms of engagement* of which the client is unaware. Any changes to the *terms of engagement* prior to the completion of the *valuation* **must** be communicated and agreed on in writing.

2 Terms of engagement format

2.1 *Firms* may have a standard form of *terms of engagement* or standing *terms of engagement* in place that may include several of the minimum terms required by Red Book Global Standards. The valuer may need to amend such a form to refer to those matters that will be clarified later.

2.2 Although the precise format of the *terms of engagement* may vary – for example, some internal *valuations* may have standing instructions or other internal policies or procedures – valuers **must** prepare written *terms of engagement* for all *valuation* work whether for internal or external use. The risks that can potentially arise if queries are subsequently raised and the parameters for the *valuation* assignment are insufficiently documented cannot be over-emphasised.

3 Terms of engagement (scope of work)

3.1 *Terms of engagement* **must** address the following matters.

a Identification and status of the *responsible valuer*

b Identification of the client(s)

c Identification of any other intended users

d Identification of the asset(s) or liability(ies) being valued

e *Valuation* (financial) currency

f *Purpose of the valuation*

g *Basis(es) of value* adopted

h *Valuation date*

i Nature and extent of the valuer's work – including investigations – and any limitations thereon

j Nature and source(s) of information upon which the valuer will rely

k All *assumptions* and *special assumptions* to be made

l Format of the report

m Restrictions on use, distribution and publication of the report

n Confirmation that the *valuation* will be undertaken in accordance with IVS and/or RICS Red Book Global Standards

o The basis on which the fee will be calculated

p Where the *firm* is *registered for regulation* by RICS, reference to the *firm's* complaints handling procedure, with a copy available on request

q A statement that compliance with these standards may be subject to monitoring under RICS' conduct and disciplinary regulations

r A statement setting out any limitations on liability that have been agreed

s Consideration of any significant *environmental, social and governance (ESG)* factors

3.2 Each heading is considered in more detail below. The text in bold specifies the key principles. The accompanying text specifies how the principles are to be interpreted and implemented in individual cases.

a) Identification and status of the responsible valuer

Include a statement confirming:

- **the *valuation* is the responsibility of the named *responsible valuer.* RICS does not allow a *valuation* to be prepared by a 'firm'**
- **the *responsible valuer* is in a position to provide an objective and unbiased *valuation* in an ethical and competent manner**
- **whether or not the valuer or valuer's *firm* has any material connection or involvement with the subject asset or the other parties to the *valuation* assignment. If there are any other factors that could limit the valuer's ability to provide an impartial and independent *valuation*, such factors must be disclosed**
- **the valuer is competent to undertake the *valuation* assignment. If the valuer needs to seek material assistance from others in relation to any aspect of the assignment (including the use and role of a specialist and service organisations), the nature of such assistance and the extent of reliance must be clear, agreed and recorded.**

Implementation

1 The use of 'for and on behalf of' a *firm* is an acceptable substitution by an identified signatory when issuing a report. If the *valuation* has been undertaken by a member under the supervision of an appropriately qualified valuer, the valuer fulfilling the supervisory function **must** ensure, and be satisfied, that the work undertaken meets the same minimum standards as if they had been solely responsible for the task.

2 For some purposes the valuer may be required to state if they are acting as an *internal* or *external valuer*. Where the valuer is obliged to comply with additional requirements regarding independence, PS 2 section 3 will apply.

3 In considering the extent of any material involvement, whether past, current or future, the valuer **must** state such involvement in the *terms of engagement*. Where there has not been any previous material involvement, a statement to that effect **must** be made in the *terms of engagement* and *valuation* report (see VPS 6 paragraph 2.2(a)(4)). More extensive guidance on independence and objectivity is given in PS 2.

4 The valuer should confirm in the report that they meet any regulatory or legal criteria for their appointment.

5 With regard to the competence of the valuer, the statement may be limited to confirmation that the valuer and/or the valuer's *firm* has sufficient current local, national and international (as appropriate) knowledge of the particular market, and adequately developed skills and understanding to undertake the *valuation* competently. It is not necessary to provide any details. Where the provisos in PS 2 section 3 apply, an appropriate disclosure **must** be made.

b) Identification of the client(s)

Confirmation of who the *valuation* assignment is being produced for is important when determining the form and content of the report, to ensure that it contains information relevant to their needs. Any restriction on who may rely on the *valuation* assignment must be agreed with the client and recorded.

Clients may be internal (i.e. *valuations* performed for an employer) or external (i.e. when the valuer is engaged by a *third-party* client).

Implementation

1 Where requests for *valuations* are received from representatives of the client, the valuer should ensure the client is correctly identified. This is particularly relevant where (but not limited to the following examples):

- the request is made by the directors of a company, but the client is the company and the directors have a separate legal standing, or

- the *valuation* is required for loan purposes and, although commissioned by the borrower or an entity acting for the lender (for example, a service management company), the report may be for the lender, its subsidiaries or members of a syndicate, etc. or
- the *valuation* is required for estate management or estate-related revenue filings and, although commissioned by a financial adviser or an attorney, the report may be for the estate.

c) Identification of other intended users

It is important to understand whether there are any other intended users of the *valuation* report, their identity and their needs, to ensure that the report content and format meets those users' needs, and to ascertain whether there are any conflicts of interest.

Implementation

1 The valuer **must** state whether or not any parties other than the client may rely upon the *valuation*.

2 In many cases, it will only be the valuer's client who is seeking reliance upon the *valuation*. Agreeing to extend reliance to *third parties* may significantly increase the risks to the valuer.

3 As a default position, valuers should confirm that they do not permit *third-party* reliance on the *valuation* report in their *terms of engagement*. Any permitted reliance on the *valuation* by a *third party* should be carefully considered and the terms on which reliance is permitted should be documented. Particular care needs to be taken to ensure that any relevant terms of business (such as limitations on liability) apply to *third parties* who are permitted to rely on a *valuation*, and that the valuer does not unwittingly become exposed to the risk of *third parties* claiming that a duty of care has been extended to them. Valuers should consider taking legal advice in this regard.

d) Identification of the asset(s) and/or liability(ies) being valued

The subject asset and/or liability in the *valuation* assignment must be clearly identified, taking care to distinguish between an asset and/or liability, and an interest in or right to use that asset and/or liability, as the case may be. The client is responsible for the accuracy and completeness of clearly identifying the subject asset(s) and/or liability(ies) being valued in the *valuation*.

If the *valuation* is of an asset and/or liability that is used in conjunction with other assets or liabilities, it is necessary to clarify whether those assets or liabilities are:

- **included in the *valuation* assignment**
- **excluded but assumed to be available or**
- **excluded and assumed not to be available.**

If the *valuation* is of a fractional interest held in an asset and/or liability, it will be necessary to clarify the relationship of the fractional interest being valued relative to all other fractional interests and the obligations of the fractional interest ownership, if any, to other fractional interest owners.

Particular regard must be had to the identification of portfolios, collections, lots and groups of properties. The valuer must consider:

- **'lotting' or 'grouping'**
- **the identification of different property or asset categories and**
- **any *assumptions* or *special assumptions* relating to the circumstances under which the properties, assets, liabilities or collections may be brought to the market.**

Some higher value properties are held in special purpose vehicles (SPV) – corporate entities that are sometimes set up for the purposes of tax efficiency when transferring the interest in the property. If instructed to value a property that is held in an SPV, it is important that the valuer clarifies that they are instructed to value the interest in the property (rather than the SPV within which the property is held) on the *assumption* that it would be transferred by a sale of the SPV. If the client requires a *valuation* of the SPV within which the property is held, only valuers with the relevant experience and qualification in business *valuation* and holding any statutory registrations required for advising on corporate values can accept such instructions.

Implementation

1 The legal interest in each asset and/or liability **must** be stated. Clarification is essential to distinguish between the characteristics of the asset in its entirety and the particular right or interest that is being valued.

2 When valuing an interest in real property that is subject to a tenancy, it may be necessary to identify any improvements undertaken by tenants and to clarify whether or not these improvements are to be disregarded on renewal, or review, of the lease, or if they may give rise to a compensation claim by the tenant when vacating the property.

3 When valuing a fractional (percentage of the whole) ownership interest in a real property, the valuer also needs to identify the degree of control represented by the percentage interest being valued and any rights held by the other fractional interest ownerships that encumber the marketability of the interest being valued (such as a first right of purchase in the event the ownership being valued is to be sold).

4 Where there is doubt about what constitutes a single property or asset, the valuer **must** 'lot', or group, the properties for *valuation* in the manner most likely to be adopted in the case of an actual sale of the interest(s) being valued. However, the valuer **must** always discuss the options with the client and **must** confirm the approach adopted in the *terms of engagement* and subsequently in the *valuation* report.

5 For further guidance on portfolios, collections and groups of properties, including the reporting format, see VPGA 9.

6 For non-financial liabilities, see IVS 220. Non-financial liabilities are liabilities requiring a non-cash performance obligation to provide goods or services.

e) Valuation (financial) currency

The valuer must establish the currency in which the *valuation* of the asset and/or liability is to be expressed.

This requirement is particularly important for *valuation* assignments involving assets and/or liabilities in more than one jurisdiction and/or cash flows in multiple currencies.

Implementation

1 If a *valuation* has to be translated into a currency other than that of the country in which the asset is located, the basis of the exchange rate **must** be agreed.

f) Purpose of the valuation

The purpose for which the *valuation* assignment is being prepared must be clearly identified and stated, as it is important that *valuation* advice is not used out of context or for purposes for which it is not intended.

The *purpose of the valuation* will also typically influence or determine the *basis(es) of value* to be used.

Implementation

1 If the client declines to reveal the *purpose of the valuation*, valuers should be aware that it may be difficult to comply with all aspects of these global standards. If the valuer is willing to proceed with the *valuation*, the client **must** be advised in writing that this omission will be referred to in the report. In this case the report **must not** be published or disclosed to *third parties*.

2 The *terms of engagement* **must** state that the *valuation* is not to be used for any purpose other than that originally agreed with the client.

g) Basis(es) of value adopted

The *valuation* basis must be appropriate for the *purpose of the valuation*. The source of the definition of any *basis of value* used must be cited or the basis explained.

Implementation

1 Where a *valuation* basis is expressly defined in these global standards (including IVS-defined bases), that definition **must** be reproduced in full. Where the definition is supplemented by a detailed conceptual framework or other explanatory material, it is not necessary to reproduce that framework or explanation. However, there is discretion to reproduce it should the valuer consider that it assists the client to understand more fully the reasoning behind the *basis of value* adopted.

2 For certain specific purposes, such as financial reporting under IFRS, or in consequence of individual jurisdictional requirements, the adoption of a specific *basis of value* may be stipulated. In all other cases the appropriate basis(es) is essentially a matter for the valuer's professional judgement.

3 It is recognised that for some purposes a projected value may be required in addition to a current *valuation*. Any such projection must comply with the applicable jurisdictional and/or national standards. See VPS 2.

h) Valuation date

The *valuation date* may be different from the date on which the *valuation* report is to be issued or the date on which investigations are to be undertaken or completed. Where this is the case, these dates should be clearly distinguished.

Implementation

1 The specific *valuation date* will need to be agreed with the client – an assumption that the *valuation date* is the *date of the report* is not acceptable.

2 Where, exceptionally, the advice being provided relates to a future date, see VPS 6 paragraph 2.2(f) and VPS 2 section 12 regarding the reporting requirements.

i) Nature and extent of the valuer's work – including investigations – and any limitations thereon

Any limitations or restrictions on the *inspection*, inquiry and/or analysis for the *purpose of the valuation* assignment must be identified and recorded in the *terms of engagement*.

If relevant information is not available because the conditions of the assignment restrict the investigation, and if the assignment is then accepted, these restrictions and any necessary *assumptions* or *special assumptions* made as a result of the restriction must be identified and recorded in the *terms of engagement*.

Implementation

1 A client may require a restricted service; for example, a short timescale for reporting may make it impossible to establish facts that would normally be verified by *inspection,* or by making normal enquiries; or the request may be for a *valuation* based on the output of an automated valuation model (AVM). Note that the provision of an AVM-derived output that has been subject to the additional application of professional judgement by a member would be regarded as the provision of a written *valuation* for the purpose of these standards (see PS 1 paragraph 1.3). Accordingly, valuers should be alert to, and aware of, the implications of either accepting or manually modifying an AVM output. A restricted service will also include any limitations on *assumptions* made in accordance with VPS 4.

2 It is accepted that a client may sometimes require this level of service, but it is the duty of the valuer to discuss the requirements and needs of the client prior to reporting. Such instructions, when related to *real estate*, are often referred to as 'drive-by', 'desk-top' or 'pavement' *valuations*.

3 The valuer should consider whether the restriction is reasonable, with regard to the purpose for which the *valuation* is required. The valuer may consider accepting the instruction subject to certain conditions, for example that the *valuation* is not to be published or disclosed to *third parties*.

4 If the valuer considers that it is not possible to provide a *valuation*, even on a restricted basis, the instruction **must** be declined.

5 The valuer **must** make it clear when confirming acceptance of such instructions that the nature of the restrictions and any resulting *assumptions*, and the impact on the accuracy of the *valuation*, will be referred to in the report (see also VPS 6).

6 VPS 4 contains general requirements with regard to *inspections*.

j) Nature and source(s) of information upon which the valuer will rely

The nature and source of any relevant information that is to be relied upon and the extent of any verification to be undertaken during the *valuation* process must be identified, agreed and recorded.

For this purpose, 'information' is to be interpreted as including data and other such inputs.

Implementation

1 Where the client provides information that is to be relied on, the valuer has a responsibility to state that information clearly in the *terms of engagement* and, where appropriate, its source. In each case the valuer **must** judge the extent to which the information to be provided is likely to be reliable, being mindful to recognise and not to exceed the limitations of their qualification and expertise in this respect.

2 The client may expect the valuer to express an opinion (and, in turn, the valuer may wish to express an opinion) on social, environmental and legal issues that affect the *valuation*. The valuer **must** therefore make clear in the report any information that needs to be verified by the client's or other interested parties' legal advisers before the *valuation* can be relied on or published. Refer also to s) Consideration of any significant ESG factors.

k) All assumptions and special assumptions to be made

All *assumptions* and *special assumptions* that are to be made in the conduct and reporting of the *valuation* assignment must be identified and recorded.

- ***Assumptions* are matters that are reasonable to accept as fact in the context of the *valuation* assignment without specific investigation or verification. They are matters that, once stated, are to be accepted in understanding the *valuation* or other advice provided.**
- **A *special assumption* is an *assumption* that either assumes facts that differ from the actual facts existing at the *valuation date* or that would not be made by a typical market participant in a transaction on the *valuation date*.**

Only *assumptions* and *special assumptions* that are reasonable and relevant, having regard to the purpose for which the *valuation* assignment is required, should be made.

Implementation

1 *Special assumptions* are often used to illustrate the effect of changed circumstances on value. Examples of *special assumptions* include:

- that a proposed building had actually been completed on the *valuation date*
- that a specific contract was in existence on the *valuation date* that had not actually been completed
- that a financial instrument is valued using a yield curve that is different from that which would be used by a market participant.

2 Further guidance on *assumptions* and *special assumptions*, including the case of projected values (i.e. future state of the asset or of any factors relevant to its *valuation*) can be found in VPS 2.

l) Format of the report

The valuer must establish the format of the report and how the *valuation* will be communicated.

Implementation

1 VPS 6 sets out the mandatory reporting requirements. Where – exceptionally – it is agreed that any of the minimum reporting contents are to be excluded, they may be treated as *departures*, provided they are agreed in the *terms of engagement*, are appropriately referred to in the *valuation* report and do not result in a report that is misleading and/or professionally inadequate for its purpose.

2 A report prepared in accordance with this standard and with VPS 6 **must not** itself be described as a certificate or statement; the use of such language implies either a guarantee or a level of certainty that is often inappropriate. However, a valuer may use the term 'certified', or similar words, within the body of a report where it is known that the *valuation* is to be submitted for a purpose that requires formal certification of a *valuation* opinion.

3 Valuers should be aware that the terms 'certificate of value', 'valuation certificate' and 'statement of value' have specific meanings in certain countries or states in designating statutory documents. One common factor is that these documents require a simple confirmation of price or value, without any requirement to understand the context, fundamental *assumptions* or analytical processes behind the figure provided. A valuer who has previously provided a *valuation* or advised on a transaction involving the asset may prepare such a document where the client is required to provide it by statute.

m) Restrictions on use, distribution and publication of the report

Where it is necessary or desirable to restrict the use of the *valuation* advice or those relying upon it, the restrictions must be clearly communicated.

Implementation

1 The valuer **must** state the permitted use, distribution and publication of the *valuation* report.

2 Restrictions are only effective if notified to the client in advance.

3 The valuer should keep in mind that any insurance that protects against claims for negligence under professional indemnity insurance (PII) policies may require the valuer to have particular qualifications, and to include certain limiting clauses in every report and *valuation*. If this is the case, the relevant words should be repeated, unless the insurers agree to either a modification or a complete waiver. If in doubt, valuers should refer to their insurance policy before accepting instructions.

4 Some *valuations* will be for purposes where the exclusion of *third-party* liability is either forbidden by law or by an external regulator. In other cases, it will be a matter for clarification or agreement with the client, having regard also to the judgement of the valuer.

5 Particular care should be taken in relation to *valuation* assignments in connection with secured lending to address *third-party* liability issues.

n) Confirmation that the valuation will be undertaken in accordance with IVS and/or RICS Red Book Global Standards

The valuer should provide:

- **confirmation that the *valuation* will be undertaken in accordance with the International Valuation Standards (IVS) and that the valuer will assess the appropriateness of all significant inputs**

and/or (depending on clients' particular requirements)

- **confirmation that the *valuation* will be undertaken in accordance with RICS Valuation – Global Standards, which incorporate IVS, and (where applicable) the relevant RICS national or jurisdictional supplement. Where appropriate, such confirmation may refer simply to RICS Red Book Global Standards.**

In the case of Red Book Global Standards applying, an accompanying note and explanation of any *departures* from Red Book Global Standards must be included. Any such *departure* must be identified, together with justification for that *departure*. A *departure* is not justified if it results in a *valuation* that is misleading. If, during the course of a *valuation*, it becomes clear to the valuer that the scope of work will not result in an IVS- or Red Book Global Standards-compliant *valuation*, this must be communicated to the client in writing.

Implementation

1 There is no material difference in outcome between the respective forms of endorsement above, which may be used according to the particular requirements of the *valuation* assignment. Some clients will expressly wish to have confirmation that the

valuation has been undertaken in accordance with IVS. In all other cases, confirmation that the *valuation* has been undertaken in accordance with Red Book Global Standards carries with it the dual assurance of compliance with IVS technical standards and RICS professional standards overall.

2 References to Red Book Global Standards without reference to the year of issue will be taken to mean the version of the RICS standards operative on the date the *valuation* report is issued. There will be some cases where it is necessary to refer to an earlier version, for example if undertaking a *valuation review* (see **PS 2 section 6**).

3 The statement of compliance should draw attention to any *departures* from Red Book Global Standards (see **PS 1 section 6**).

4 Where other *valuation* standards – specific to a particular jurisdiction – will be followed (see **PS 1 section 4**), this should be confirmed as part of agreeing the *terms of engagement*.

o) The basis on which the fee will be calculated

Implementation

1 The level of the fee is a matter to be settled with the client, unless there is a fee basis prescribed by an external body that binds both parties. RICS does not publish any scale of recommended fees.

p) Where the firm is registered for regulation by RICS, reference to the firm’s complaints handling procedure, with a copy available on request

Implementation

1 This requirement is included to emphasise the need for *firms registered for regulation* by RICS to comply with the RICS Rules of Conduct.

q) A statement that compliance with these standards may be subject to monitoring under RICS’ conduct and disciplinary regulations

Implementation

1 The purpose of this statement is to draw the attention of the client to the possibility that the *valuation* may be investigated for compliance with these standards.

2 Guidance on the operation of the monitoring regime, including matters relating to confidentiality, is available on the RICS website.

3 Clients should be aware that this statement cannot validly be made by any valuer who is not a member or practising in an *RICS-regulated firm*, or covered by an arrangement under **PS 1 section 8**.

r) A statement setting out any limitations on liability that have been agreed

Implementation

1 The issues of risk, liability and insurance are closely linked. Pending the issue of guidance of global application, members should check the latest RICS guidance applicable in their jurisdiction on the RICS website.

s) Consideration of any significant environmental, social and governance (ESG) factors

Implementation

1 The *terms of engagement* **must** include any requirements in relation to the consideration of significant *environmental, social and governance (ESG)* factors.

2 Requirements may include *ESG* matters that relate to the activities of the valuer such as the incorporation of *ESG* considerations into *inspection* and investigation. They may also include resources such as *ESG* performance data, *ESG* risk assessment and relevant cost information that may be required from the client and/or additional experts commissioned in accordance with **PS 2 paragraph 2.4**. Such resources **must** be considered in the same way as referred to in **VPS 1 paragraph 3.2(j)**; in each case the valuer **must** judge the extent to which the information to be provided is likely to be reliable, being mindful to recognise and not exceed the limitations of their qualification and expertise in this respect. Where the valuer does not have the qualification and expertise to judge the reliability of *ESG* resources provided that may be relevant to the *valuation* (such as, in some cases, cost information), this **must** be considered as part of the limitations referred to in **VPS 1 paragraph 3.2(i)**, with appropriate limits on liability as referred to in **VPS 1 paragraph 3.2(r)**.

3 The *valuation* **must** consider the potential impact of significant *ESG* factors on value, to the extent that such factors are reasonably identifiable and quantifiable. The level of *ESG* consideration will be commensurate with the type of asset or liability, location and *purpose of the valuation*. Upon consideration, there may not be any significant *ESG* factors that impact the *valuation*, in which case this **must** be stated, along with appropriate justification.

4 Relevant limitations on *ESG* considerations **must** also be clarified at this stage, such as, but not limited to, clarifying that the *valuation* does not constitute an *ESG* risk assessment or *ESG* rating.

5 Any client requirement to consider *ESG* matters, including specific measurements and strategies that are applicable and/or relevant only to the client, **must** be identified and agreed in the *terms of engagement* or as a separate instruction. These requirements **must** be considered in a way that is appropriate to the *basis of value* and any *special assumptions*.

6 Examples of *ESG* factors are included in IVS 104 Data and Inputs: Appendix. The relevance of these will differ depending on the *valuation* task being undertaken.

VPS 2 Bases of value, assumptions and special assumptions

1 Bases of value

1.1 The valuer **must** ensure that the *basis of value* adopted is appropriate for, and consistent with, the *purpose of the valuation*.

1.2 If one of the *bases of value* defined in these global standards (including IVS-defined bases) is used, then it should be applied in accordance with the relevant definition and guidance, including the adoption of any *assumptions* or *special assumptions* that are appropriate.

1.3 If a *basis of value* not defined in these global standards (including IVS-defined bases) is used, it **must** be clearly defined and stated in the report, which **must** also draw attention to the fact that it is a *departure* if use of the basis in the particular *valuation* assignment is voluntary and not mandatory.

2 General principles

2.1 A *basis of value* is the fundamental premise on which the reported values are, or will be, based (IVS Glossary 10.03).

2.2 The following bases are defined in IVS 102 Bases of Value: Appendix A10–A60 and most are in common use, although they may not be universally adopted in all markets:

- *market value* (see section 4 below)
- *market rent* (see section 5 below)
- *investment value (or worth)* (see section 6 below)
- *equitable value*
- *synergistic value* and
- liquidation value.

Care is necessary to ensure that, where used, *synergistic value* is fully understood by the client.

2.3 In addition, for the purposes of financial reporting, *fair value* (under *International Financial Reporting Standards*) is widely recognised (including by RICS) and used. Again, not universally – see further detail in section 7 below.

2.4 For some *valuation* assignments, particularly in relation to specific jurisdictions within which there may be mandatory requirements, another *basis of value* may be specified (for example, in legislation) or be appropriate to use. Where this is so, the valuer **must** define clearly the basis adopted. In any case where adoption of the basis is other than mandatory, the valuer **must** explain in the report why use of a basis reproduced in these global standards (including any jurisdiction-specific supplement to these standards) is considered inappropriate (see **PS 1 section 4**).

2.5 Any sensitivity analysis to be included in *documentation* or reporting is to be carefully presented so as not to undermine the *basis of value* adopted.

2.6 Valuers are cautioned that the use of an unrecognised or bespoke *basis of value* without good reason could result in breach of the requirement that the *valuation* report **must not** be ambiguous or misleading (see **VPS 6 section 1**).

2.7 IVS 102 Bases of Value: Appendix includes material on 'premises of value' that is not fully reproduced here.

3 Bases of value

3.1 The valuer has responsibility for ensuring that the *basis of value* adopted is consistent with the *purpose of the valuation* and appropriate to the circumstances. This responsibility is subject to compliance with any mandatory requirements, such as those imposed by statute. It is important that the basis to be adopted is discussed and confirmed with the client at the outset in any case where the position is not straightforward.

3.2 It is important to note that *bases of value* are not necessarily mutually exclusive. For example, the *worth* of a property or asset to a specific party, or the *equitable value* of a property or asset in exchange between two specific parties, may match the *market value* even though different assessment criteria are used.

3.3 Because bases other than *market value* may produce a value that could not be obtained on an actual sale, whether or not in the general market, the valuer **must** clearly distinguish the *assumptions* or *special assumptions* that are different from, or additional to, those that would be appropriate in an estimate of *market value*. Typical examples of such *assumptions* and *special assumptions* are discussed in sections 9 and 10 below.

3.4 Valuers **must** ensure in all cases that the *basis of value* is reproduced or clearly identified in both the *terms of engagement (scope of work)* and the report.

3.5 A valuer may be legitimately instructed to provide *valuation* advice based on other criteria, and therefore other *bases of value* may be appropriate. In such cases the definition adopted **must** be set out in full and explained, and the requirements of **PS 1 paragraph 6.3(b)** **must** be met.

4 Market value

Market value is defined in IVS 102 Bases of Value: Appendix A10.01 as:

> 'the estimated amount for which an asset or liability should exchange on the valuation date between a willing buyer and a willing seller in an arm's-length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion.'

4.1 *Market value* is a *basis of value* that is internationally recognised and has a long-established definition. It describes an exchange between parties that are unconnected and operating freely in the marketplace. It represents the figure that would appear in a hypothetical contract of sale, or equivalent legal document, at the *valuation date*, reflecting all those factors that would be taken into account in framing their bids by market participants at large and reflecting the highest and best use of the asset. The highest and best use of an asset is defined in IVS 102 Appendix as 'the use, from a participant perspective, that would produce the highest value for an asset'. It is the use of an asset that maximises its productivity and that is possible, legally permissible and financially feasible – fuller treatment of this *basis of value* can be found at paragraph A10.04 and section A90 of IVS 102 Bases of Value: Appendix.

4.2 It ignores any price distortions caused by *special value* (an amount that reflects particular attributes of an asset that are only of value to a *special purchaser*) or *synergistic value* (*marriage value)*. It represents the price that would most likely be achievable for an asset across a wide range of circumstances. *Market rent* (see section 5) applies similar criteria for estimating a recurring payment rather than a capital sum.

4.3 In applying *market value*, the *valuation* amount **must** reflect the actual market state and circumstances as of the effective *valuation date.* The full conceptual framework for *market value* can be found in section A10 of IVS 102 Bases of Value: Appendix.

4.4 Notwithstanding the disregard of *special value*, where the price offered by prospective buyers generally in the market would reflect an expectation of a change in the circumstances of the asset in the future, the impact of that expectation is reflected in *market value*. Examples of where the expectation of additional value being created or obtained in the future may have an impact on the *market value* include:

- the prospect of development where there is no current permission for that development and
- the prospect of *synergistic value/marriage value* arising from a merger with another property or asset, or interests within the same property or asset, at a future date.

4.5 The impact on value arising by use of an *assumption* or *special assumption* should not be confused with the additional value that might be attributed to an asset by a *special purchaser*.

4.6 In some jurisdictions, a *basis of value* described as 'highest and best use' is adopted, and this may either be defined by statute or established by common practice in individual countries or states.

5 Market rent

Market rent is defined in IVS 102 Bases of Value: Appendix A20.01 as:

> 'the estimated amount for which an interest in real property should be leased on the valuation date between a willing lessor and a willing lessee on appropriate lease terms in an arm's-length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion.'

5.1 *Market rent* will vary significantly according to the terms of the assumed lease contract. The appropriate lease terms will normally reflect current practice in the market in which the property is situated, although for certain purposes unusual terms may need to be stipulated. Matters such as the duration of the lease, the frequency of rent reviews and the responsibilities of the parties for maintenance and outgoings will all affect the *market rent*. In certain countries or states, statutory factors may either restrict the terms that may be agreed, or influence the impact of terms in the contract. These need to be taken into account where appropriate.

5.2 *Market rent* will normally be used to indicate the amount for which a vacant property may be let, or for which a let property may be re-let when the existing lease terminates. *Market rent* is not a suitable basis for settling the amount of rent payable under a rent review provision in a lease, where the definitions and *assumptions* specified in the lease have to be used.

5.3 Valuers **must** therefore set out clearly the principal lease terms that are assumed when providing an opinion of *market rent*. If it is the market norm for lettings to include a payment or concession by one party to the other as an incentive to enter into a lease, and this is reflected in the general level of rents agreed, the *market rent* should also be expressed on this basis. The nature of the incentive assumed **must** be stated by the valuer, along with the assumed lease terms.

6 Investment value

Investment value (worth) is defined in IVS 102 Bases of Value: Appendix A40.01 as:

> 'the value of an asset to a particular owner or prospective owner for individual investment or operational objectives.'

6.1 As the definition implies, and in contrast to *market value*, this *basis of value* does not envisage a hypothetical transaction but is a measure of the value of the benefits of ownership to the current owner or to a prospective owner, recognising that these may differ from those of a typical market participant. It is often used to measure performance of an asset against an owner's own investment criteria.

7 Fair value

Fair value (the definition adopted by the International Accounting Standards Board (IASB) in IFRS 13) is:

> 'The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.'

7.1 The guidance in IFRS 13 includes an overview of the *fair value* measurement approach.

7.2 The objective of a *fair value* measurement is to estimate the price at which an orderly transaction to sell the asset or to transfer the liability would take place between market participants at the measurement date under current market conditions. The references in IFRS 13 to market participants and a sale make it clear that for most practical purposes the concept of *fair value* is consistent with that of *market value*, and so there would ordinarily be no difference between them in terms of the *valuation* figure reported.

7.3 A *fair value* measurement requires an entity to determine the following (this list is not exhaustive):

- the particular asset or liability that is the subject of the measurement (consistent with its unit of account)
- for a non-financial asset, the *valuation* premise that is appropriate for the measurement (consistent with its highest and best use)
- the principal (or most advantageous) market for the asset or liability
- the *valuation* technique(s) appropriate for the measurement, considering the availability of data with which to develop inputs that represent the *assumptions* that market participants would use when pricing the asset or liability, and the level of the *fair value* hierarchy within which the inputs are categorised.

7.4 Valuers undertaking *valuations* for inclusion in *financial statements* should familiarise themselves with the relevant requirements – see also VPGA 1.

8 Transaction costs

8.1 Many *bases of value*, including *market value* and IFRS *fair value*, represent the estimated price that would be agreed for the exchange of an asset in the market before adjustment for the seller's costs of sale or the buyer's costs of purchase, and any taxes payable by either party as a direct result of the transaction (see IVS 102 Bases of Value: Appendix section 70). These *valuations* **must** reflect the price that would be agreed, not the net receipt or the gross cost to the parties. If a client requires an estimate of such additional costs, these should be provided separately from the reported value.

8.2 This does not mean that any costs (or taxes) that a prospective buyer or seller would incur in an actual transaction should be ignored in the process of estimating *market value* or *fair value*. The costs that market participants would incur in a transaction are material in determining the price they would be prepared to agree. For example, if using an *income approach*, the capitalisation of the net rent using a comparable net discount rate will produce a capital value figure that represents the total outlay of the purchaser, including costs. So, a deduction has to be made from this figure to estimate *market value/fair value* to allow for a typical buyer's costs – otherwise the value will be overstated.

9 Assumptions

An *assumption* is made where it is reasonable for the valuer to accept that something is true without the need for specific investigation or verification.

Any such *assumption* **must** be reasonable and relevant, having regard to the purpose for which the *valuation* is required.

9.1 The full definition of *assumption* from the Glossary is as follows.

> 'A supposition taken to be true. It involves facts, conditions or situations affecting the subject of, or approach to, a *valuation* that, by agreement, do not need to be verified by the valuer as part of the *valuation* process.'

9.2 It will almost always be necessary to couple a *basis of value* with appropriate *assumptions* (or *special assumptions* – see **section 10** below) that describe the assumed status or condition of the property or asset at the *valuation date*.

9.3 An *assumption* is often linked to a limitation on the extent of the investigations or enquiries that could be undertaken by the valuer – see **VPS 4**. Therefore, all *assumptions* that are likely to be included in the report **must** be agreed with the client and included in the *terms of engagement*. Where it is not possible to include *assumptions* in the *terms of engagement,* they should be agreed in writing with the client before the *valuation* report is issued.

9.4 If, after *inspection* or investigation, the valuer considers that an *assumption* agreed in advance with the client is likely to be inappropriate, or should become a *special assumption*, the revised *assumptions* and approach **must** be discussed with the client with appropriate *records* made, prior to the conclusion of the *valuation* assignment and delivery of the report.

9.5 See also VPGA 8 for practical application in relation to real property interests.

10 Special assumptions

A *special assumption* is made by the valuer where an *assumption* either assumes facts that differ from those existing at the *valuation date* or that would not be made by a typical market participant in a transaction on that *valuation date*.

Where *special assumptions* are necessary to provide the client with the *valuation* required, these **must** be expressly agreed and confirmed in writing to the client before the report is issued.

Special assumptions may only be made if they can reasonably be regarded as realistic, relevant and valid for the particular circumstances of the *valuation*.

10.1 The valuer may include in the report some comment or assessment of the likelihood of the *special assumption* being fulfilled. For example, a *special assumption* that permission had been granted to develop land may have to reflect the impact on value of any conditions that might be imposed.

10.2 A typical *special assumption* might be that a property or asset has been altered in some defined way, for example, 'the market value on the special assumption that the works had been completed'. In other words, it assumes facts that differ from those existing at the *valuation date*.

10.3 If a client requests a *valuation* on the basis of a *special assumption* that the valuer considers to be unrealistic, the instruction should be declined.

10.4 Circumstances where it may be appropriate to make *special assumptions* include, for example:

- a past change in the physical aspects of the property or asset where the valuer has to assume those changes have not taken place
- where a change in the physical aspects of the property is proposed, such as a new building to be constructed or an existing building to be refurbished or demolished
- the treatment of alterations and improvements carried out under the terms of a lease
- where the property may be affected by environmental factors, including natural (such as flooding), non-natural (such as contamination) or existing use issues (such as a non-conforming user).

10.5 Some illustrations of *special assumptions* in relation to real property interests include:

- planning (zoning) consent has been, or will be, granted for development (including a change of use) at the property
- a building or other proposed development has been completed in accordance with a defined plan and specification
- the property has been changed in a defined way (for example, removal of process equipment)
- a property that is currently vacant had been leased on defined terms
- a property currently leased on defined terms was vacant and the lease terminated
- the exchange takes place between parties where one or more has a special interest and that additional value, or *synergistic value* (*marriage value)*, is created as a result of the merger of the interests. This example only applies if a party with a special interest has not indicated a willingness to acquire the subject asset on the *valuation date*. If an exchange with a buyer with a special interest is anticipated, this is part of the factual background to the *valuation* and therefore is not a *special assumption*. However, the valuer should make it clear that any *synergistic value* would not arise in a sale to a party without the special interest.

10.6 Where a property has been damaged, the *special assumptions* may include:

- treating the property as having been reinstated (reflecting any insurance claims)
- valuing as a cleared site with development permission assumed for the existing use
- refurbishment or redevelopment for a different use, reflecting the prospects of obtaining the necessary development permissions.

10.7 The adoption of some of these *special assumptions* may qualify the application of *market value*. They are often particularly appropriate where the client is a lender and *special assumptions* are used to illustrate the potential effect of changed circumstances on the value of a property as a security.

10.8 Where *valuations* are prepared for *financial statements*, the normal *basis of value* will exclude any additional value attributable to *special assumptions*. However, if (exceptionally) a *special assumption* is made, this **must** be referred to in any published reference. See VPS 6 paragraph 2.2(i) and 2.2(l).

11 Valuations reflecting an actual or anticipated market constraint, and forced sales

Wherever the valuer, or client, identifies that a *valuation* may need to reflect an actual or anticipated marketing constraint, details of that constraint **must** be agreed and set out in the *terms of engagement*.

11.1 The valuer may be instructed to undertake a *valuation* reflecting an actual or anticipated market constraint, which may take one of many different forms.

11.2 If a property or asset cannot be freely or adequately presented to the market, the price is likely to be adversely affected. Before accepting instructions to advise on the likely effect of a constraint, the valuer should ascertain whether this arises from an inherent feature of the asset, or of the interest being valued, or from the circumstances of the client or some combination of all of these.

11.3 If an inherent constraint exists at the *valuation date*, it is normally possible to assess its impact on value. The constraint should be identified in the *terms of engagement*, and it should be made clear that the *valuation* will be provided on this basis. It may also be appropriate to provide an alternative *valuation* on the *special assumption* that the constraint did not exist at the *valuation date* to demonstrate its impact.

11.4 Greater care is needed if an inherent constraint does not exist at the *valuation date*, but is a foreseeable consequence of a particular event or sequence of events. Alternatively, the client may request a *valuation* to be on the basis of a specified marketing restriction. In either case the *valuation* would be provided on the *special assumption* that the constraint had arisen at the *valuation date*. The precise nature of the constraint **must** be included in the *terms of engagement*. It may also be appropriate to provide a *valuation* without the *special assumption* to demonstrate the impact that the constraint would have if it arose.

11.5 A *special assumption* that simply refers to a time limit for disposal without stating the reasons for that limit would not be a reasonable *assumption* to make. Without a clear understanding of the reasons for the constraint, the valuer would be unable to determine the impact that it may have on marketability, sale negotiations and the price achievable, or to provide meaningful advice.

11.6 A marketing constraint should not be confused with a forced sale. A constraint may result in a forced sale, but it can also exist without compelling the owner to sell.

11.7 The term 'forced sale value' **must not** be used. A 'forced sale' is a description of the situation under which the exchange takes place, not a distinct *basis of value*. Forced sales arise where there is pressure on a particular vendor to sell at a specific time – for example, because of the need to raise money or to extinguish a liability by a given date. The fact that a sale is 'forced' means that the vendor is subject to external legal or personal commercial factors, and therefore the time constraint is not merely a preference of the vendor. The nature of these external factors and the consequences of failing to conclude a sale are just as important in determining the price that can be achieved within the length of time available.

11.8 While a valuer can assist a vendor in determining a price that should be accepted in forced sale circumstances, this is a commercial judgement. Any relationship between the price achievable by a forced sale and the *market value* is coincidental; it is not a *valuation* that can be determined in advance, but a figure that might be seen as a reflection of worth to that particular vendor at the particular point in time, having regard to the specific context. As emphasised in paragraph 11.7 above, although advice may be given on the likely realisation in forced sale circumstances, the term is a description of the situation under which the sale takes place, and so it **must not** be described or used as a *basis of value*.

11.9 It is a common misconception that in a poor or falling market there are automatically few 'willing sellers' and that, as a consequence, most transactions in the market are the result of 'forced sales'. Accordingly, the valuer may be asked to provide forced sale advice on this basis. This argument has little merit because it suggests that the valuer should ignore the evidence of what is happening in the market. The commentary for *market value* in VPS 2 section 4 makes it clear that a willing seller is motivated to sell at the best terms available in the market after proper marketing, whatever that price may be.

11.10 The valuer should be careful not to accept instructions on the basis of a misconception and should explain to clients that, in the absence of a defined constraint affecting either the asset or the vendor, the appropriate basis is *market value.* In a depressed market, a significant proportion of sales may be made by vendors that are obliged to sell, such as administrators, liquidators and receivers. However, such vendors are normally under a duty to obtain the best price in the current circumstances and cannot impose unreasonable marketing conditions or constraints of their own volition. These sales will normally comply with the definition of *market value*.

12 Assumptions and special assumptions related to projected values and property risk advice

Any *assumptions* or *special assumptions* relating to projected values **must** be agreed with the client prior to reporting an opinion of value.

The *valuation* report **must** make reference to the higher degree of uncertainty that is likely to be implicit with a projected value where, by definition, comparable evidence will not be available.

12.1 By their nature, projected values rely wholly on *assumptions*, which may include some significant *special assumptions*. For example, the valuer may make various *assumptions* about the state of the market in the future – yields, rental growth, interest rates, etc., which **must** be supported by credible studies or economic outlook-based forecasts.

12.2 Detailed attention is required to ensure that all *assumptions* made are:

- in accordance with any applicable national or jurisdictional standard
- realistic and credible, and
- clearly and comprehensively set out in the report.

12.3 When making *special assumptions*, great care **must** also be exercised concerning the reliability and precision of any methods, models, tools or data used for forecasting or extrapolation.

VPS 3 Valuation approaches and methods

Valuers are responsible for adopting, and as necessary justifying, the *valuation* approach(es) and the *valuation* method(s) used to fulfil individual *valuation* assignments. These **must** always have regard to:

- the nature of the asset (or liability)
- the purpose, intended use and context of the particular assignment and
- any statutory or other mandatory requirements applicable in the jurisdiction concerned.

Valuers should also have regard to recognised best practice within the *valuation* discipline or specialist area in which they practise, although this should not constrain the proper exercise of their judgement in individual *valuation* assignments in order to arrive at an opinion of value that is professionally acceptable for its purpose.

Unless expressly required by statute or by other mandatory requirements, no one *valuation* approach or single *valuation* method necessarily takes precedence over another. In some jurisdictions and/or for certain purposes, more than one approach and/or method may be expected or required to arrive at a balanced judgement. In this regard, the valuer **must** always be prepared to appropriately report and document the approach(es) and method(s) adopted.

Valuation methods are typically implemented through a *valuation model* and therefore attention is also drawn to VPS 5.

1 Although no formal, universally recognised definition of *valuation* approach exists, IVS defines it as 'a generic term for the use of the cost, income or market approach'. The term *valuation method* is defined in IVS as 'within a valuation approach, a specific technique to conclude a value'.

2 *Valuations* are required of different interests in different types of assets for a range of different purposes. Given this diversity, the approach to the estimation of value in one case may well be inappropriate in another, let alone the actual method(s) or model(s) used. Using the definition in paragraph 1 above, the overall *valuation* approach is usually classified into one of three main categories.

- The *market approach* is based on comparing the subject asset with identical or similar assets (or liabilities) for which price information is available, such as a comparison with market transactions in the same, or closely similar, type of asset (or liability) within an appropriate time horizon.
- The *income approach* is based on capitalisation or conversion of present and predicted income (cash flows), which may take a number of different forms, to produce a single

current capital value. Among the forms taken, capitalisation of a conventional market-based income or discounting of a specific income projection can both be considered appropriate, depending on the type of asset and whether such an approach would be adopted by market participants. The *income approach* can also consider the value of an asset in terms of projected costs and cost savings, for example capital expenditure on retrofit.

- The *cost approach* is based on the economic principle that a purchaser will pay no more for an asset than the cost to obtain one of equal utility, whether by purchase or construction.

3 Underlying each *valuation* approach and *valuation* method is the need to make such comparisons as are practically possible. It may well be possible to arrive at a *valuation* opinion by adopting multiple approaches, methods and models, unless statute or some other mandatory authority imposes a particular requirement. Great care **must** be exercised when relying on the *cost approach* as the primary or only approach, as the relationship between cost and value is rarely direct.

4 Further detail on the application of approaches and methods can be found in IVS 103 and IVS 105 in terms of the responsibilities of valuers in relation to *valuation modelling* (see also **VPS 5**). It must be emphasised that the valuer is ultimately responsible for selection of the approach(es) and method(s) to be used in individual *valuation* assignments, unless statute or other mandatory authority imposes a particular requirement.

5 In some cases a valuer may need to report and record why a *valuation* method has not been used.

6 Valuers are encouraged to be analytical and to select and use *valuation* methods that support more in-depth analysis where appropriate. Valuers should not select and use *valuation* methods only on the basis that they are methods they have always used previously for similar *valuation* assignments – there **must** be a rationale for the selection.

7 There has been a trend in some markets towards greater interest and use of growth explicit *valuation* methods, including growth explicit discounted cash flow (DCF) methods. Use of such methods is not mandated but encouraged in appropriate circumstances. Further supporting information and global practice information can be found on the RICS website.

VPS 4 Inspections, investigations and records

1 Inspections and investigations

Inspections and investigations **must** always be carried out to the extent necessary to produce a *valuation* that is professionally adequate for its purpose. The valuer **must** take reasonable steps to verify the information relied on in the preparation of the *valuation* and, if not already agreed, clarify with the client any necessary *assumptions* that will be relied on.

These general principles are supplemented by the following additional requirements in VPS 1 and VPS 6.

- Any limitations or restrictions on the *inspection*, inquiry and analysis for the *purpose of the valuation* assignment **must** be identified and recorded in the *terms of engagement* (VPS 1 paragraph 3.2(i) and VPS 6 paragraph 2.2(h)) and also in the report.
- If the relevant information is not available because the conditions of the assignment restrict the *investigation*, then if the assignment is accepted, these restrictions and any necessary *assumptions* or *special assumptions* made as a result of the restriction **must** be identified and recorded in the *terms of engagement* (VPS 1 paragraph 3.2(i) and VPS 6 paragraph 2.2(h)) and in the report.

1.1 When settling the *terms of engagement* the valuer **must** agree the extent to which the subject asset is to be inspected and any investigation is to be made – see VPS 1.

1.2 When determining the extent of evidence necessary, professional judgement is required to ensure the information to be obtained is adequate for the *purpose of the valuation* and consistent with the *basis of value* adopted. In each case the valuer **must** judge the extent to which the information to be provided is likely to be reliable, and recognise and not exceed the limitations of their qualification and expertise when making this judgement.

1.3 When a property or other physical asset is inspected or examined, the degree of investigation that is appropriate will vary, depending on the nature of the asset and the *purpose of the valuation*. Except in the circumstances described in section 2, valuers are reminded that to dispense voluntarily with an *inspection* or examination of physical assets may introduce an unacceptable degree of risk in the *valuation* advice to be provided. They **must** therefore carefully assess that risk before proceeding; see VPS 1 paragraph 3.2(i) regarding ‘restricted services’, including the use of automated valuation models.

1.4 Where measurement needs to be undertaken or checked, members should have regard to the International Property Measurement Standards wherever applicable.

1.5 VPGA 8 provides detailed commentary on matters evident or to be considered during *inspection* of *real estate*, including those matters that fall within the general heading of '*sustainability* and *ESG* matters'. Such factors are commonly important in terms of market and societal perception and influence, and valuers **must** have proper regard to their relevance and significance in relation to individual *valuation* assignments. VPGA 5 provides commentary on matters to be considered during the *inspection* of *plant and equipment (including infrastructure)*. Attention should also be given to IVS 104 ESG Data and Inputs: Appendix.

1.6 Subject to **PS 2 paragraph 2.4** and **VPS 1 paragraph 3.2(j)**, the valuer **must** take reasonable steps to verify the information relied on in the preparation of the *valuation* and, if not already agreed, clarify with the client any necessary *assumptions* that will be made. While a client may request, or consent to, an *assumption* being relied on, if – following an *inspection* or examination – the valuer considers that such an *assumption* is at variance with the observed facts, then its continued adoption could, providing that it is realistic, relevant and valid for the particular circumstances of the *valuation*, become a *special assumption* (see **VPS 2 section 10**).

1.7 If relevant information is not available because the conditions of the instruction prevent *inspection*, or where it is agreed that *inspections* and investigations may be limited, then if the instruction is accepted, the *valuation* will be on the basis of restricted information and **VPS 1 paragraph 3.2(j)** will apply. Any restriction on *inspection* or examination, or lack of relevant information, should be set out in the *terms of engagement* and *valuation* report. If the valuer considers that it is not possible to provide a *valuation* even on a restricted basis, the instruction should be declined.

1.8 When a *valuation* assignment involves reliance on information supplied by a party other than the valuer, the valuer should consider whether the information is credible and may be relied on without adversely affecting the credibility of the *valuation* opinion. In that event, the assignment may proceed. Significant inputs provided to the valuer (for example, by management or owners) that materially affect the *valuation* outcome but about which the valuer considers some element of doubt arises will require assessment, investigation and/or corroboration. In cases where the credibility or reliability of information supplied cannot be supported, such information should not be used.

1.9 While the valuer should take reasonable care to verify any information provided or obtained, any limitations on this requirement **must** be clearly stated (see **VPS 1**). When preparing a *valuation* for *financial statements*, the valuer should be prepared to discuss the appropriateness of any *assumptions* with the client's auditor, other professional adviser or regulator.

1.10 A valuer meeting the criteria in **PS 2 section 2** will be familiar with, if not expert on, many of the matters affecting either the type of asset, including where applicable the locality. Where an issue, or potential issue, that could affect value is within the valuer's knowledge or evident from an *inspection* or examination of the asset, including where applicable the immediate locality, or from routine enquiries, it should be drawn to the client's attention no later than when the report is issued, and ideally in advance of the report in cases where the impact is significant.

2 Revaluation without reinspection of real property previously valued

2.1 A re*valuation* without a re*inspection* of an interest in real property previously valued by the valuer or *firm* **must not** be undertaken unless the valuer is satisfied that there have been no material changes to the physical attributes of the property, or the nature of its location, since the last assignment.

2.2 It is recognised that the client may need the *valuation* of its property updated at regular intervals and that re*inspection* on every occasion may be unnecessary. Provided that the valuer has previously inspected the property, and the client has confirmed that no material changes to the physical attributes of the property and the area in which it is situated have occurred, a re*valuation* without re*inspection* may be undertaken. The *terms of engagement* **must** state that this *assumption* has been made.

2.3 The valuer **must** obtain from the client information of current or anticipated changes in rental and other relevant income from *investment properties*, and any material changes to the non-physical attributes of each property, such as other lease terms, planning consents, statutory notices and so on. The valuer **must** consider how *sustainability* and *ESG* factors could affect the *valuation*.

2.4 Where the client advises that there have been material changes, or if the valuer is otherwise aware or has good reason to believe that such changes have taken place, the valuer **must** inspect the property. In all other cases, the interval between *inspections* is a matter for the professional judgement of the valuer who will, among other considerations, have regard to its type and location.

2.5 If the valuer believes that it is inappropriate to undertake a re*valuation* without re*inspection* because of material changes, the passage of time or other reasons, the valuer may nevertheless accept an instruction to proceed without *inspection*, providing the client confirms in writing (prior to the delivery of the report) that it is required solely for internal management purposes, no publication or disclosure will be made to *third parties* and the client accepts responsibility for the associated risk. A statement declaring this position, and that the report must not be published, **must** be set out unequivocally in the report.

3 Valuation records

3.1 A proper *record* **must** be kept of *inspections* and investigations, and of other key inputs, in an appropriate business format. This applies regardless of whether the valuer is employed by the client or externally engaged by the client.

Documentation

3.2 Written *records* of the *valuation* or *valuation review* are termed as ‘documentation’ in IVS and might contain client correspondence, working papers or both. *Documentation* serves as evidence for the findings drawn and ensures Red Book Global Standards and IVS compliance. It should, where appropriate, include a description of the *valuation* or *valuation review* and the valuer's risk management techniques used to minimise the potential for inaccurate *valuations*, such as stress testing, standardisation, model validation and independence, which could include obtaining second opinions, using different methods and input validation.

3.3 In order to sufficiently describe and explain the *valuation* and the valuer's opinion, *documentation* **must** be maintained throughout the *valuation* process, and include the conclusions reached. Adequate *documentation* subject to the nature of the instruction **must** be provided to enable understanding of the scope of the *valuation*, the work undertaken and the basis of conclusions.

3.4 *Documentation* can be included in the *valuation* report itself, the working papers or both (see also 3.5 below). It should normally include (but not be limited to):

- the valuer's use of professional judgement
- communication with the client
- data and inputs considered
- different methods used for the *valuation*
- the valuer's handling of any risks to help minimise the potential for inaccurate *valuations* and
- the quality control procedures adhered to.

3.5 To maintain a proper audit trail (for future review and/or audit) and be in a position to respond effectively to a future enquiry, legible notes **must** be made (which may include photographs or other images) of the findings and, particularly, the limits of *inspection* and the circumstances in which it was carried out. The notes should also include a record of the key inputs and all calculations, investigations and analyses considered when arriving at the *valuation*.

3.6 The valuer **must** keep a copy of the *valuation* report and all supporting *documentation* for any time period stipulated by any relevant legal, regulatory or contractual requirements.

3.7 Details of the *inspection* and any investigations **must** be clearly and accurately recorded in a manner that is neither ambiguous nor misleading and does not create a false impression.

3.8 Valuers **must** request and seek to collect appropriate and sufficient *sustainability* and *ESG* data for the *valuation*. What is appropriate and sufficient will be subject to and proportionate to the *valuation* circumstances. There may be matters outside the valuer's control, such as but not limited to the prevention of *ESG* data sharing by the owner or occupier of an asset. Any limitation on investigations **must** be considered in accordance with VPS 1 paragraph 3.2(i) and VPS 6 paragraph 2.2(g). Relevant *ESG* data used in a *valuation* **must** also be appropriately recorded.

3.9 All notes and *records* should be retained in an appropriate business format. The appropriate period for retention will depend on the *purpose of the valuation* and the circumstances of the case but **must** have regard to any relevant statutory, legal or regulatory requirements.

VPS 5 Valuation models

For the first time, IVS includes a standalone section covering *valuation models*: IVS 105. It is not the intention to fully repeat that here, but rather set out mandatory and best practice requirements and additional context for RICS members and *RICS-regulated firms*.

1 IVS defines a *valuation model* as 'a quantitative implementation of a method in whole or in part that converts inputs into outputs used in the development of a value'. This is distinct from a *valuation* method, defined as 'within a valuation approach, a specific technique to conclude a value'.

2 Where a complex or proprietary *valuation model* is used, valuers **must** make sure the model is suitable for the *valuation purpose*, using appropriate professional judgement.

3 Members and, where appropriate, *RICS-regulated firms* **must** consider and appropriately apply the provisions of IVS 105 not repeated here.

4 *Valuation modelling* can involve advanced numerical and statistical practices and the use of advanced technology and automation (see **PS 1 paragraphs 1.4–1.6**). In general, the more advanced the model(s), the greater the degree of vigilance needed to ensure there is no internal inconsistency or error.

VPS 6 Valuation reports

1 General principles

Valuation reports and *documentation* are a critical and defining feature of the Red Book Global Standards process. The report and *documentation* **must**:

- clearly and accurately set out the conclusions of the *valuation* in a manner that is neither ambiguous nor misleading, and which does not create a false impression. If appropriate, the valuer should draw attention to, and comment on, any issues affecting the degree of certainty, or uncertainty, of the *valuation* under paragraph 2.2(o) below
- deal with all the matters agreed between the client and the valuer in the *terms of engagement (scope of work)* (see **VPS 1**).

1.1 In brief, the *valuation* report and supporting *documentation* **must** convey a clear understanding of the opinions being expressed by the valuer and provide transparency to the intended user on the *valuation* approach(es), methods, inputs, models, professional judgement and resultant value(s). *Valuation* reports should be in terms that can be read and understood by someone with no prior knowledge of the subject asset or liability.

1.2 A *valuation's* findings **must** be recorded and submitted to the client in writing, using paper *records*, electronic files or other types of recorded media. The level of reporting **must** at a minimum meet the requirements contained in paragraph 2.1 below.

1.3 *Documentation* and reporting requirements apply whether the valuer is externally engaged by the client or employed by the client.

1.4 The format and detail of the report is a matter to be agreed between the valuer and the client in the *terms of engagement*. It should be proportionate to the task, and – as for the *valuation* itself – professionally appropriate for the purpose. Where the report is to be provided on a form or in a format specified by the client that omits reference to one or more of the headings in section 2 below, then either the initial service agreement or the *terms of engagement* – or an appropriate combination of the two – **must** clearly address these matters. Failure to do so would result in the *valuation* not being undertaken in accordance with these global standards. See also **VPS 1 paragraph 3.2(l)**.

1.5 Where multiple reports are to be made to a single client over a period of time, with the same *terms of engagement*, supplementary correspondence or *documentation* would be required for the case and time-specific aspects of the instruction. It **must** be made clear to the client and to any others who may rely on the *valuation* advice provided that the *terms of engagement* and form of report **must** always be read together.

1.6 A valuer may provide the client with preliminary *valuation* advice, or a draft report or draft *valuation*, in advance of the completion of the final report – see **PS 2 paragraphs 3.12–3.15**. However, it is essential that the preliminary or provisional status is made clear, pending issue of the formal and final report.

1.7 Members are reminded that any *valuation* advice provided, in whatever format, creates a potential liability to the client, or under certain circumstances to one or more *third parties*. Great care should therefore be taken to identify and understand when and how such liabilities do, or may, arise, and their likely extent. See paragraph 2.2(p) below.

1.8 The terms 'certificate of value', 'valuation certificate' and 'statement of value' should not be used in connection with the provision of *valuation* advice. However, a valuer may use the term 'certified' or similar words in the body of the report where it is known that the *valuation* is to be submitted for a purpose that requires formal certification of a *valuation* opinion. (See **VPS 1 paragraph 3.2(l)**.)

2 Report content

2.1 *Valuation* reports **must** address the following matters, which reflect the requirements set out in **VPS 1** for the *terms of engagement (scope of work)*. Although reports may often commence with identification of the asset (or liability) and confirmation of the *purpose of the valuation*, valuers are otherwise strongly advised where possible to consider and follow the headings set out below when reporting, to ensure that all relevant matters are covered.

a Identification and status of the *responsible valuer*

b Identification of the client and any other intended users

c *Purpose of the valuation*

d Identification of the asset(s) or liability(ies) valued

e *Basis(es) of value* adopted

f *Valuation date*

g Extent of investigation

h Nature and source(s) of the information relied, upon including sources of key data and inputs used

i *Assumptions* and *special assumptions*

j Restrictions on use, distribution and publication of the report

k Confirmation that the *valuation* has been undertaken in accordance with IVS and/or RICS Red Book Global Standards

l *Valuation* approach and reasoning, including any *valuation* method(s) and complex or proprietary model(s) used

m Amount of the *valuation* or *valuations* n Date of the *valuation* report

o Commentary on any material valuation uncertainty (MVU) in relation to the *valuation* where it is essential to ensure clarity on the part of the *valuation* user

p A statement setting out any limitations on liability that have been agreed

q Significant *environmental, social and governance (ESG)* factors used and considered

2.2 Each report heading is considered in more detail below. The text in bold specifies the key principles. The accompanying text specifies how the principles are to be interpreted and implemented in individual cases.

a) Identification and status of the responsible valuer

The valuer can be an individual or a member of a *firm*. The report must include:

a **the signature of the individual responsible for the *valuation* assignment**

b **a statement confirming that the valuer is in a position to provide an objective and unbiased *valuation*, and is competent to undertake the *valuation* assignment.**

If the valuer has obtained material assistance from others in relation to any aspect of the assignment, the nature of such assistance and the extent of reliance must be referenced in the report.

Implementation

1 A *valuation* is the responsibility of an individual member. RICS does not allow a *valuation* to be prepared by a *firm*, although the use of 'for and on behalf of' under the *responsible valuer's* signature is an acceptable substitution.

2 In all cases the signatory's professional designation (for example MRICS), or other relevant professional qualification, **must** be made clear.

3 The valuer should confirm in the report that they meet any regulatory or legal criteria for their appointment. Where it is a specific requirement to do so, the valuer **must** state whether they are acting as an *internal valuer* or *external valuer* as defined in the Glossary. However, for certain purposes in individual jurisdictions, other definitions of these terms may apply, which **must** be recognised in the *terms of engagement* (assuming the valuer meets the criteria specified in the definition) and made explicit in the report. Where other criteria concerning the status of a valuer have been adopted, they **must** again be confirmed, together with a statement that the valuer meets them.

4 In considering the extent of any material involvement, whether past, current or possible future, the valuer **must** have regard to the requirements of **PS 2 section 7**. Any disclosures or statements made in accordance with **VPS 1 paragraph 3.2(a)(3)** **must** be repeated in the *valuation* report. Where there has not been any other material involvement, a statement to that effect **must** be made in the *valuation* report. See also **PS 2** relating to the resolution of conflicts of interest.

5 A statement should be made that the valuer and/or the valuer's *firm* has sufficient current local, national and international (as appropriate) knowledge of the particular market, and the skills and understanding to undertake the *valuation* competently. Where more than one valuer in a *firm* has contributed, confirmation that **PS 2 paragraph 2.7** has been satisfied is needed, although it is not necessary to provide any details.

6 Where the valuer incorporates into the report a *valuation* prepared by another valuer or *firm* – whether in the capacity of a subcontractor or *third-party* expert in one or more aspects – see (j) subparagraphs 3–4 below.

7 In some countries or states the valuation standards specific to that jurisdiction may require additional disclosures to be made with regard to the status of the valuer.

b) Identification of the client and any other intended users

The party commissioning the *valuation* assignment must be identified, together with any other parties whom it is intended may rely on the results of the assignment (see also (j) below).

Implementation

1 The report **must** be addressed to the client or its representatives. The source of the instructions and the identity of the client **must** be stated, if different from the addressee. Other known users of the report are to be named.

2 For some purposes valuers may be unable to exclude liability to *third parties* (see **PS 2 section 5**). Any limitation on disclosure of a *valuation* based on restricted information or instruction should be included (see **VPS 1 paragraph 3.2(j)**).

c) Purpose of the valuation

The *purpose of the valuation* assignment must be clearly stated.

Implementation

1 The report **must** be unambiguous. Where the *purpose of the valuation* is not disclosed by the client, the valuer should seek clarification on why this is so. The *valuation* report **must** include an appropriate statement to clarify the circumstances.

d) Identification of the asset(s) and/or liability(ies) to be valued

The asset and/or liability to which the *valuation* assignment relates must be clearly identified. Clarification may be needed to distinguish between an asset and an interest in or right of use of that asset.

If the *valuation* is of an asset that is used in conjunction with other assets, the valuer must clarify whether those assets are:

- **included in the *valuation* assignment**
- **excluded but assumed to be available or**
- **excluded and assumed not to be available.**

If the *valuation* is of a fractional interest held in an asset or liability, the relationship of the fractional interest being valued relative to all other fractional interests and the obligations of the fractional interest ownership, if any, to other fractional interest owners, must be made clear.

Particular regard must be had to the identification of portfolios, collections and groups of properties. The valuer must consider 'lotting' or 'grouping'; the identification of different property or asset categories; and any *assumptions* or *special assumptions* relating to the circumstances under which the properties, assets, liabilities or collections may be brought to the market.

Implementation

1 The legal interests in each asset or liability should be stated. Clarification is essential to distinguish between the characteristics of the asset in its entirety and the particular right or interest that is being valued. Where the asset is a property, the extent to which vacant possession is, or may be, available (if required) should also be noted.

2 Where the assets are located in more than one country or state, the report **must** list the assets in each country or state separately, and should normally be arranged so that all the assets in one country or state are grouped together. The legal interest in each asset or liability should be stated.

3 Where the *terms of engagement* have required separate identification of assets or liabilities by their use, category or class, the report should be structured accordingly.

4 Where there is doubt about what constitutes a single property or asset, the valuer should generally 'lot', or group, the properties for *valuation* in the manner most likely to be adopted in the case of an actual sale of the interest(s) being valued. However, the valuer should discuss the options with the client and **must** confirm the approach adopted in both the *terms of engagement* and the report. For further guidance on portfolios, collections and groups of properties, including the reporting format, see VPGA 9.

e) Basis(es) of value adopted

The *basis of value* must be appropriate for the purpose. The source of the definition of any *basis of value* used must be cited or the basis explained.

Implementation

1 The *basis of value*, together with its definition (but not supporting conceptual framework or other explanatory material regarding that definition), **must** be stated in full in the report.

2 Unless agreed otherwise in the *terms of engagement,* the valuer is not required to provide a *valuation* on an alternative *basis of value*. However, where the *basis of value* is not a market-based figure and the *valuation* is materially different from *market value*, an explanatory statement to that effect may be appropriate. This is to ensure that the user of the *valuation* is alerted to the possibility that, although relevant for the specified purpose, the

valuation may not bear a relation to the price that could be obtained if the asset or liability were placed on the market for disposal.

3 Where, exceptionally, a *valuation* is provided relating to a future date, this **must** be made explicit (see **paragraph (f)** below). It should be separately reported with confirmation that it complies as appropriate with any applicable jurisdictional and/or national standards. A projection may take one of several forms and does not normally constitute a distinct *basis of value* in itself. But, as it rests substantially on *special assumptions*, which may or may not be borne out by actual events, it is of a different character from advice relating to a current or past date and **must not** be represented as if it were on an equal footing. In particular, it **must** not be described or represented as *market value*.

f) Valuation date

The *valuation date* may be different from the date on which the *valuation* report is issued or the date on which investigations are to be undertaken or completed. Where appropriate, these dates must be clearly distinguished in the report.

Implementation

1 The *valuation date* **must** be stated (see VPS 1 paragraph 3.2(h)).

2 If there has been a material change in market conditions, or in the circumstances of a property, asset or portfolio, between the *valuation date* (where this is earlier than the *date of the report*) and the *date of the report*, the valuer should draw attention to this. It may also be prudent in appropriate instances for the valuer to draw the client's attention to the fact that values change over time and a *valuation* given on a particular date may not be valid on an earlier or later date.

3 Additional care is needed when providing a projection of value, to ensure that the client understands that the actual value at the future date, on whatever basis is adopted, may diverge from that being reported, and almost certainly will if the then state of the asset or conditions of the market differ from the *special assumptions* statements made at the time of the projection. See also **paragraph (e)(3)** above.

g) Extent of investigation

The extent of the investigations undertaken, including the limitations on those investigations set out in the *terms of engagement (scope of work)*, must be disclosed in the report.

Implementation

1 Where the asset is a real property interest, the report **must** record the date and extent of any *inspection*, including reference to any part of the property to which access was not possible (see VPS 4). Equivalent steps, appropriate to the class of asset concerned, should be taken in relation to tangible *personal property*.

2 The valuer **must** make it clear if the *valuation* has been made without an opportunity to carry out an appropriate *inspection* (see VPS 4 paragraphs 1.2 and 1.7) or equivalent check.

3 In the case of a re*valuation*, the report should also refer to any agreement in respect of the requirement for, or frequency of, an *inspection* of the property (see VPS 4).

4 Where a substantial number of properties are being valued, a generalised statement of these aspects (i.e. regarding *inspection*) is acceptable, provided that it is not misleading.

5 Where the asset is not real or tangible *personal property*, particular care should be taken in the report to note the extent to which investigations were possible.

6 Where the *valuation* is undertaken on the basis of restricted information, or is a re*valuation* without an *inspection*, the report **must** include full particulars of the restriction (see also VPS 1 paragraph 3.2(i)).

h) Nature and source(s) of the information relied upon, including sources of key data and inputs used

The nature and source of any relevant information relied upon in the *valuation* process and the extent of any steps taken to verify that information must be disclosed.

To the extent that information provided by the commissioning party, or another party, has not been verified by the valuer, this should be clearly stated with reference, as appropriate, to any representation from that party.

For this purpose, 'information' is to be interpreted as including data and other such inputs.

Implementation

1 Where the client has provided information that is to be relied on, the valuer has a responsibility to state clearly that the information is covered by, or in, the *terms of engagement* (see VPS 1) and, where appropriate, to specify its source. In each case the valuer **must** judge the extent to which the information to be provided is likely to be reliable and whether any further reasonable steps are required to verify it.

2 The valuer **must** make it clear if the *valuation* has been carried out without information that would normally be, or be made, available. The valuer **must** also indicate in the report if verification (where practicable) is needed of any information or *assumptions* on which the *valuation* is based, or if any information considered material has not been provided.

3 If any such information or *assumption* requiring verification is material to the amount of the *valuation*, the valuer **must** make clear that the *valuation* should not be relied on without that verification (see VPS 1 paragraph 3.2(j)). In the case of a re*valuation*, a statement of any material changes advised by the client or a stated *assumption* that there have been no material changes should be included.

4 The client may expect the valuer to express an opinion, and in turn the valuer may wish to express an opinion, on legal issues that affect the *valuation*. In these circumstances the valuer **must** make clear in the report any information that must be verified by the client's or other interested parties' legal advisers before the *valuation* can be relied on or published.

5 The report should state any additional information that has been available to, or established by, the valuer, and is believed to be crucial to the client's ability to understand and benefit from the *valuation*, with regard to the purpose for which it has been prepared.

6 The rationale for the valuer's opinion of the general reliability and quality of the important data, inputs, modifications and *assumptions* **must** be documented in the report by the valuer. This should contain sources, procedures, the valuer's reasoning for selecting to utilise particular data, *assumptions*, modifications and inputs.

i) Assumptions and special assumptions

All *assumptions* and any *special assumptions* made must be clearly stated.

Implementation

1 All *assumptions* and any *special assumptions* **must** be set out in the report in full, together with any reservations that may be required and a statement that they have been agreed with the client. Both the *valuation* conclusion and the executive summary (if provided) should explicitly set out all *special assumptions* that have been made to arrive at the reported figure. Where the *assumptions* vary in different countries or states, the report **must** make this clear.

j) Restrictions on use, distribution and publication of the report

Where it is necessary or desirable to restrict the use of the *valuation* or those relying upon it, this must be stated.

Implementation

1 The valuer **must** state the permitted use, distribution and publication of the *valuation*.

2 It may have been agreed that the report may be published in full or in a condensed publication statement, for instance in the annual accounts of a company, but it is more common for only a reference to be made to it. In this case it is essential that the valuer approves any published reference or publication statement to ensure that all the references are accurate and the reader is not misled.

3 If it has been agreed that a condensed publication statement is required, the draft statement should be prepared as a separate document and provided to the client at the same time as the report. The content of the statement may be governed by rules issued by local regulatory bodies, but it should contain the following minimum information:

- the name and qualification of the valuer, or the valuer's *firm*
- an indication of whether the valuer is an *internal valuer* or *external valuer* and, where required, that the specific criteria relating to this status have been met

- the *valuation date* and *basis(es) of value*, together with any *special assumptions*
- comment on the extent to which the values were determined directly by reference to market evidence or were estimated using other *valuation* techniques
- confirmation that the *valuation* has been made in accordance with these standards, or the extent of and reason(s) for *departure* from them and
- a statement indicating any parts of the report prepared by another valuer or specialist.

4 For *valuations* in which the public has an interest or which may be relied on by parties other than the client commissioning the report or to which it is addressed, the valuer **must** make additional disclosures in the *valuation* report and any published reference to it. These are set out in PS 2 section 5.

5 'Publication' does not include making the report or the *valuation* figure available to a mortgage (lending) applicant or borrower.

6 The valuer should check the accuracy of any other relevant material referring to the properties or to the *valuation* that is to be published.

7 The valuer is also advised to read the whole document in which the report or reference is to be published to ensure that there is no misstatement of any other matter or opinion of which the valuer may have knowledge.

8 The valuer should insist that a copy of the final proof of the document or the reference is supplied before issue, and attach that proof to the letter of consent. Any pressure by other parties or persuasion to delegate power to sign should be resisted.

9 The valuer is permitted to exclude information of a commercially sensitive nature from a report that is published in full, subject to any legal requirements that may apply in a particular country or state.

10 An opinion may be expressed that, if included in a public document, might have some effect on a matter that is in dispute, under negotiation or subject to certain rights between the owner and a *third party* (for example, an opinion of the rental or capital value of a property with an imminent rent review). The report may also include information about a company's trading that would not usually be in the public domain. Such information is commercially sensitive and the client must decide, subject to the approval of the auditors and any regulatory body, whether it should be included in the publication.

11 In the published reference, the valuer **must** refer to the omission(s) and state that this has been done on the express instructions of the client and with the approval of the regulatory body and/or auditors. Without this note, the valuer may be inadvertently placed in a situation where there is unjustifiable criticism.

12 Where the full report is not published, the publication statement **must** refer to any *special assumption* made and any additional *valuation* provided. Similarly, sufficient reference to any *departures* should be made in any published document.

13 In each case the onus is on the valuer to determine what constitutes a ‘sufficient reference’. A reference would not be regarded as ‘sufficient’ if it failed to alert the reader to matters of fundamental importance as to the basis or amount of the *valuation*, or if there was any risk that the reader might be misled.

14 It is expected that a valuer would not normally consent to the publication of a projected value. Where, in exceptional cases, consent is given, great care should be taken to ensure that any associated provisos or disclaimers are accurately reproduced.

k) Confirmation that the valuation has been undertaken in accordance with IVS and/or RICS Red Book Global Standards

The valuer should provide:

- **confirmation that the *valuation* has been undertaken in accordance with IVS and that all significant inputs have been assessed by the valuer and found to be appropriate for the *valuation* provided**

or (depending on clients’ particular requirements)

- **confirmation that the *valuation* has been undertaken in accordance with *RICS Valuation – Global Standards*, which incorporate IVS, and (where applicable) the relevant RICS national or jurisdictional supplement. Where appropriate, such confirmation may refer simply to RICS Red Book Global Standards.**

In the case of Red Book Global Standards applying, an accompanying note and explanation of any *departures* from Red Book Global Standards must be included. A *departure* would not be justified if it resulted in a *valuation* that is misleading.

Implementation

1 There is no material difference in outcome between the respective forms of endorsement above, which may be used according to the requirements of the *valuation* assignment. Some clients will expressly wish to have confirmation that the *valuation* has been undertaken in accordance with IVS, and this can be given. In all other cases, confirmation that the *valuation* has been undertaken in accordance with RICS Red Book Global Standards carries with it the dual assurance of compliance with IVS and with RICS professional standards overall.

2 References to Red Book Global Standards without reference to the year of issue will be taken to mean the version of the RICS standard operative at the *valuation date*, provided that it is on or before the date of signature of the report.

3 The statement of compliance should draw attention to any *departures* from Red Book Global Standards (see PS 1 section 6).

4 Where valuation standards specific to a particular jurisdiction have been followed, a formal statement regarding compliance with those jurisdictional standards may be added.

5 Where the valuer incorporates into the report a *valuation* prepared by another valuer or *firm* – whether as a subcontractor or as a *third-party* expert – it **must** be confirmed that such *valuations* have been prepared in accordance with these global standards, or other standards that may apply in the particular circumstances.

6 The valuer may be requested to incorporate a *valuation* commissioned directly by the client. In such cases the valuer **must** be satisfied that any such report has been prepared in accordance with these global standards.

l) Valuation approach and reasoning, including any valuation method(s) and complex or proprietary model(s) used

To understand the *valuation* figure in context, the report must make reference to the approach(es) adopted, the method(s) and model(s) applied, key inputs used and the principal reasons for the conclusions reached.

This requirement does not apply if it has been specifically agreed and recorded in the *terms of engagement (scope of work)* that a report will be provided without reasons or other supporting information.

Implementation

1 Where different *valuation* approaches and *assumptions* are required for different assets, it is important that they are separately identified and reported.

2 For the distinction between approach and method see VPS 3 paragraph 1. The extent of description of these in individual assignments should be proportionate to the task, being focused on assisting understanding of the client and other intended users. The supporting reasons, or rationale, for the conclusions reached should, where relevant, include an explanation of any deviation from common practice within the profession.

3 Refer to VPS 5 in respect of the use of *valuation models*. A *valuation model* is a tool used for the quantitative implementation of a *valuation* method and transforms inputs into outputs used in the development of a value.

4 In the case of assets and/or liabilities that are interests in *real estate*, attention is drawn to VPS 4 paragraph 1.5.

m) Amount of the valuation or valuations

This must be expressed in the applicable currency.

Implementation

1 In the main body of the report, the opinion of value **must** be provided in words, as well as in figures.

2 Where the *valuation* instruction includes several assets falling into different use categories or geographic locations, whether the *valuation* is reported asset by asset or otherwise will depend on the purpose for which the *valuation* is required, the circumstances

and client preferences. Where a portfolio includes assets of differing tenures, the value of the tenure groups may be subtotalled, together with a statement of the overall value.

3 An entity will usually require asset and/or liability values to be expressed in the currency of the country in which it is based. For *financial statement* purposes, this is known as the 'reporting currency'. Irrespective of the location of the client, *valuations* **must** be made in the currency of the country in which the asset or liability is located.

4 Where the client requires the *valuation* to be translated into a different currency (for example, into the reporting currency), unless agreed otherwise the exchange rate to be adopted is the closing rate (also known as the 'spot rate') on the *valuation date*.

5 Where the *valuation* instruction requires the opinion of value to be reported in more than one currency (such as with cross-border portfolio *valuations*), the opinion of value **must** indicate the currencies adopted and the amount **must** be shown in words and figures in the main body of the report. In addition, the exchange rate adopted should be as at the *valuation date* and this **must** be stated in the *valuation* report.

6 If the identification of individual assets and their values is consigned to a schedule(s) appended to the report, a summary of values **must** be included within the body of the report.

7 If there has been a material change in market conditions, or in the circumstances of an asset or portfolio, between the *valuation date* (where this is earlier than the *date of the report*) and the *date of the report*, the valuer should draw attention to this. It may also be prudent in appropriate instances for the valuer to draw the client's attention to the fact that values change over time, and a *valuation* given on a particular date may not be valid on an earlier or later date.

8 'Negative values' and liabilities may arise and **must** always be stated separately. They should not be offset.

n) Date of the valuation report

The date on which the report is issued must be included. This may be different from the *valuation date* (see (f) above).

o) Commentary on any material valuation uncertainty (MVU) in relation to the valuation where it is essential to ensure clarity on the part of the valuation user

Implementation

1 This requirement is mandatory only where the uncertainty is material. For this purpose, 'material' means where the degree of uncertainty in a *valuation* falls outside any parameters that might normally be expected and accepted.

2 All *valuations* are professional opinions on a stated *basis of value*, coupled with any appropriate *assumptions* or *special assumptions*, which **must** also be stated (see VPS 2) – a *valuation* is not a fact. Like all opinions, the degree of subjectivity involved will inevitably vary from case to case, as will the degree of 'certainty' – for example, the probability that the

valuer's opinion of *market value* would exactly coincide with the price achieved were there an actual sale at the *valuation date*, even if all the circumstances envisaged by the *market value* definition and the *valuation assumptions* were identical to the circumstances of an actual sale. Most *valuations* will be subject to a degree of variation (that is, a difference in professional opinion), a principle well-recognised by the courts in a variety of jurisdictions.

3 Ensuring user understanding and confidence in *valuations* requires clarity and transparency, hence the general requirement under subsection (m) above for the report to make reference to the approach or approaches adopted, the key inputs used and the principal reasons for the conclusions reached, thereby enabling the user to understand the *valuation* figure in context. How much explanation and detail is necessary concerning the supporting evidence, the *valuation* approach and the particular market context is a matter of judgement in individual cases.

4 Normally, *valuations* will not require additional explanation or clarification beyond the general requirement referred to in paragraph 3 above. However, in some cases there may be a greater degree of uncertainty concerning the *valuation* figure reported than usual, and where that uncertainty is material – which should be expressly signalled in the report – further proportionate commentary **must** be added to ensure the report does not create a false impression. Valuers should not treat such a statement expressing less confidence in a *valuation* than usual as an admission of weakness – it is not a reflection on their professional skill or judgement, but a matter entirely proper for disclosure. Indeed, if a failure to draw attention to material uncertainty gave a client the impression that greater weight could be attached to the opinion than was warranted, the report would be misleading.

5 For further guidance on material valuation uncertainty (MVU) see VPGA 10.

p) A statement setting out any limitations on liability that have been agreed

Implementation

1 The issues of risk, liability and insurance are closely linked. Pending the issue of guidance of global application, members should check the latest RICS guidance applicable in their jurisdiction.

q) Significant environmental, social and governance factors (ESG) used and considered

Valuers must identify, report and document the consideration of significant *ESG* factors and any impact on the *valuation* conclusion and/or rationale.

When it comes to the significant *ESG* aspects influencing a *valuation*, the valuer should be reasonably informed of *ESG* frameworks and legislation relevant to the *valuation* being undertaken.

***ESG* considerations have the potential to require qualitative and/or quantitative reporting and *documentation*. They may present opportunities and/or risks that need to be taken into account.**

ESG **factors beyond the scope of what was agreed in the** ***terms of engagement*** **and/or where not considered significant by the reasonable professional judgement of the valuer do not need to be reported and** ***documented*****.**

Significant ***ESG*** **factors considered in terms of their impact on the** ***valuation*** **and the** ***valuation*** **report should not be regarded as an** ***ESG*** **risk assessment or for any other use beyond the scope of the** ***valuation*****.**

Implementation

1 Examples of *ESG* factors for all asset classes are included at IVS 104 Data and Inputs: Appendix. These may or may not be significant depending on the *valuation*.

2 The relevance of *ESG* factors and whether they are significant will depend on the asset or liability being valued, as well as the *valuation purpose* and *basis of value*. Some factors will only be relevant in certain locations and *valuation* circumstances. Significant *ESG* considerations should be proportionate to the *valuation* task. Additional and more detailed considerations may be required for some *ESG* factors depending on the type of *valuation*. The VPGAs below include *ESG* considerations specific to certain *valuation purposes* and asset types.

Part 5: Valuation practice guidance applications

VPGA 1 Valuations for financial reporting

1 Scope

1.1 This VPGA provides guidance on *valuations* that may be required for *financial reporting*. It provides an overview of the typical components of a financial report, matters that the valuer needs to consider when agreeing *terms of engagement* for work of this type and additional matters that need to be addressed in the report. It then provides a summary of those *International Financial Reporting Standards* (IFRS) that may require *valuation* inputs for different types of asset or liability to meet specific accounting requirements.

1.2 Valuers are reminded that financial reporting standards continue to evolve and they should be aware of, and refer to, the standard applicable on the reporting date.

2 Background

2.1 Financial reports, also known as *financial statements*, provide information about an entity's financial position, performance and changes in its financial position that is useful to management, owners and other stakeholders in making economic decisions. An entity can be any incorporated or unincorporated body or organisation. Periodic financial reports prepared in accordance with specified financial reporting standards are usually a legal requirement for many types of entity in most jurisdictions.

2.2 A complete financial report will typically include the following.

- A balance sheet, also referred to as a 'statement of financial position', which provides a statement of the entity's assets, liabilities and owners' equity at a given point in time.
- An income statement, also known as a 'statement of comprehensive income', or 'profit and loss account', which reports on an entity's income, expenses and profits over a given period of time.

- An equity statement or statement of retained earnings, which reports on the changes in equity of the entity during the stated period.
- A cash flow statement that shows an entity's cash flow activities, particularly its operating, investing and financing activities.
- Notes to the above.

2.3 IFRS are the most widely adopted financial reporting standards globally and include specific requirements for *valuation*, which are discussed in this VPGA. However, members should note that national standards are also extensively used, especially for smaller private sector and most public sector entities. Although it is impractical to refer to such national accounting standards in an international guidance document, many are similar to IFRS. The guidance given may therefore be relevant for *valuations* for use in financial reporting standards other than IFRS.

2.4 *Valuations* may be needed to assist in preparing some of the information that has to be included in financial reports. It is therefore important that a valuer understands the different accounting requirements for which *valuations* may be required and the applicable *valuation* criteria. Some examples of the different purposes for which *valuations* may be required in financial reports include measurement of an asset or liability for inclusion on the balance sheet, allocation of the purchase price of an acquired business between different assets, impairment testing and the calculation of depreciation charges in the profit and loss account.

2.5 This VPGA provides information on the different purposes for which *valuation* advice may be required in the preparation of *financial statements* and the different *valuation* bases, *assumptions* and approaches that may be required or allowed. Unless they are appropriately qualified, valuers should be careful not to go beyond providing the required *valuation* advice by advising on whether or how this is used in the *financial statements*, subject only to approving any published reference to their *valuation*.

3 Compliance with valuation standards

3.1 IVS 101 requires the scope of work agreed for a *valuation* to be appropriate for its intended use. If instructed to undertake a *valuation* for use in financial reporting, the valuer needs to be aware of the specific accounting purpose for which the *valuation* is required. To comply with IVS 101 and **VPS 1**, the following additional points may need to be considered in preparing and agreeing the scope of work.

- Confirmation of how the asset is used or classified by the reporting entity. The required accounting treatment and related *valuation* advice for identical or similar assets can differ according to how they are used by an entity, e.g. whether an asset is held for investment, production, is surplus and held for sale, or inventory that is held for sale.
- Identification of the applicable Financial Reporting Standards (FRS), including those for the specific accounting purpose for which the *valuation* is required.

- If an asset is utilised in conjunction with other separately identifiable assets, agree what the 'unit of account' is, i.e. how associated assets are to be aggregated or disaggregated for *valuation*.
- *Bases of value* required by the relevant accounting standard. *Fair value* as defined in IFRS 13 is the most common, but others may be required.
- Confirmation of the *assumptions* that will be made. These will need to reflect the standards applicable for the accounting purpose, which in turn will depend on how the entity uses or intends to use the asset. Unless the client has declared assets as surplus or management intends to liquidate the business, it is usually appropriate to make an *assumption* that the asset(s) will continue to be used as part of the business of which they form part.
- Restrictions on use, distribution and publication of the report. It is usual for valuers to restrict references to or publication of their *valuation* without prior consent. It is important to understand that a request to provide a client with a *valuation* that will be used for financial reporting does not automatically mean that the *valuation* will appear in the published report. Indeed, under IFRS the only non-financial asset that has to be measured at *fair value* on each reporting date is *investment property*; see IAS 40. As explained in this VPGA, *valuation* advice may be required only as one input into an entity's calculation of a figure required by the FRS or to decide which of permitted alternative measurement options it will use. However, if the client indicates that they wish to publish or refer to the *valuation* in their published financial report, then the terms **must** include a condition that any published reference must be first approved by the valuer in the context in which it is proposed to appear. (**VPS 1 section 3.2(m)**).
- The extent of the valuer's duty to respond to any questions on the *valuation* raised by the entity's auditor. (See VPGA 11.)

3.2 It should be noted that it is not normally appropriate to provide a *valuation* on a *special assumption* because all assets and liabilities should be valued 'as is' on the reporting date. One exception is where there is a lease of an asset between the reporting entity and a subsidiary or connected company where a *special assumption* that the lease had been terminated on the reporting date may be required to avoid a misstatement of the asset's value.

3.3 In addition to the minimum requirements in **VPS 6**, a *valuation* report for financial reporting should include, where applicable:

- appropriate references to matters addressed in the scope of work as outlined above
- any information that the reporting entity is required to disclose about the *valuation* by the relevant FRS. Examples of disclosures required about *fair value* measurements include methods and significant *assumptions* used in the measurement, and whether the measurement was determined by reference to observable prices or recent market transactions. Some standards also require information about the sensitivity of the measurement to changes in significant inputs

- where the effect on value of any *assumption* made is material, the effect of that *assumption* should be disclosed in the report
- if it has been agreed that the client may include a published reference to the *valuation* and who prepared it, a draft statement **must** be prepared and annexed to the report, together with a condition that the valuer approves its use in the context of the proposed financial report. (VPS 6 section 2.2(j)).

4 Guidance on selected IFRS

4.1 IFRS are the standards and interpretations issued by the International Accounting Standards Board (IASB) and the International Sustainability Standards Board (ISSB). They comprise:

a International Accounting Standards. Standards originally issued before 2001 are prefixed IAS, and those originally published later are prefixed IFRS

b IFRS International Sustainability Disclosure Standards, and

c interpretations developed by the International Financial Reporting Interpretations Committee (IFRIC).

4.2 At the time of publication there are 41 effective financial reporting standards, 2 International Sustainability Disclosure Standards and almost 20 current interpretations endorsed by IFRIC. These standards are subject to regular review and updates.

4.3 This VPGA briefly summarises those standards that may require *valuations* of tangible and *intangible assets* to be undertaken, with a note of the key requirements for those *valuations*. Members involved in this work should familiarise themselves with the current version of the relevant IFRS, available from the IFRS website.

Fair Value IFRS 13

4.4 This standard defines and explains the application of *fair value*, which is the most common *basis of value* required across the whole suite of IFRS. Understanding the key principles of this standard is therefore essential for valuers providing *valuations* for *financial reporting*. *Fair value* is defined as:

> '...the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.'

4.5 IFRS 13 provides considerable guidance on how the elements of this definition are to be interpreted and applied. This includes explaining the attributes of the market in which the transaction is deemed to take place, the nature and motivation of the parties to the transaction, what represents the most advantageous price and how the principle of highest and best use applies.

4.6 Many valuers will be more familiar with *market value*, as defined in IVS, than with *fair value* as defined above. However, for most practical purposes the two should produce the same result as they are both based on the same concept of a price in a free and open exchange between typical buyers and sellers on a given date. It follows that for non-financial assets both reflect the principle of highest and best use, presuming the parties are knowledgeable and informed, acting in their best interests and without undue constraint.

4.7 One condition that IFRS 13 applies to the principle of highest and best use is that it has to be determined whether the maximum value to market participants would be to use the asset in combination with other assets and liabilities, or to use on a standalone basis. The illustrative examples that accompany IFRS 13 include land developed for industrial use in an area where nearby sites have been redeveloped for high-density residential use, which is also consistent with the current zoning for land use in the area. In this example the *fair value* is determined by comparing:

a the value of the land as currently developed for the specific industrial use (i.e. the land would be used in combination with other assets, such as the factory buildings, plant, equipment and other assets or liabilities)

b the value of the land as a vacant site for residential use, taking into account the costs of demolishing the factory and other costs (including any uncertainty about whether the entity would be able to convert the asset to the alternative use) necessary to convert the land to a vacant site (i.e. the land is to be used by market participants on a standalone basis).

4.8 This means that a valuer of *real estate* may sometimes be instructed to provide *valuations* on alternative *assumptions* of the use. This is so the client can calculate which is the highest and best use, after taking into account the value of any assets used in combination and the costs of realising an alternative use.

4.9 IFRS 13 allows use of any techniques (methods) under the *market approach*, *income approach* and *cost approach*, subject to them being appropriate in the circumstances and for which sufficient data are available, maximising the use of relevant observable inputs and minimising the use of unobservable inputs. Observable inputs are defined as inputs that are developed using market data, such as publicly available information about actual transactions. Unobservable inputs are not supportable by market data. Both types of input have to be developed using the best information available about the *assumptions* that market participants would use when pricing the asset or liability.

4.10 Consequently, valuers should provide a clear rationale for their reported *valuations*, indicating the key inputs that have been relied on in arriving at their *valuation* opinion.

4.11 There is also the requirement in IFRS 13 for the reporting entity to indicate where the inputs used fall within the 'Fair Value Hierarchy', Levels 1–3. The level determines the disclosures the reporting entity has to make about the reported values.

- Level 1 is reserved for assets for which there are quoted prices in an active market for identical assets available on the measurement date. *Valuation* experts are very unlikely to be involved in any *valuation* that would fall within Level 1.
- Level 2 are inputs other than quoted prices that are observable for similar assets in an active market, either directly or indirectly, which may need some adjustment to reflect the characteristics of the subject asset, providing that adjustment is not 'significant'.
- Level 3 is where unobservable inputs have been used, or observable inputs that have been subject to significant adjustments.

4.12 It is the reporting entity's responsibility to determine which level applies to the *fair value* measurements it discloses in its accounts. The valuer's role is to ensure that sufficient information is provided on the methods and inputs used to enable the entity to make this determination, by providing the information required in VPS 6 section 2.2(l). In practice most entities report *fair values* of *real estate* as having Level 3 inputs due to the heterogeneous nature of the assets and the relative illiquidity of the market compared with other assets, and the resulting adjustments that are required to prices of similar assets.

IAS 2 Inventories

4.13 This standard applies to assets held for sale in the ordinary course of business, e.g. finished goods, works-in-process, raw materials and supplies to be used in the production process or in the provision of services. It includes land and buildings held for sale, e.g. a stock of unsold houses held by a property developer. IAS 2 excludes construction works in progress, financial instruments, biological assets used in agricultural activity and agricultural produce at the point of harvest, all of which are the subject of other IFRS.

4.14 Such assets held for sale are measured at the lower of their cost to the entity or 'net realisable value', which is 'the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale'.

4.15 A distinction is made between net realisable value and *fair value*, indicating that the former is specific to the entity and the latter the price that could be obtained in the market. So, while a stock of completed but unsold residential units held by a developer might each have an estimated *fair value* on the reporting date, the costs of holding and maintaining until a sale can be achieved will need to be taken into account by the entity. These costs will be specific to the entity, but valuers may be asked for information that would assist in their estimation, for example the rate at which sales could be achieved and the time required to complete all disposals.

IAS 16 Property, Plant and Equipment

4.16 This applies to property, plant and equipment (PP&E) expected to be used for more than one accounting period and used in the production or supply of goods and services or for administration. It excludes *investment property*. It also excludes agricultural assets except for 'bearer plants', i.e. living plants expected to bear produce for more than one reporting period.

4.17 When an item of PP&E is first recognised, it is measured at cost. In subsequent periods it is reported at its 'carrying amount', which may be measured at either cost less accumulated depreciation and accumulated impairment (the 'cost model'), or at *fair value* less subsequent accumulated depreciation and accumulated impairment (the 'revaluation model'). Under the revaluation model the *fair value* is determined according to IFRS 13. It is stipulated that if one item of PP&E is revalued, all other items of the same class or type must also be revalued, in order to prevent selective revaluation of some items and not others.

4.18 Since changes in the *fair value* of assets held for producing goods or services are often not considered relevant to the performance of a business, the cost model is more commonly used. Valuers are therefore more likely to be called to provide *valuation* advice to assist the entity in making appropriate depreciation adjustments.

4.19 Depreciation is an expense charged against income to reflect the consumption of an asset over its useful life to the entity. This expense is an apportionment of the 'depreciable amount', which is the difference between the carrying amount (determined by either the cost model or the revaluation model described above) and the 'residual amount', which is any value remaining at the end of the asset's useful life to the entity.

4.20 The useful life to the entity is not the same as economic life of the asset; it could be much shorter. For example, a specialised building designed for a specific manufacturing process may come to the end of its useful economic life to the entity when it is only a few years old, if it is no longer viable to produce the product for which it is designed. However, if it is in good physical condition, it may still have a residual value if it can be economically adapted for an alternative use.

4.21 An entity has discretion over the apportionment of the depreciable amount applied to each period, as long as it reflects the pattern at which the benefits of the asset are consumed over its useful life. Depreciation in this context should not be confused with the way the word is used in valuation, for example when applying the *depreciated replacement cost* (DRC) method. The *fair value* of an asset can be determined using the DRC method under the revaluation model, and then the entity will need to decide on the appropriate depreciation charge to apply to this *fair value* as a separate exercise.

4.22 IAS 16 requires components of an asset that have a cost that is significant in relation to the whole must be depreciated separately. In the standard it gives the example of the engines of an aircraft being depreciated separately from the airframe. In the case of commercial buildings, the *plant and equipment* providing heating, cooling or other services is often depreciated separately from the superstructure as they each have different economic lives. On the other hand, components that have a similar useful life and that are depreciated in a similar manner may be grouped.

4.23 The standard regards land and buildings as separable assets, even if they are acquired together. The land is not normally depreciated, except in special cases such as quarry or landfill sites. This means that valuers are frequently asked to provide either a value of the land component alone or an apportionment of the value of the whole between the land and the buildings.

4.24 An apportionment of the current *fair value* of the whole property is normally done by deducting the value of the land element in order to establish the proportion that can be attributed to the building(s). It is important to note that this proportion is not necessarily the same as the depreciable amount of the building(s) if the useful life to the entity of the building(s) is less than the economic life that is reflected in the value of the whole property. Where this is the case, the valuer will also need to additionally estimate the residual value of the building(s). This is the value of each building on the reporting date, but assuming that it is of the age and in the condition expected at the end of its useful life to the entity.

4.25 Confusion sometimes arises as to the basis on which land that buildings have been constructed on should be valued. Is the value confined to the existing use, or is it the value that could be obtained assuming that the buildings were at the end of their useful life at the *date of valuation*? IAS 16 provides that any increase in the value of the land on which a building stands does not affect the determination of the depreciable amount of the building. Accordingly, for the purpose of calculating the depreciable amount attributable to the buildings, the land value for the existing use of the buildings should be used. However, if the value of the land is higher for an alternative use, this should also be reported, as it could be material to the entity's view of the useful life of the buildings.

4.26 IAS 16 does not prescribe how values should be allocated between components of an asset, and the valuer has an obvious difficulty where it clearly would be impractical, if not impossible, to sell a component that is an integral part of the overall asset, for example the service installations in a building. However, providing a clear rationale is given, for example looking at the percentage of the initial building cost that was attributable to its services and applying a similar percentage to the current *fair value* of the whole building, this is normally acceptable.

IAS 36 Impairment of Assets

4.27 Impairment arises where the carrying amount of an asset exceeds the amount that can be recovered from the higher of its continued use or the sale of the asset. If impairment is considered to have arisen, the carrying amount of the asset, whether derived from either historic cost or a previous *valuation*, should be written down to the 'recoverable amount'. The recoverable amount of an *intangible asset* with an indefinite useful life is to be measured annually, irrespective of whether there is any indication that it may be impaired.

4.28 The recoverable amount is the higher of the 'value in use' and 'fair value less costs of disposal'. It is not always necessary to determine both these amounts; if either exceeds the asset's carrying amount, the asset is not impaired and it is not necessary to estimate the other amount.

4.29 IAS 36 sets out detailed considerations for assessing value in use. In summary it is the present value of the future cash flows expected to be derived from the asset or cash-generating unit. The cash-generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. Value in use is specific to the entity as it reflects the cash flows that the entity expects to obtain from continuing use of an asset or cash generating unit over its anticipated useful life, including any proceeds from its ultimate disposal. The standard sets detailed criteria for matters that should be reflected in this discounted cash flow analysis, and any valuer instructed to calculate value in use should familiarise themselves with these criteria.

4.30 *Fair value* is as defined in IFRS 13, less costs of disposal. The costs of disposal are those directly attributable to the transaction, e.g. legal fees, marketing costs, removal costs, unrecoverable transaction taxes and any costs directly incurred in preparing the asset or cash-generating unit for sale. They exclude consequential costs, e.g. those involved in reorganising the business following the disposal.

4.31 In practice a valuer is more likely to be engaged just to provide an estimate of the *fair value* less cost to sell, given that the calculation of value in use requires many inputs that are specific to the particular entity's business.

IAS 38 Intangible Assets

4.32 An *intangible asset* is an identifiable non-monetary asset without physical substance. Such an asset is identifiable when it is separable from other assets of the entity or when it arises from contractual or other legal rights. Separable assets can be sold, transferred or licensed independently from the business that owns them. Expenditure on an *intangible asset* is treated as an expense when acquired unless:

- it is probable that there will be future economic benefits from the asset, and
- the cost of the asset can be reliably measured.

If it meets both these criteria, it is recognised as an asset on the balance sheet.

4.33 Initially an *intangible asset* is carried at cost but subsequently can be carried at either cost or *fair value* as defined in IFRS 13, less any subsequent depreciation. However, the *fair value* option can normally only be used if there is an active market for the *intangible asset*, which is rare apart from examples such as taxi licences. An exception is where an *intangible asset* has been acquired as part of a business combination, where the absence of a specific cost for the asset means that a *fair value* must be estimated for its initial recognition, as per IFRS 3.

IAS 40 Investment Property

4.34 *Investment property* is land or a building, part of a building or both held by the owner to earn rentals or for capital appreciation rather than for:

- use in the production or supply of goods or services, or for administrative purposes
- sale in the ordinary course of business.

This definition includes property that is being constructed or developed for future use as *investment property*. It includes property that is owned outright and property held under a lease by the reporting entity, providing it is sublet or intended to be sublet under an operating lease or leases (see IFRS 16).

4.35 *Investment property* is initially recognised at its cost of purchase plus any directly attributable costs. For all subsequent statements the entity may adopt either the *fair value* model or the cost model. If the cost model is adopted in the balance sheet, the entity must still disclose the *fair value* in the notes to the accounts. All *investment property* owned by the entity must use the same option, except that if the *fair value* option is used and a specific property is incapable of reliable *valuation*, the cost model may be used for that property only. *Fair value* is applied in accordance with IFRS 13.

4.36 The test for when a property can be deemed incapable of reliable *valuation* is strict and arises when, and only when, the market for comparable properties is inactive and alternative reliable measurements of *fair value* (for example, based on discounted cash flow projections) are not available. In practice this is only likely to arise where:

- an entity has acquired a property for a highly speculative or unusual development, for which no reliable comparables exist or
- an *investment property* is under construction. The entity may carry the asset at cost until either its *fair value* becomes reliably measurable or construction is completed, whichever is earlier.

4.37 Subject to these limited exceptions, *investment property* is the only asset type where a current *fair value* is required at each reporting date. The entity is also required to disclose the extent to which the *fair value* of *investment property* is based on a *valuation* by an independent valuer who holds a recognised and relevant professional qualification, and has recent experience in the location and category of the *investment property* being valued. Consequently, if instructed to value *investment property* for financial reporting, the valuer **must** have regard to the requirements in VPS 6 section 2.2(j), and provide a draft publication statement.

IAS 41 Agriculture

4.38 IAS 41 applies to biological assets and agricultural produce. It does not apply to:

- bearer plants (see IAS 16)
- land used or held for agricultural purposes (see IAS 16 or IAS 40)
- *intangible assets* related to agricultural activity.

4.39 A biological asset is a living animal or plant. Agricultural produce is the harvested produce of an entity's biological assets. The following are not bearer plants and therefore fall within the scope of IAS 41:

- plants cultivated to be harvested as agricultural produce (e.g. trees grown for their timber)
- plants cultivated to produce agricultural produce when it is likely that the entity will also harvest and sell the plant as agricultural produce (e.g. trees that are cultivated both for their fruit and timber, other than incidental scrap sales)
- annual crops (e.g. potatoes or wheat).

4.40 Biological assets and agricultural produce are recognised in the accounts of the entity that controls them at *fair value*, less costs to sell. *Fair value* is generally determined in accordance with IFRS 13.

4.41 Biological assets or agricultural produce sharing significant attributes such as species, breed, age or quality may be grouped together for *valuation* purposes.

4.42 Contracts for sale for a fixed price at a future date are not necessarily relevant in establishing *fair value*, which **must** reflect the price that would be agreed between market participants on the reporting date (see VPS 2). No adjustment should be made to *the fair value* to reflect the existence of a contract for a future sale.

4.43 Cost may sometimes be a good indicator of *fair value*, particularly when:

- little biological transformation has taken place since the cost was incurred, e.g. for seedlings planted immediately prior to the end of a reporting period or newly acquired livestock
- the impact of the biological transformation on price is not expected to be material, e.g. the initial growth in a plantation that will not be harvested for many years.

IFRS 3 Business Combinations

4.44 This standard sets principles for the recognition and measurement of assets and liabilities acquired in a business combination, in other words in a takeover or merger. One of the parties to a business combination can always be identified as the acquirer, being the entity that obtains control of the other business. The formation of a joint venture or the acquisition of an asset or a group of assets that does not constitute a business are not business combinations.

4.45 In general the standard requires the acquiring entity to measure at *fair value* the identifiable assets acquired and the liabilities assumed as at the date of acquisition, even if it adopts the cost less depreciation option for similar assets in the rest of its business. *The fair values* of the assets and liabilities acquired are used in determining the value of any *goodwill* acquired. There are exceptions to the recognition and measurement requirements for some assets and liabilities, such as contingent liabilities, income taxes, employee benefits and assets held for sale.

4.46 An asset is identifiable if it either:

- is separable, i.e. capable of being separated or divided from the entity and sold, transferred, licensed, rented or exchanged regardless of whether the entity intends to do so, or
- arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations.

4.47 All identifiable assets have to be measured at their *fair value* in accordance with IFRS 13 at the first reporting date following the combination. This is regardless of whether the acquired entity has previously carried those items at *fair value* or cost. The rule in IAS 38 that only *intangible assets* for which there is an active market can be carried at *fair value* does not apply in the case of a business combination. Thereafter, all assets and liabilities are measured at each reporting date in accordance with the relevant accounting standard.

IFRS 5 Non-current Assets Held for Sale and Discontinued Operations

4.48 A non-current asset includes investments in other companies, *intangible assets* and tangible assets such as property, *plant and equipment*. To be classified as a 'non-current asset held for sale', the asset must be available for immediate sale in its present condition and the sale must be highly probable within 12 months. There needs to be commitment by the entity's management to the sale, and to active marketing of the asset at a reasonable price.

4.49 A non-current asset, or group of such assets, held for sale is measured at the lower of *fair value* less costs to sell and its carrying amount prior to its reclassification.

4.50 *Fair value* is measured in accordance with IFRS 13, and the valuer may additionally be asked to advise on the probable costs to sell.

IFRS 16 Leases

4.51 IFRS 16 has different accounting requirements for lessees and lessors.

a Lessees:

For any leased assets, lessees have to account for both the 'right of use asset' and the corresponding liability on their balance sheet. The standard prescribes inputs for these calculations that are not necessarily market-based, although entities may require some *valuation i*nputs to assist in these calculations. RICS' IFRS 16: Principles for UK real estate professionals contains examples that are specific to the UK, but IFRS 16 is applicable wherever IFRS is used.

Investment property held under a lease is excluded from the scope of IFRS 16 and is measured under IAS 40.

b Lessors:

Lessors have to classify each of their leases to another entity as either a finance lease or an operating lease. A lease is a finance lease if it transfers substantially all the risks and rewards incidental to ownership of the underlying asset. The standard lists some tests that can be used to determine whether a lease is a finance lease.

To assist lessors in this classification, valuers may be asked to provide *valuation* advice on the economic life of the asset at the commencement of the lease, the probable residual value of the underlying asset at the end of the lease and the extent to which the risks and rewards of ownership are transferred by the lease.

A complication affecting leased property is that IFRS 16 requires the land and building elements of a lease be considered separately for the purposes of classification. If it appears that the element of the lease attributable to the building could be a finance lease, it will be necessary to make an allocation of the initial rent based on the relative *fair values* of the interest in each element at the inception of the lease.

IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information

4.52 This standard requires an entity to disclose information about all *sustainability*-related risks and opportunities that could reasonably be expected to affect the entity's cash flows, its access to finance or cost of capital over the short, medium or long term. *Sustainability*-related risks and opportunities that could not reasonably be expected to affect an entity's prospects are outside the scope of IFRS S1.

4.53 The standard defines criteria for determining what are material risks or opportunities and whether these are presented fairly in the entity's financial reports. The standard references industry-specific guidance issued for over 70 different industries in the Sustainable Industry Classification System (SICS), which has been the responsibility of the International Sustainability Standards Board (ISSB) since 2022.

4.54 The standard has no specific requirements relating to the *valuation* of assets, although the need for the entity to make disclosures about *sustainability* risks and opportunities may mean valuers are requested to comment on these in relation to any asset they are requested to value on the reporting date.

4.55 **VPS 4 paragraph 1.5** requires the valuer to consider any *sustainability* and *ESG* factors that could affect the *valuation*. **VPS 6 section 2.2(q)** states that *sustainability* and *ESG* factors **must** form an integral part of the *valuation* approach and reasoning. VPGA 8 provides high-level guidance on reflecting *sustainability* and *ESG* considerations in *real estate valuations*, and further guidance is provided in the current edition of RICS' Sustainability and ESG in commercial property valuation and strategic advice.

IFRS S2 Climate-related Disclosures

4.56 This requires an entity to disclose information about climate-related risks and opportunities that could reasonably be expected to affect the entity's cash flows, its access to finance or the cost of capital over the short, medium or long term.

4.57 The standard requires entities to disclose their governance and strategy for identifying and managing any climate-related risks, including information about how the entity has responded to, and plans to respond to, climate-related risks and opportunities in its decision-making, and how the entity plans to achieve any climate-related targets it has set or is required to meet by law or regulation. It must also disclose any significant areas of uncertainty in its assessment of its climate resilience.

4.58 There are some specific disclosure requirements for greenhouse gas emissions and carbon credits. An entity must also provide quantitative and qualitative information about the progress of plans disclosed in previous reporting periods.

4.59 There are no requirements that affect the *valuation* of assets, but a valuer will need to be aware of how the *sustainability* risks or opportunities affect demand for the type of asset being valued, and may be asked to specifically comment on this if instructed to provide a *valuation*. Examples could be to comment on flood risk or potential water shortages.

VPGA 2 Valuations for secured lending

1 Scope

1.1 The guidance below provides additional commentary on the *valuation* of interests in real property and in other tangible assets for secured lending globally. *Valuation* practice, process and regulation for secured lending often has particular differences depending on the jurisdiction and asset type. Reference should therefore be made to relevant secured lending coverage in RICS national supplements, jurisdiction guides and any other relevant RICS or other professional standards and best practice guidance, in addition to adhering to local laws and regulation.

2 Background

2.1 The most common examples of security in relation to real property interests where a *valuation* is likely to be sought are:

a property that is, or will be, owner-occupied

b property that is, or will be, held as an investment

c property that is fully equipped as a trading entity and valued with regard to trading potential and

d property that is, or is intended to be, the subject of development or refurbishment.

Each of the above examples is discussed further in paragraph 6.3 of this VPGA.

2.2 This VPGA contains additional guidance in a secured lending *valuation* context covering:

- taking instructions, *terms of engagement* and disclosures
- independence, objectivity and conflicts of interest
- *basis of value* and *special assumptions* and
- reporting and disclosures.

2.3 In most jurisdictions there is a wide variety of real property and other tangible assets offered as security and a range of lending products available, and so each case will require a slightly different approach. It is therefore important for the valuer and client (including lender, other finance party or their representatives) to agree variations, subject to **PS 1 section 4**. The overriding objective is that the valuer should understand the client's needs and objectives, and the client should understand the advice that is given. These principles apply to real property interests and other tangible assets alike.

3 Independence, objectivity and conflicts of interest

3.1 Members are reminded that in accordance with PS 2 section 3, they **must** at all times act with integrity, independence and objectivity, and avoid conflicts of interest and any actions or situations that are inconsistent with their professional obligations. Additionally, members are reminded that they **must** also declare any potential conflicts of interest – personal or professional – to all relevant parties.

3.2 Examples of where such considerations should be made include, but are not limited to, situations where the valuer or *firm*:

- has a longstanding professional relationship with the borrower or the owner of the property or asset
- is introducing the transaction to the client or the borrower, for which a fee is payable to the valuer or *firm*
- has a financial interest in the asset or in the borrower
- is acting for the owner of the property or asset in a related transaction
- is acting (or has acted) for the borrower on the purchase of the property or asset
- is retained to act in the disposal or letting of a completed development on the subject property or asset
- has recently acted in a market transaction involving the property or asset
- has provided fee earning professional advice on the property or asset to current or previous owners or their lenders and/or
- is providing development consultancy for the current or previous owners.

3.3 Members should refer to PS 2 section 3 and the current edition of RICS' Conflicts of interest for additional information and take appropriate actions.

4 Taking instructions and disclosures

4.1 Valuers are reminded that the *terms of engagement* **must** incorporate the minimum requirements of VPS 1 paragraph 3.1 with suitable *records* kept. Additional client requirements can be agreed as long as they do not directly conflict with **VPS 1** or any other mandatory standard. These should also be recorded. Particular care is to be taken to agree and record any *special assumptions* that are to be made.

4.2 Valuers may be asked to agree lender's terms of engagement documentation before commencing work. Valuers should acknowledge the client's instructions in writing, confirming any VPS 1 matters not included in the client's *terms of engagement*. Where accepting the lender's terms of engagement, the valuer should carefully consider implications such as, but not limited to, their indemnities and liability.

4.3 Particular note should be taken of VPS 1 paragraph 1.3, as it is a common occurrence in secured lending.

> ‘A master service agreement may already be in place between a client and valuer. Where such an agreement exists, a valuer is not always required to complete separate additional *terms of engagement*. However a valuer **must** confirm in writing and document any additional items required to meet the minimum requirements of VPS 1 paragraph 3.1.’

4.4 It is the practice in some markets globally for *valuations* for secured lending to be commissioned by a party that is not the intended lender, for example, a prospective borrower or broker. This practice can have specific challenges that the valuer should consider. If the instructing party does not know, or is unwilling to disclose, the identity of the intended lender(s), it should be stated in the *terms of engagement* that the *valuation* may not be acceptable to a lender(s). This may be because some lenders do not accept a *valuation* procured by a borrower, or because a lender has specific reporting requirements. If the identity of the intended lender is unknown, this should be clearly stated in both the *terms of engagement* and the *valuation* report. Any new information regarding the identification of the lender that arises after the *terms of engagement* are agreed **must** be documented in writing as an addendum to the *terms of engagement* and referenced in the *valuation* report. Once details of the lender become available, conflicts of interest checks should be conducted and documented in writing as an addendum to the *terms of engagement* and referenced in the *valuation* report.

4.5 Where relevant and appropriate for the particular jurisdiction and/or market, the valuer should enquire whether there has been a recent transaction or a provisionally agreed price on any of the properties to be valued. If such information is revealed, further enquiries should be made, for example, the extent to which the property was marketed, the effect of any incentives, the price realised or agreed, and how the achieved price reflects current market trends and/or how it relates to comparable properties.

4.6 There are different practices globally around the extent to which a valuer is provided with information about lending facilities being contemplated by the client, including the term (duration) of the loan. In some jurisdictions this information is restricted. Where provided with information and where appropriate for the *valuation* circumstances, a valuer may consider pertinent details for their *valuation* such as, but not limited to, the term of the loan. This consideration is to undertake the *valuation* and not to comment on the terms of the loan. Where this is the case, it should be recorded in the report.

5 Basis of value and special assumptions

5.1 *Market value* is the *basis of value* widely used for *valuations* or appraisals undertaken for secured lending. However, in some jurisdictions alternative bases may be recognised or expressly required, for example, as a result of statute or regulation, ‘mortgage lending value’ being one example. These alternative bases may, and often do, involve prescribed approaches or *assumptions* and may therefore result in a value for the purpose of secured lending that is quite markedly different from *market value* as defined in IVS 102 paragraph A10.01 and reproduced in **VPS 2**. While valuers can provide advice using these alternative *bases of value*, what is essential is that the particular *basis of value* adopted is always made clear.

5.2 Any *special assumptions* (see VPS 2 section 10) made in arriving at the value reported are to be agreed in writing with the client in advance and referred to in the report.

5.3 Circumstances that arise in *valuations* for secured lending where *special assumptions* may be appropriate include, for example, where:

- planning consent had been granted for development at the property when it has not been granted on the *valuation date*
- a physical change to the property, such as proposed new construction or refurbishment, had occurred on the *valuation date*
- a new letting on given terms, or the settlement of a rent review at a specific rent, had been completed on the *valuation date*
- any lease or leases between connected parties has/have been disregarded
- an identified *special purchaser* is interested in buying the asset
- a constraint that could prevent the property being either brought to or adequately exposed to the market is to be ignored
- a proposed economic or environmental designation was already in effect on the *valuation date*.

5.4 The appropriate *special assumptions* will depend on the circumstances under which the *valuation* is requested and the nature of the property to be valued.

5.5 Any *valuation* for secured lending made using a *special assumption* should be accompanied by a comment on any material difference between the reported value with and without that *special assumption*.

6 Reporting and disclosures

6.1 Reporting requirements are set out in VPS 6 paragraph 2.2. Other specific requirements may also be agreed in the *terms of engagement* with the lender. Practices differ globally and by sector, but matters that may also require consideration and comment in a report prepared for secured lending include:

a comment on any specific risks and/or market trends that could arise/impact during the duration of the loan (e.g. trends in rent and sales values; lease duration; tenant mix, etc.)

b the current marketability of the interest and commentary about the sustainability of this in the context of the duration of the loan

6.2 The *terms of engagement* and the undertaking of a *valuation* **must** be reconsidered in the following circumstances (this list is not exhaustive):

- it becomes clear that the investigations or limitations included in the scope of work will not result in a credible *valuation*
- information provided by *third parties* that forms a material part of the *valuation* is either unavailable or inadequate
- *inspections* and investigations cannot be carried out to the extent necessary to produce a *valuation*.

6.3 The following paragraphs indicate matters that it may be appropriate to include when valuing interests in different categories of real property, as listed in paragraph 2.1 of this VPGA, in addition to those matters referenced at 6.1.

a) Property that is, or will be, owner-occupied

i Typical *special assumptions* that may arise when valuing this category of property include:

- planning consent has been, or will be, granted for development, including a change of use of the property
- a building or other proposed development has been completed in accordance with a defined plan and specification
- all necessary licences and consents are in place
- the property has been changed in a defined way (for example, removal of equipment or fixtures) and
- the property is vacant when, in reality, at the *valuation date* it is occupied.

b) Property that is, or will be, held as an investment

i Additional report contents should include:

- a summary of occupational leases, indicating whether the leases have been read or not, and the source of any information relied on
- a statement of, and commentary on, current rental income, and comparison with current market rental value. Where the property comprises a number of different units that can be let individually, separate information should be provided on each
- an *assumption* as to covenant strength where there is no information readily available, or comment on the market's view of the quality, suitability and strength of the tenant's covenant
- comment on maintainability of income over the life of the loan (and any risks to the maintainability of income), with particular reference to lease breaks or determinations and anticipated market trends – this may well need to be considered in a broader *sustainability* and *ESG* context, such as potential future cost liabilities related to meeting regulatory and investor requirements, and
- comment on any potential for redevelopment or refurbishment at the end of the occupational lease(s).

ii Typical *special assumptions* that may arise in valuing this category of real property include whether:

- a different rent has been agreed or determined, e.g. after a rent review
- any existing leases have been determined, and the property is vacant and to let, or
- a proposed lease on specified terms has been completed.

c) Property that is fully equipped as a trading entity and valued with regard to trading potential

i The closure of the business could have a significant impact on the *market value*. The valuer should therefore report on this impact, either individually or as a combination of one or more of the following *special assumptions*:

- the business has been closed and the property is vacant
- the trade inventory has been depleted or removed
- the licences, consents, certificates and/or permits have been lost or are in jeopardy and/or
- accounts and records of trade are not available to a prospective purchaser.

ii Typical *special assumptions* that may arise in valuing this category of real property include:

- *assumptions* made on the trading performance and
- projections of trading performance that materially differ from current market expectations.

iii Clients may require a breakdown of the value attributed to FF&E (furniture, fixtures and equipment) in the *valuation*.

d) Property that is, or is intended to be, the subject of development or refurbishment

i Additional report contents should include:

- comment on costs and contract procurement
- comment on the viability of the proposed project
- if the *valuation* is based on a residual method, an illustration of the sensitivity of the *valuation* to any *assumptions* made
- the implications on value of any cost overruns or contract delays and
- comment on the anticipated length of time the redevelopment or refurbishment will take, as this may affect the current value due to inconvenience and/or temporary lack of utility.

ii Typical *special assumptions* that may arise in valuing this category of property include whether:

- the works described had been completed in a good and competent manner, in accordance with all appropriate statutory requirements
- the completed development had been let, or sold, on defined terms or
- a prior agreed sale or letting has failed to complete.

iii Where a *valuation* is required on the *special assumption* that the work had been completed (as complete) as of a current *valuation date*, the value reported should be based on current market conditions. If a *valuation* is required on the *special assumption* that the work has been completed as of a future date and the *valuation date* is as of that future date, the valuer is reminded of the requirements for developing and reporting the opinion of value in accordance with VPS 1 paragraph 3.2(k) and VPS 6 paragraph 2.2(i).

6.3 It is good practice to attach any instruction letter and the *terms of engagement* to the report, and refer to these documents in the body of the report.

VPGA 3 Valuation of businesses and business interests

1 Scope

1.1 The guidance below provides additional commentary on the *valuation* of businesses and business interests, and the practical application of IVS 200 Businesses and Business Interests.

2 Introduction

2.1 IVS 200 defines a business as 'an organisation or integrated collection of assets and/or liabilities engaged in commercial, industrial, service or investment activity'. A business interest can be either 100% of the entity or a fractional interest, representing less than 100% of the entity. This VPGA is concerned with the *valuation* of entire businesses – whether companies, sole traders or partnerships (including limited liability partnerships) – together with interests therein, such as company stocks and shares or partnership interests.

2.2 This VPGA does not deal with the *valuation* of *intangible assets* (please refer to VPGA 6), *plant and equipment* (see VPGA 5), land or other tangible assets that may sometimes constitute part of a business. For the *valuation* of individual *trade related properties*, please refer to VPGA 4. However, a business valuer may often be required to rely on the *valuation* of such assets provided by other specialist valuers (for example, of *real estate*) and of mineral rights.

2.3 *Valuation* of equity capital, other financial interests, loan capital, debentures, options, warrants, convertibles and fixed interest securities may form part of a business *valuation* assignment.

2.4 To satisfy **PS 2 section 2**, the valuer should have experience of and be regularly involved in business *valuation*, as practical knowledge of the factors affecting investment in any particular property, asset, business or share is essential.

3 Scope of work and terms of engagement

3.1 The *valuation* knowledge of clients will vary widely. Some will have a thorough understanding of business *valuation*, while others will be unfamiliar with the terms and concepts used by business valuers.

3.2 It is important that both the scope of the work to be undertaken and the *terms of engagement* are understood and agreed in writing between the valuer and the client prior to commencement of the assignment. The business entity, or the specific interest in the business entity that is to be valued, or the right (or rights) to use that interest that are to be appraised, should be recorded. Such *record* should specify:

- the legal structure of the business entity
- whether the interest in the business entity is to be valued in its entirety or a fractional interest
- if the business entity to be valued is confined to, or excludes certain assets or liabilities, and
- the class (or classes) of shares concerned: if the focus is on the equity of the business entity or a fractional interest.

3.3 Any *assumptions* that are made **must** be clearly stated in compliance with VPS 2 sections 9 and 10.

3.4 The valuer **must** produce *terms of engagement* that comply with the minimum terms set out in PS 2 section 7 and VPS 1, adapted as necessary to refer to business *valuation*.

4 Businesses and business interests

4.1 A business *valuation* may either comprise the whole of the activity of an entity or a part of the activity. It is important to distinguish as necessary between the entirety value, the value of a fractional interest (see paragraph 2.1 above), the values of specific assets and/or liabilities of the entity, and the intended use of the *valuation* (for example, for tax planning or management's internal purposes) prior to commencing the *valuation*.

4.2 The *valuation* report **must** contain the following four essentials and comply with the minimum terms set out in VPS 6.

a The *purpose of the valuation*.

b The effective date of the *valuation*.

c The business interest being valued.

d The *valuation* basis.

4.3 It is essential to be clear about the 'intended use' of the *valuation*. This will determine the *basis of value*. There are five *bases of value* in IVS directly relating to businesses and business interests:

- *market value*
- *synergistic value*
- *equitable value*
- *investment value*
- liquidation value.

Purpose may refer to the provision of an opinion in accordance with a specific *basis of value*, for example, *market value* or IFRS 13 *fair value*. Intended use may refer to a type of transaction or activity, for example, financial reporting.

4.4 Where individual assets, divisions and liabilities are to be valued, and are capable of being independently transferred, they should, where possible, be valued at their respective *basis of value*, rather than by apportionment of the entire value of the business.

4.5 When valuing a business or interest in a business, the valuer should consider whether a higher value could be arrived at on a liquidation basis and, if so, consider the prospect of realising such value, having regard to the ownership interest.

4.6 Whatever the ownership interest – whether a proprietorship, a partnership or in corporate form – the rights, privileges and conditions attaching to that interest have to be considered in the *valuation*. Ownership interests may be the entire business, or part or shares therein, and it may be important to distinguish between legal and beneficial ownership, rights and obligations inherent to the interest and those rights that may be contained in any agreement between current shareholders. Ownership rights will usually be set out in legally binding documents such as articles of association, articles of incorporation, business memoranda, bye-laws, partnership articles or other agreements, and shareholder agreements.

4.7 The documents referred to in paragraph 4.6 above may contain transfer restrictions and may state the *basis of value* that has to be used on a transfer of the business interest. It is important to distinguish between rights and obligations inherent in the interest to be valued. For example, the ownership documentation may require the *valuation* to be done on a pro-rata proportion of the entity value, regardless of size of interest. The valuer will then have to comply with such requirements and the rights attaching to any other class of interest. IVS 200 provides further commentary on ownership rights.

4.8 A non-controlling interest may have a lower value than a controlling one, although a majority interest does not necessarily control the entity. Voting control and other rights will be set out by the legal frameworks mentioned in paragraph 4.6 above, and may give control or veto even to minority interests in certain circumstances. There are often different equity classes in a business, each with different rights.

4.9 The reason why the valuer has been instructed to perform a business *valuation* is important to understand, as the *valuation* may be required for a wide variety of purposes. Examples include financial reporting, taxation, public sector assignments, transactions and flotations, fairness opinions, banking arrangements, insolvency and administration, management information or portfolio review. The purpose will introduce various *bases of value*, some governed by statute and case law, and others by international and national standards of professional valuation practice.

4.10 IVS *bases of value* directly relevant to business *valuation* are stated above. Other *bases of value* typically encountered for these *valuations* are IFRS *fair value* or a similar definition from other local GAAPs, *fair value* in the articles and any associated definition (fair *market* *value*, unrestricted *market value*, etc.), owner value and net realisable value. It is important to check the precise terms of any *basis of value* that may be described, for example, in shareholders' agreements, legislation or regulations and the *purpose of the valuation* (commercial, tax or accounting). Valuers should be mindful of the requirements of PS 1 sections 3, 4 and 7, relating to the use of a *basis of value* not recognised in Red Book Global Standards.

4.11 Depending on the rules and practice followed in respect of the *basis of value*, *valuations* of the same asset may be different. For example, because of the rules concerning tax *valuations*, a tax authority might view a *valuation* differently to a litigant, merger partner or *special purchaser*.

4.12 While the valuer should consider future returns likely to be received from the business, as well as the other aspects of *valuation* (particularly fiscal factors), ultimately the business that is to be valued is the one that actually exists, or the one that could exist on a commercial basis as at the *valuation date*. The valuer therefore needs to account for the future expectations of operation of the business. These expectations may be based partly on actual historic performance and partly on budgets or forecasts. The valuer needs to understand the perspective of potential buyers or sellers, who are the market participants, following appropriate research as to the business and outlook for the industry, and discussions with the operators of the business as to their expectations.

4.13 As the underlying concept revolves around the cash flows that the purchaser might expect to accrue from ownership, these are generally measured after deducting the commercial costs of managing and financing the business entity. Therefore, where a business entity does not bear realistic management costs, the valuer will need to consider the deduction of notional management costs at a market rate in arriving at profitability for business *valuation purposes*.

4.14 In many cases the valuer may need to apply more than one *valuation* approach and method, particularly where there is insufficient information or evidence to enable the valuer to rely on just one. In such cases, the valuer may use other approaches and methods to arrive at the final *valuation*, indicating why preference is given to any one or more methodologies. The valuer should consider all *valuation* approaches, giving reasons why any particular approach has not been applied.

5 Information

5.1 Business or shares *valuation* often depends on information received from the proprietors and their advisers or representatives. As per PS 2, the valuer **must** apply professional scepticism when considering information. The valuer should specify what reliance has been placed on what information, as well as stating the rationale for accepting and using, without verification, information provided by the client or that person's representative. Some information may have to be verified in whole or in part, and this will need to be stated in the *valuation* report. Although the value may largely depend on future expectations, the history may assist in determining what these expectations might reasonably be. Projections of future profits and cash flows should be viewed with professional scepticism and, to the extent possible, calibrated and corroborated with external data points.

5.2 The valuer needs to be aware of any relevant economic developments, industry trends and the context in which the *valuation* is being prepared, for example, political outlook, government policies, inflation and interest rates, and market activity. Such factors may affect businesses in different sectors in distinct ways.

5.3 The interest being valued will reflect the financial standing of the business at the *valuation date*. The nature of the assets and/or liabilities needs to be understood, and the valuer is expected to consider which ones are employed for income generation, and which are redundant to such activities at the *valuation date*. The valuer should also take account of off-balance sheet assets and/or liabilities where necessary. The value of assets and/or liabilities not used in generating the profits or cash flows of the business (usually called surplus assets/liabilities) should normally be added/deducted in the *valuation* if using the *market approach* or the *income approach*.

6 Valuation investigation

6.1 As a minimum requirement, valuers should not carry out a *valuation* in the absence of a detailed knowledge and understanding of the history of, and activities associated with, the business and/or asset(s) and/or liabilities. They will also need a comprehensive understanding of, as appropriate, management structures and personnel, state of the subject industry, general economic outlook and political factors. In addition, consideration needs to be given to issues such as the rights of minority shareholders. For these reasons, valuers should have appropriate competency in business *valuation* and conform with the other requirements of PS 2.

6.2 Typical information requirements to assist the valuer in understanding the subject business and/or asset(s)/liabilities, or business interests, could include:

- most recent *financial statements*, and details of current and prior projections or forecasts
- description and history of the business or asset, including legal protections
- information about the business or asset and supporting intellectual property and intangibles (for example, marketing and technical know-how, research and development, documentation, design graphics and manuals, including any licences/approvals/consents/permits to trade, etc.)
- company constitution documents, shareholders' agreements, subscription agreements, other collateral agreements
- precise activities of the business, and its associated companies or subsidiaries
- class rights of all share and debenture classes (security over assets)
- previous *valuation* reports
- product(s) dealt in, supported or extended by the business and intangibles

- company's market(s) and competition, barriers to entry in such markets, business and marketing plans, due diligence
- strategic alliances and joint venture details
- whether contractual arrangements can be assigned or transferred in any *intangible asset* or royalty agreement
- major customers and suppliers
- objectives, developments or trends expected in the industry, and how these are likely to affect the company or asset
- accounting policies
- strengths, weaknesses, opportunities and threats (SWOT) analysis
- key market factors (for example, monopoly or dominant market position, market share)
- major capital expenditure in prospect
- competitor positions
- seasonal or cyclical trends
- technological changes affecting the business or asset
- vulnerability of any source of raw materials or supplier arrangement
- whether there have been any recent acquisitions or mergers in the sector around the *valuation date*, and the criteria that were applied
- whether there have been any significant developments or changes to the business since the latest accounting date (for example, management information, budgets, forecasts)
- offers to acquire the business, or discussions with banks and other sponsors to go public
- management of research and development (for example, non-disclosure agreements, subcontractors, training and incentives)
- *valuations* of underlying assets
- relevant legislation and frameworks in relation to *environmental, social and governance (ESG) factors*. See IVS 104 Data and Inputs: Appendix and **VPS 6 section 2.2(q)**.

6.3 Much of the information relied on will be derived from the client(s) and it may not be possible to verify it. In such cases, the *valuation* report should make this clear. It may, however, extend to information obtained from other specialist valuers or other comment or informed sources, as set out at paragraph 5.1 above, and it should be made clear whether reliance has been placed on such information.

7 Valuation approaches and methodology

7.1 In broad terms, *valuation* theory recognises three approaches in the *valuation* of shares and businesses. These are:

- the *market approach*
- the *income approach*
- the *cost approach*.

7.2 While the *market* and *income approaches* can be used for the *valuation* of any business or business interest, the *cost approach* will not normally apply except in special circumstances. Theses would include, for example, property holding and investment companies, and investment businesses holding listed company shares.

Market approach

7.3 The *market approach* provides an indication of value by comparing the asset and/or liability with identical or comparable asset and/or liability for which price information is available.

7.4 The two primary *market approach* methods are the ‘guideline public company’ method and the ’guideline transactions method’. These are based on data derived from three principal sources:

- public stock markets in which ownership interests of similar businesses are traded
- the acquisition market in which entire businesses or controlling interests in businesses are bought and sold, and
- prior transactions or offers for the ownership of the subject business.

7.5 There are other *market approach* methods, including bona fide offers to purchase shares in the company, acquisitions undertaken by the company and common market practice.

7.6 The guideline public company method focuses on comparing the subject asset to guideline similar, publicly-traded companies and assets. In applying this method, *valuation* multiples are derived from the historic and operating data of comparables. These are selected, where possible, from the same industry or one affected by the same economic factors as that of the subject business, and are evaluated on both a qualitative and quantitative basis. The data is then adjusted, having regard to the strengths and weaknesses of the subject asset relative to the selected companies, and applied to the appropriate operating data of the subject asset to arrive at an indication of value. Appropriate adjustments (as supported by market-derived information presented in the report) to reflect different qualities or characteristics are usually made to the derived data. Examples of such matters are differences in perceived risk and future expectations, including rates of growth, and differences in ownership interest, including level of control, marketability and size of holding.

7.7 The guideline transactions method uses *valuation* multiples based on historical transactions that have occurred in related sectors. These derived multiples are then adjusted and applied to the appropriate operating data of the subject asset to arrive at an indication of value.

7.8 Recent prior transactions in the shares of the company can provide strong evidence of value, but only if they took place relatively recently and on an arm's-length basis. Bona fide offers to buy the shares in the company can similarly provide evidence of value and can be considered, but should not be solely relied upon as it is not an actual transaction and due diligence may not have been completed. It is important to establish that the offers were genuine, rather than just a possible first stage in negotiations.

7.9 In certain industries, businesses are bought and sold on the basis of common market practice, often (though not exclusively) derived from multiples or percentages of turnover, and not linked to profitability. Where such common market practice exists, and there is evidence that buyers and sellers in the actual market rely on them, the business valuer may consider them. However, it would be sensible to cross-check the results arising from such market practices against one or more other methods. Care should be taken that the 'established market practice' has not been superseded by changes in circumstances over time. Common market practice based on turnover is normally based on sectors in which the gross profits to be made from the turnover can be accurately estimated.

Income approach

7.10 The *income approach* provides an indication of value by converting future cash flow to a single current value. Under the *income approach*, the value of an asset is determined by reference to the value of income, cash flow or cost savings generated by the asset.

7.11 The single period capitalisation method, as opposed to a detailed projection of future cash flow, commonly estimates the value by capitalising a level of economic income. A thorough understanding of accounting and economic profits; their historical record, based usually on historical *financial statements*; and forecasting is necessary in each case. Normalised profits after tax are determined and, if necessary, adjusted to reflect differences between actual historical profits and cash flows and those that could be expected to be received by a purchaser of the business at the *valuation date*.

7.12 Further adjustments may include restating non-arm's-length transactions and costs incurred with related parties to commercial terms, and reflecting the effect of non-recurring events whether of income or cost. Examples of this include one-off redundancies, and exceptional profits or losses. Comparison of depreciation and inventory accounting should be on a like-for-like basis.

7.13 The single period capitalisation method implicitly assumes that the economic income will increase at a constant growth rate in perpetuity, if only by reference to inflation. Normalised profits or cash flows are then capitalised. This approach is addressed by the following methods:

- capitalisation of a single period metric (earnings before interest, taxes, depreciation and amortisation (EBITDA), EBIT, etc.), which is accomplished through a capitalisation rate
- capitalisation of a single period metric (EBITDA, EBIT, etc.), which is accomplished through a market multiple.

Care should taken in these cases to distinguish between:

- enterprise value (which also considers the debt of the business and any liquid assets owned by the entity that might mitigate the acquirer's purchase price) and
- equity value (i.e. the value of the shares).

7.14 If the economic income is sales, EBITDA, EBIT or net operating profit after tax, the resulting value is enterprise value. This is the value of all the operating capital employed in the company. The debt then has to be deducted, and cash and non-operating assets added, in order to derive the equity value. If the economic income is profit before tax, profit after tax or dividends, the resulting value is the equity value. It may then be appropriate to add on surplus cash and non-operating assets. The multiple relating to profits after tax is known as the price-earnings (p/e) ratio.

7.15 Business value is often derived by capitalising profits or cash flows before costs of servicing debt, using a capitalisation or discount rate such as the weighted average cost of capital (WACC). The equity value is the enterprise value less the *market value* of the net debt, but can be established by measuring the equity cash flow itself. The single period capitalisation method is identical to the use of present value techniques if the subject company is expected to grow at a constant rate. This is not commonly observed in practice.

7.16 Present value techniques measure the value of an asset by the present value of its future economic cash flow, which is cash that is generated over a period of time by an asset, group of assets or business enterprise. Cash flow can include earnings, cost savings, tax deductions and proceeds from its disposition. When applied to business *valuation*, value indications are developed by discounting expected cash flows, estimated, where appropriate, to include growth and price inflation, to their net present value at a suitable rate of return. The rate of return incorporates the risk-free rate for the use of funds and risks associated with the particular investment and the market. The discount rate selected is generally based on rates of return available from alternative investments of similar type and quality as at the *valuation date*. Expressions such as 'rate of return' may mean different things to different individuals, so valuers should consider defining what is meant by such terms. Rate of return, discount rate and cost of capital are all referring to essentially the same concept.

7.17 At the end of the discrete period of projections, it is necessary to add a terminal value. This is the expected value of the business at the end of the discrete period. That value is then discounted back to net present value using the discount rate. There are three techniques for estimating the terminal value:

a applying a capitalisation rate (that is the discount rate less growth)

b applying a suitable market multiple

c calculating the asset realisation proceeds, less costs of disposal and less remediation costs. This is used for businesses or projects that have a finite life, followed by closure.

Care should be taken if using the market multiple to calculate the terminal value. The valuer should ensure that the multiple does not conflict with the discount rate less growth.

7.18 The values of redundant or surplus assets, namely those owned but not used in the business operations, need to be taken into account in enterprise or equity values.

7.19 The *income approach*, as applied using the maintainable dividend as the economic income, is an approach that can also be considered in company *valuation*, principally in relation to fractional shareholdings. For business *valuations*, value indicators are developed by determining a share's future dividends and prospect of dividends, and a rate of return, using dividend discount and initial yield models.

Cost approach

7.20 The *cost approach* provides an indication of value using the economic principle that a buyer will pay no more for an asset than the cost to obtain an asset of equal utility, whether by purchase or construction, unless undue time, inconvenience, risk or other factors are involved. The approach provides an indication of value by calculating the current replacement or reproduction cost of an asset, and making deductions for physical deterioration and all other relevant forms of obsolescence.

7.21 When applied to business *valuation*, the method most commonly used is the summation method: the aggregation of the values of the individual assets and liabilities in the business. The individual assets may be valued using the *market*, *income* or *cost approaches*.

7.22 This approach is commonly adopted in property investment, farming companies and share investment portfolio companies. It is not normally the preferred one for trading businesses, as it does not include the value of most *intangible assets*. It can be appropriate where they are failing to achieve an adequate return on the tangible net assets used in the business, or where a trading business also has substantial investment activity or surplus cash. The net asset value per share can be discounted when considering the value of non-control holdings.

7.23 The *cost approach* can produce a *market value* basis of *valuation* or a liquidation basis of *valuation*. The liquidation basis is after making provision for making assets ready for resale, and for costs of closure.

Complex capital structures

7.24 Limited companies sometimes have different share classes with varying rights. These may include preferred or deferred shares, growth shares or shares with capped rights. Such *valuations* should only be undertaken by those with appropriate experience and by reference to the specific guidance in IVS 200.

Summary

7.25 The *valuation assumptions* and inputs may be based either on actual data or on budgets, projections or forecasts. The *market approach* is likely to be based on actual inputs, such as prices in the stock markets or prices achieved on sales of similar assets or businesses, and actual income or profits generated. For the *income approach*, assumed inputs might include cash flow forecasts or projections. For *valuations* adopting the *cost approach*, actual inputs will include the *market value* of the various assets on the balance sheet.

8 Reports

8.1 Where the *valuation* has to comply with Red Book Global Standards, the valuer **must** produce a report that complies with the minimum terms set out in VPS 6. Generally, the report has a brief introductory section or executive summary that defines the assignment, summarises the conclusion and leads into the details of the report. The structure should move from the general to the specific, providing a logical flow of data and analysis within which all the necessary considerations can be incorporated, leading to the *valuation* conclusions.

8.2 Most reports will have the following major sections, although not necessarily in this order:

- introduction
- purpose and *basis of value*
- *assumptions* and *special assumptions*
- subject of *valuation* and *date of valuation*
- description and history of the business
- accounting policies
- *financial statement* analysis
- business and marketing plan analysis, and prospects
- search results for comparable public companies and comparable transactions
- industry in which the business operates, economic environment, yields and risk assessment
- environmental constraints
- *valuation* approaches, methods and conclusion
- caveats, disclaimers and limitations
- confirmation of compliance with RICS Red Book Global Standards, IVS and other relevant industry guidelines, and
- copies of all relevant information to reach the value outcome.

8.3 Some reports will have a separate section containing a general discussion of *valuation* methodology, which will often follow the introduction. If national, regional and economic data are important to the company and asset, each may have its own section.

8.4 Where appropriate, factual information, or sources thereof, should be identified either in the body of the report or in the appendices. Where the opinion of an expert is required for litigation purposes, the report must adhere to the requirements imposed by the local jurisdiction and **must** therefore contain all relevant disclosures, including the statement of the expert's qualifications and the statement of truth (VPS 6).

9 Confidentiality

9.1 Information in respect of many business assets will be confidential. Valuers should use their best endeavours to preserve such confidentiality, particularly in relation to information obtained in respect of comparable assets. Where required by the client, business valuers will comply with any requests to enter into non-disclosure or similar agreements.

VPGA 4 Valuation of trade related properties

1 Background

1.1 Certain real property is valued principally with reference to its trading potential. This is commonly undertaken using the profits method of *valuation* (within the *income approach*), although other methods are also applied depending on the circumstances as an alternative or cross-check. The way assets are assessed for purchase, sale and as investments may help with the selection of the approach and method to use. The guidance below sets out the principles of valuing this type of property but does not cover specific *valuation models*, *assumptions* or inputs, which may vary according to the property to be valued.

1.2 Examples of property types where (subject to the jurisdiction and market) reference to trading potential may be a consideration in purchase and sale include but are not limited to hotels, pubs and bars, restaurants, nightclubs, fuel stations, care homes, casinos, cinemas, theatres, various other forms of leisure property, car parks, garden centres, caravan parks and crematoria.

1.3 The essential characteristic of a *trade related property* is that it has been designed or adapted for a specific use, and the value of the property interest is intrinsically linked to the returns that an owner can generate from that use. The value therefore reflects the trading potential of the property. It can be contrasted with generic property that can be occupied by a range of different business types without significant restrictions.

1.4 A further subset of properties includes those where the adaptation in use or restraint on flexibility is less marked, but a *valuation* based on an *income approach* and a profits method, including many aspects of this VPGA, may still be regarded as the best indicator of value. A non-exhaustive list of examples includes self-storage, flexible workspace and purpose-built investment student housing. The choice of method will be a matter for valuer judgement, having regard to the specific type, form and use of the property and market circumstances prevailing, and evolving, at the time.

1.5 *Trade related property* can, by its nature, be distinctly different from the wider real property covered in VPGA 8, although parts of that guidance, where not different from that below, are also relevant. This is an evolving asset type, and it is emphasised that **PS 2** states that *valuation* services **must** be provided by competent individuals who have the necessary expertise. The *valuation* process, approach, method and models need to be contemporary and appropriate.

1.6 The profits method, or related methods, should generally be used only in those cases where the fair maintainable operating profit (FMOP) can be accurately estimated to arrive at a substantiated *valuation* conclusion. In many cases *trade related properties* are subject to profitability fluctuations as a consequence of intrinsic and extrinsic factors, such as property improvements or change in demand habits.

1.7 The use of explicit methods of *valuation* such as discounted cash flow (DCF) analysis may be more appropriate for complex *trade related properties*, where the future foreseeable change in profitability can be more explicitly reflected in the present value. RICS' Discounted cash flow valuations may be of relevance (note it does not have specific provisions for *trade related property*).

1.8 Valuers who prepare *valuations* of *trade related property* often specialise in this particular market as reliable, often granular data needs to be correctly applied, with appropriate professional judgement and experience. Knowledge of the operational aspects of the property *valuation*, and of the industry as a whole, is fundamental to the understanding of trading performance, market transactions and the analysis required.

1.9 Comparable information may be derived from a wide variety of sources, including transactional evidence. This can take the form of, for example, key performance indicators (KPIs), metrics and benchmarking from data providers, indices and relevant market participants (subject to the application of appropriate professional scepticism and judgement). Also, information may be drawn from different operational entities with regard to the component parts of a profits *valuation*. The valuer should emphasise in the report that the *valuation* is assessed having regard to trading potential; it should refer to the actual profits achieved and possible profitability shifts triggered by changes to the property, locality and market. If the trading potential and/or the actual profits vary, there could be a change in the reported value (see **VPS 6 paragraphs 2.2(h)(4)** and **2.2(o)**).

1.10 Where it is reasonable to do so based on market and other relevant factors, the valuer may assume that the current trade related use of the property will continue. However, where it is reasonable to take account of a possible alternative use, this should be appropriately reflected in the report. Appropriate use of *special assumptions* may also be considered.

2 Terms used in this VPGA

2.1 The terms used in this VPGA may have different meanings when used by other professional disciplines.

Adjusted net profit

2.2 This is the valuer's assessment of the actual net profit of a currently trading operational entity. It is the net profit that is shown from the accounts once adjustments for abnormal and non-recurring expenditure, finance costs and depreciation relating to the property itself, as well as rent where appropriate, have been made. It relates to the existing operational entity and gives the valuer guidance when assessing the fair maintainable operating profit (FMOP).

2.3 It is also possible to assess this, especially for small-sized or relatively simple *trade related properties*, in other ways. For example, it can refer to the adjusted EBITDA (when assessing either direct operation or operation through management agreement) or to the adjusted net rental income (when assessing leased properties).

Earnings before interest, taxes, depreciation and amortisation (EBITDA)

2.4 This term relates to the actual operating entity and may be different from the valuer's estimated FMOP.

Fair maintainable operating profit (FMOP)

2.5 This is the level of profit, stated prior to depreciation and finance costs relating to the asset itself (and rent if leasehold), that the reasonably efficient operator (REO) would expect to derive from the fair maintainable turnover (FMT) based on an assessment of the market's perception of the potential earnings of the property. It should reflect all costs and outgoings of the REO, as well as an appropriate annual allowance for periodic expenditure, such as decoration, refurbishment and renewal of the trade inventory.

2.6 Some markets and asset types have specific standards related to assessment of FMOP. For example, some hotel *valuation* is undertaken with reference to the *Uniform System of Accounts for the Lodging Industry* (USALI), to reflect all appropriate deductions to assess the FMOP in the case of direct operation or properties under management. USALI may also be relevant when assessing the divisible balance, to verify rent sustainability in the case of leased properties.

Fair maintainable turnover (FMT)

2.7 This is the level of trade that an REO would expect to achieve on the *assumption* that the property is properly equipped, repaired, maintained and decorated.

Market rent

2.8 This is the estimated amount for which an interest in real property should be leased on the *valuation date* between a willing lessor and a willing lessee on appropriate lease terms in an arm's-length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion. Whenever *market rent* is provided, the 'appropriate lease terms' that it reflects should also be stated.

2.9 In the case of *trade related properties*, it is important to assess the sustainability of the rent in relation to the productivity of the subject property. Therefore both an analysis of trading performance and comparable market evidence, including transaction evidence, may be necessary.

Market value

2.10 This is the estimated amount for which an asset or liability should exchange on the *valuation date* between a willing buyer and a willing seller in an arm's-length transaction after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion.

Operational entity

2.11 An operational entity usually includes:

- the legal interest in the land and buildings
- the trade inventory, usually comprising all trade fixtures, fittings, furnishings and equipment and
- the market's perception of the trading potential, together with an assumed ability to obtain/renew existing licences, consents, certificates and permits.

Consumables and stock in trade are normally excluded.

Personal goodwill (of the current operator)

2.12 This is the value of profit generated over and above market expectations that would be extinguished upon sale of the *trade related property*, together with 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.

Reasonably efficient operator (REO)

2.13 This is a concept where the valuer assumes that the market participants are competent operators, acting in an efficient manner, of a business conducted on the premises. It involves analysing and estimating the trading potential rather than just adopting the actual level of trade under the existing ownership (although this may form part of the evidence). It is an important concept as market evidence might demonstrate that a different level of performance could be achieved at the property compared to the actual performance. It excludes personal *goodwill*.

Tenant's/operator's capital

2.14 This may include, for example, all consumables, purchase of the inventory, stock and working capital.

Trade related property

2.15 This is any type of real property designed or adapted for a specific type of business where the property value reflects the trading potential for that business.

Trading potential

2.16 This is the stabilised profit estimate, in the context of a *valuation* of the property that an REO would expect to be able to realise from occupation of the property. This could be above or below the recent trading history of the property. It reflects a range of factors (such as the location, design and character, level of adaptation and trading history of the property within the market conditions prevailing) that are inherent to the property asset.

3 Profits method of valuation

3.1 The profits method of *valuation* involves the following steps (see section 2 for terms used):

Step 1: An assessment is made of the FMT that could be generated at the property by an REO.

Step 2: Where appropriate, an assessment is made of the potential gross profit resulting from the FMT.

Step 3: An assessment is made of the FMOP. The costs and allowances to be shown in the assessment should reflect those to be expected of the REO – which will be the most likely purchaser or operator of the property if offered in the market.

Step 4:

a To assess the *market value* of the property, the FMOP is capitalised at an appropriate rate of return reflecting the risk and rewards of the property and its trading potential. Evidence of relevant comparable market transactions should be analysed and applied. Note the *market value* could be of, for example, a freehold, leasehold or other interest.

b In assessing *market value,* the valuer may decide that an incoming new operator would expect to improve the trading potential by undertaking alterations or improvements. This will be implicit within the valuer's estimate of FMT at step 1. In such instances, an appropriate allowance should be made from the figure resulting from step 4 to reflect the costs of completing the alterations or improvements and the delay in achieving FMT. Similarly, if the property needs repair and/or decoration to enable the REO to achieve the FMT, then an appropriate allowance should be made from the figure resulting from step 4(a) to reflect the cost of such repairs and decorations.

c To assess the *market rent* for a new letting, the rent payable on a rent review or the reasonableness of the actual rent passing the correct apportionment of the divisible balance (i.e. EBITDAR) between landlord and tenant needs to be assessed.

3.2 It is important that the valuer is regularly involved in the relevant market for the class of property, with the requisite *valuation* competence and experience. Practical knowledge of the factors affecting the particular market is required, as well as the ability to access and analyse relevant and comprehensive comparable performance data.

3.3 When preparing a *trade related property valuation* it is essential that the valuer reviews the cumulative result of the different steps of the *valuation* process. The *valuation* should be considered, having regard to the valuer's general experience and knowledge of the market and their professional judgement.

4 Valuation special assumptions

4.1 Valuers are commonly asked for a *valuation* subject to *special assumptions*, which **must** be in accordance with the mandatory requirements at VPS 2 section 10.

4.2 Typical *special assumptions* are:

a on the basis that trade has ceased (sometimes with the additional *special assumption* that no trading records are available to prospective purchasers or tenants)

b on the same basis as (a) but also assuming the trade inventory has been removed

c as a fully equipped operational entity that has yet to trade, known by a number of terms such as but not limited to 'day one' and 'turn key'

d subject to adopted trade projections. This may be appropriate when considering development of the property. In using adopted projections, all *special assumptions* **must** be realistic, relevant and valid for the particular circumstances of the *valuation* (VPS 2).

5 Valuation approach for a fully equipped operational entity

5.1 The *valuation* of a *trade related property* as a fully equipped operational entity necessarily assumes that the transaction will be either the letting or the sale of the property, together with the trade inventory, licences, etc. required to continue trading.

5.2 However, this *assumption* does not necessarily mean that the entire trade inventory is to be included in the *valuation* of the property. For example, some equipment may be owned by *third parties* and therefore would not form part of the interest being valued. Any *assumption* made about the trade inventory included in the *valuation* should be clearly set out in the report.

5.3 There may be tangible assets that are essential to the running of the operational entity but are either owned separately from the land and buildings or are subject to separate finance leases or charges. In such cases, an *assumption* may need to be made that the owners or beneficiaries of any charge would consent to the transfer of the assets as part of a sale of the operational entity. If it is not certain that such an *assumption* can be made, the valuer should consider carefully the potential impact on the *valuation* that the lack of availability of those assets would have to anyone purchasing or leasing the operational entity, and comment accordingly in the report.

5.4 When *trade related properties* are sold or let as fully equipped operational entities, the purchaser or operator normally needs to renew licences or other statutory consents and take over the benefit of existing certificates and permits. If the valuer is making any different *assumption*, it should be clearly stated as a *special assumption*.

5.5 Where it is not possible to inspect the licences, consents, certificates and permits relating to the property, or other information cannot be verified, the *assumptions* made should be identified in the report, together with a recommendation that their existence should be verified by the client's legal advisers.

6 Assessing the trading potential

6.1 There is a distinction between the *market value* of a *trade related property* and the *investment value* – or its *worth* – to the particular operator. The operator will derive *worth* from the current and potential net profits from the operational entity operating in the chosen format. While the present operator may be one potential bidder in the market, the valuer will need to understand the requirements and achievable profits of other potential bidders, along with the dynamics of the open market, to come to an opinion of value for that particular property.

6.2 A *trade related property* is considered to be an individual trading entity and is typically valued on the *assumption* that there will be a continuation of trading.

6.3 When assessing future trading potential, the valuer should exclude any turnover and costs that are attributable solely to the personal circumstances, or skill, expertise, reputation and/or brand name of the existing operator. However, the valuer should reflect additional trading potential that might be realised by an REO taking over the property at the *valuation date*.

6.4 The actual trading performance should be compared with similar types of *trade related property* and styles of operation. To do so the valuer needs a proper understanding of the profit potential of those property types and how they compare with one another. A *trade related property* valuer should test, by reference to market transactions and similar *trade related properties*, whether the present trade represents the FMT in current market conditions. When available, the actual trading accounts of the subject property and similar properties may need adjusting to reflect the circumstances of the REO.

6.5 For many trading entities, the vehicle for a transfer of the business will be the sale of a freehold or leasehold interest in the property. Such transactional evidence can be used as comparable evidence in the *valuation* of *trade related properties*, so long as the valuer is in a position to exclude the value of the component parts of the transaction that are not relevant. Examples include stock, consumables, cash, liabilities and *intangible assets* (such as brand names or contracts, to the extent they would not be available to the REO).

6.6 Changes in competition can have a dramatic effect on profitability, and hence value. The valuer should be aware of the impact of current and expected future levels of competition. If a significant change from existing levels is anticipated, the valuer should clearly identify this in the report and comment on the general impact it might have on profitability and value.

6.7 Outside influences, such as the construction of a new road or changes in relevant legislation, can also affect the trading potential and hence the value of the *trade related property*.

6.8 Where the property is trading and the trade is expected to continue, the *valuation* should be reported as follows:

> 'Market value *[or market rent]* as a fully equipped operational entity having regard to trading potential subject to any agreed or special assumptions … *[which must be clearly set out]*.'

7 Valuation approach for a non-trading property

7.1 The *valuation* process for a non-trading property is the same as outlined in section 5 above, but where the property is empty either through cessation of trade, or because it is a new property with no established trading history, different *assumptions* are to be made. For example, an empty property may have been stripped of all or much of its trade inventory, or a new property may not have the trade inventory installed, but either could still be valued having regard to its trading potential.

7.2 The cessation of an operational entity and the removal of some or all the trade inventory are likely to affect the value of the property. It would therefore be appropriate to express the value on both the basis of one or more *special assumptions*, and a basis reflecting the status quo. This is often a requirement when advising a lender on the value of *trade related property* for loan security purposes. For example, the differences could reflect the cost and time involved in purchasing and installing the trade inventory, obtaining new licences, appointing staff and achieving FMT.

7.3 Where the property is empty, the *valuation* can be reported as follows:

> 'Market value *[or market rent]* of the empty property having regard to trading potential subject to the following special assumptions … *[which must be clearly set out]*.'

8 Apportionment

8.1 Apportionment is also referred to as allocation of value in IVS 102 Bases of Value, paragraph 80. The valuer may need, or may be requested, to provide an indicative apportionment of a *valuation* or a transaction price for:

- analysis as a comparable
- inclusion in *financial statements* to comply with the applicable accounting standards
- secured lending or
- tax purposes.

8.2 Any such apportionment of *market value* would usually relate to:

- the land and buildings reflecting the trading potential and
- the trade inventory.

8.3 When considering the apportionment of a transaction price, particularly where the sale is through share transfer in a limited company, the valuer should proceed with caution as the transaction may, in addition to that listed in paragraph 8.2, reflect the following:

- the *trading stock*, consumables and cash
- *intangible assets* and
- liabilities, such as salaries, taxes, debts, etc.

8.4 Apportionments for tax purposes have to be in accordance with specific legislation and are outside the scope of this VPGA.

9 Valuation for investment purposes

9.1 The basic approach to an investment *valuation* of *trade related property* is the same as for any other category of property. Where the investment is a portfolio or group of properties, VPGA 9 is relevant.

9.2 When valuing a *trade related property* investment, the valuer will need to carry out the assessment of the FMT and FMOP as set out in paragraph 3.1. It is also necessary to assess the *market rent* of the property to determine the security of the income stream and growth potential. The rent payable and the rent review will be determined by the terms of the subsisting or proposed lease.

9.3 The capitalisation rate adopted for investment *valuations* differs from that for vacant possession *valuations*. The investment rate of return will generally be determined by market transactions of similar *trade related property* investments. Clearly, due to the differing characteristics of *trade related property* and the wide variety of lease terms, careful analysis of comparable transactions is essential.

9.4 Depending on the circumstances of the *valuation*, the valuer will consider the landlord's fixtures and fittings and trade inventory, noting the latter is often owned by the occupational tenant. Where relevant, the valuer should consider, record and report the importance of the trade inventory to the trading potential and value of the property, and any *assumptions* made around this. Valuers may need to consider the underlying vacant possession *valuation* background as evidence for their *valuation* conclusions, but if assuming in the calculations that vacant possession is obtained at any future point, for example at lease end, they should bear in mind the trade inventory.

10 Legal and regulatory matters including ESG

10.1 Many *trade related properties* require licensing, permissions and other certified proof of meeting legal and regulatory requirements for their operation. Where such requirements are missing, this can impact trading potential. Some of this can relate to the particular business in operation, and some are an expected market requirement for the type of property and/or market. Valuers should assess and record their *assumptions* and any relevant *special assumptions* related to this, and properly consider personal and business requirements as distinct from those that would be expected in the market.

10.2 There are increasing legal, regulatory and market requirements globally around the need for the sustainable operation of *real estate* by users. This is coupled with related *ESG* requirements. In addition to the *sustainability* and *ESG valuation* requirements in **VPS 1**, **VPS 4**, and **VPS 6**, and advice in VPGA 8, additional consideration may need to be given to *trade related properties* to reflect that they are often valued more explicitly with reference to operational and capital income and costs. However, valuers should also be careful to properly separate the *sustainability* and *ESG* commitments and requirements of a particular operator or business from those attached to the real property asset for the relevant market.

VPGA 5 Valuation of plant and equipment (including infrastructure)

1 Scope

1.1 The guidance below provides additional commentary on the *valuation* of *plant and equipment* and the practical application of IVS 300 Plant, Equipment and Infrastructure.

2 Background

2.1 *Plant and equipment* is referred to in various terms globally, including plant or machinery or *personal property*. *Plant and equipment* has certain characteristics that influence the approach to its classification, measurement and *valuation*.

2.2 *Plant and equipment* may be broadly divided into four categories.

a Plant/machinery

This may include individual/separable machinery as part of a process/production line, trade or business (e.g. machine tools, packaging and storage equipment), and assets that are operated individually (i.e. vehicles, rail, shipping and aircraft).

b Production process plant

Assets that may be configured to operate as part of a dedicated production process. A significant amount of the total construction cost of process plant may be attributed to design, commission and civil works/installation.

c Infrastructure

A collection of assets, systems and facilities dedicated to a specific production process; this may include a significant quantity of different equipment, civil works, land improvements and structures.

d Equipment

An all-encompassing term for other assets such as sundry/ancillary machinery, tooling (including moulds, jigs and dies), fixtures, furniture and furnishings, trade fixtures and fittings and spare parts (which also may be recognised separately as inventory).

2.3 The boundaries between these categories are not always easy to define, and the criteria used may vary according to the particular market sector the assets serve, the *purpose of the valuation* and relevant national and international accounting conventions.

2.4 *Plant and equipment* may be physically affixed to real property in whole or in part, or may be removable/relocated. The extent and complexity of installation and annexation will vary, depending on the nature of the *plant and equipment* – this may have a significant impact on the *valuation* outcome. The valuer should also have regard to any associated landlord/lessor requirements that may impact value. *Plant and equipment* annexed to a real property may include fixtures and fittings; however, clarification around what constitutes potential 'tenant's improvements' should be established. The valuer should also clarify the physical location of the *plant and equipment* to be valued; assets held at *third-party* premises or remote locations, or mobile assets, may require further consideration/adjustments in the *valuation*.

2.5 Although *intangible assets* (please refer to VPGA 6) fall outside the definition of *plant and equipment*, the two asset classes often operate together, which may have an impact on their discrete and/or composite values. In such cases the valuer should establish appropriate *assumptions* in this regard (preferably at the engagement stage) and prior to reporting a *valuation*. Valuers should also be aware that the definition of *intangible assets* may vary relative to statute, local practices and accounting convention. Particular attention may be required when *plant and equipment* assets form part of (or are connected with) intangibles, trading concerns, licences, software, consents, income streams, royalties and other intellectual property.

2.6 The ownership status of the real property where the *plant and equipment* is located may impact the *valuation*. The valuer should obtain clarification where possible regarding the ownership status of the property to identify any specific lease terms/requirements that may impact the *valuation*.

2.7 Occasionally, items will be subject to a *third-party* interest, for example, a finance arrangement or finance lease (see section 6 below). The valuer should be particularly cautious in such cases and seek advice from the client and its advisors regarding the treatment of such assets, which may vary according to statute and jurisdiction. The *valuation* and report may require *special assumptions*, which should be agreed, in writing, at the time of engagement.

3 Plant and equipment included in real property valuations

3.1 *Plant and equipment* providing services to a building(s) will normally be reflected in the value of the real property interest. If a joint *plant and equipment* and real property *valuation* is being performed, both valuers should discuss this to avoid duplication or omission of assets. Examples include:

- equipment for the supply of gas, electricity, water, drainage, fire protection, security, space heating, hot water and air conditioning equipment

- structures or fixtures such as mezzanine floors, chimneys, plant housings and railway tracks
- land improvements and site infrastructure – for example roadways, car parking.

3.2 Exceptions to this general principle are:

- where the services or any structures are specific to a process in the building, for example clean rooms, specialised climate controls, stand-by generators or structures that only support or provide access to specific process *plant and equipment*
- where the *valuation* is required for tax purposes or accounting depreciation (see VPGA 1), in which case the client may require a separate *valuation* for certain building service plant or associated equipment.

4 Inspections, investigations and records

4.1 Due to the varying nature of *plant and equipment*, physical *inspections* form an essential part of the information-gathering phase of a *valuation*.

4.2 Physical *inspections* enable the valuer to identify certain factors that may impact the *valuation* of the *plant and equipment*. This may include confirmation of the physical existence of the assets, operational status, condition, utilisation and operational environment. While *third-party* data such as technical condition reports, verification reports and financial records may be referred to for valuation purposes, an independent physical *inspection* of all assets, or a representative sample, provides increased support for the *plant and equipment valuation*. The valuer should be careful they do not provide commentary regarding aspects of the assets that they are not qualified for (e.g. technical condition, etc.), and should clearly state the extent of the *inspection* performed and any associated limitations.

4.3 Many of the *inspection* requirements set out in **VPS 4** can be readily adapted to *plant and equipment* assets. If it is not practical to inspect all of the assets, a suitable sample should be agreed with the client and any limitations should be expressly stated in the engagement agreement and deliverables.

4.4 Any *valuation* provided without a physical *inspection* would be limited relative to the quantity and accuracy of the available data, and may not be appropriate for all *valuation purposes*. The valuer should ensure the client is aware of these limitations.

5 Plant and equipment and other asset types

5.1 It is important to understand the potential interplay between *plant and equipment* and other asset types, particularly when the *plant and equipment valuation* forms part of a wider exercise including other *valuation* specialisms. The valuer should maintain open communication with other valuers to avoid omission or duplication, and ensure key *valuation* inputs and *assumptions* are aligned.

5.2 In some instances, *plant and equipment valuations* may require inputs from other *valuation* specialists, for example:

- property valuers: property lease terms (termination dates, clearance requirements, etc.) should be obtained as they may impact asset value (if being valued for removal). Tax valuations may require close interplay with property valuers to ensure the correct identification/allocation of value to each asset category
- business valuers: business *valuations* would typically indicate the maximum potential value that could be attributed to *plant and equipment* if valued as part of a business.

5.3 The *valuation* of infrastructure may be valued by *plant and equipment*, property or business valuers using a combination of approaches. The valuer should obtain an understanding of the wider *purpose of the valuation* and identify whether any other valuers have been instructed by the client to avoid duplication or omission of the assets.

6 Plant and equipment subject to finance, lease and collateral agreements

6.1 It is common for *plant and equipment* to be subject to lease or financing arrangements varying from simple hire/lease purchase agreements through to complex, cross-border financing agreements. Therefore, valuers will need to establish the reporting basis and any *special assumptions* at the time of engagement, or agree and document the *assumptions* as the engagement progresses. In particular, the lease/finance agreement terms, stakeholders and wider commercial circumstances will need to be taken into account, and the valuer may need to liaise with other advisers in this regard.

6.2 National and *International Financial Reporting Standards* and lending regulators' rules regarding the treatment of leased/financed assets are subject to regular review and change. Valuers should clearly set out the basis and extent of their proposed work relative to such rules and standards, to ensure that the resulting *valuation* advice is appropriate/relevant.

6.3 In some instances, *plant and equipment* valuers may be requested to provide guidance regarding potential asset values at a future date: this should be performed in accordance with VPS 2, and is referred to as a 'projected value' or ‘residual value’. When considering projected value advice, current and historical market data and trends, macroeconomic factors, obsolescence and usage/maintenance may be considered. However, any advice would be necessarily limited to data available at the *valuation date*. It is therefore not possible to provide projected *valuation* advice with any accuracy. Valuers should state this explicitly in preparing their *terms of engagement*.

7 Key considerations

Basis of value

7.1 When valuing *plant and equipment* on the basis of *market value*, VPS 2 section 4 requires the valuer to confirm the premise of value. This may be that the assets will remain in their working place (in-situ) or are valued for removal (ex-situ).

7.2 The *valuation* may be subject to certain *special assumptions* (as defined in VPS 2 section 10); these **must** be agreed with the client and clearly stated in any engagement *documentation* and deliverables.

Valuation assumptions

7.3 Further *assumptions* may also be required, depending on the *purpose of the valuation*. These should be clearly stated in the *valuation* report and may include the following.

- In-situ *valuations* may assume the *plant and equipment* is being valued for continued use as part of an ongoing business (with assumed profitability).
- Ex-situ *valuations* may assume the method of sale, for example public auction, public tender or by private treaty.
- *Plant and equipment* may be valued on a different *basis of value* (refer to IVS 300). The valuer needs to understand and outline the conceptual link between *market value* as defined in Red Book Global Standards and other *bases of value*.
- *Valuations* may exclude reference to environmental issues and constraints.
- In the absence of a formal technical condition assessment, the valuer may assume asset condition to be commensurate with age and usage.
- The *plant and equipment* is fully owned/free from encumbrance or *third-party* lien.
- Any restriction on sale method (for example, lease conditions preclude sale by auction, access).
- Estimated costs of sale/removal/reinstatement and associated regulatory and contractual requirements may be reflected in the *valuation* in some instances.

Marketing period

7.4 All *valuations* are provided on the *assumption* that the asset is sold following a reasonable marketing period, unless specifically stated otherwise. In some instances, certain restrictions may be in place such that the *valuation* should reflect a limited or restricted marketing period. This can arise where a complementary asset, such as a building housing the subject assets or services essential to their normal operation, would not be available for the length of time required for proper marketing. The valuer should state this *special assumption* in any engagement *documentation* and deliverables (refer to VPS 2 section 10).

Information gathering

7.5 In order to provide a *valuation*, the valuer will require certain asset information, including asset type, specification, location, capacity, operational status/performance, usage/utilisation, age, condition and estimated remaining useful life. When considering an asset as part of an ongoing business, additional information may also be required regarding the wider business operation and other market sector participants.

7.6 Typical information requirements to assist the valuer in understanding the *plant and equipment* assets and/or liabilities may include:

- technical specifications
- recent *valuations*
- condition surveys
- finance arrangements and rental agreements
- fixed asset register
- capital expenditure plans (recent and projected cap-ex plans)
- maintenance, refurbishment and retirement policies
- site plans, production schematics and process flow diagrams
- operational data, including production capacity and utilisation.

7.7 The quantity and accuracy of available information will vary for each *valuation*; this should be agreed with the client as part of the engagement process and clearly stated in the *valuation* report.

Other valuation considerations

7.8 There may be occasions when factors affecting other asset classes (such as land and buildings) will impact the *valuation of plant and equipment*. Examples include where the property is held on a short lease, if there are proposals for redevelopment or if there is contamination of the land and plant that would require decontaminating prior to removal. These factors should be discussed with the client and included in any deliverables.

8 Regulatory measures

8.1 All *plant and equipment valuations* should consider wider macroeconomic factors, including relevant *sustainability* and *ESG* factors. Examples of *ESG* factors are included in IVS 104 Data and Inputs: Appendix. Certain industries are subject to specific legislation and regulations; non-compliance with these requirements may impact asset values. While valuers are not expected to be regulatory experts, they should have an appreciation of any regulatory factors relating to the asset being valued.

8.2 The valuer should discuss this with the client/related advisers to understand the potential impact on values and include details in the deliverable.

9 Valuation approaches and methodology

9.1 In broad terms, *valuation* theory recognises three approaches in the *valuation* of *plant and equipment*. These are:

- the *market approach*
- the *income approach*
- the *cost approach*.

9.2 The *valuation* approach(es) adopted may vary, depending on the nature of the asset being valued. The *market approach* is the principal approach to apply; however, where market data is not readily available (i.e. for the *valuation* of specialised or bespoke assets), the *income* or *cost approach* may be considered. The *income approach* is typically applied for the *valuation* of assets that generate a specific income/revenue stream and may be valued via this approach, e.g. vessels, aircraft and process plant/facility. The valuer should consider all *valuation* approaches; in some instances, the valuer may apply a combination of the *market*, *income* and *cost approaches* in order to reach a conclusion.

Market approach

9.3 The *market approach* provides an indication of value by comparing the asset with identical or comparable (that is similar) assets for which price information is available.

9.4 There are three recognised methods of comparison used in the *market approach*:

a direct match

b comparable match with adjustment, e.g. capacity, model, etc.

c market data analysis, e.g. regression and value profile derivation.

9.5 Other considerations include the following.

a What is the market for the assets, i.e. global or domestic? Is there an open and transparent market? Are assets regularly traded?

b Does the selling price reflect the final, agreed selling price, or is it subject to negotiation?

c What is the background to the sales evidence; were both parties willing, or under some duress?

d How does the market data compare? Consider average and median values, and exercise caution with extreme high and low values.

e How does the market data compare to the asset being valued? What characteristics vary and how can you adjust the sales price to more closely reflect the asset?

f Are a large quantity of assets being valued? If so, consider potential ’flooding’ of the market and the potential impact on values.

Members may find it useful to refer to the current edition of RICS' Comparable evidence in real estate valuation.

Income approach

9.6 The *income approach* provides an indication of value by converting future cash flow to a present value equivalent, through the application of an appropriate rate of return an investor would require, when considering the purchase of the asset. Under the *income approach*, the value of an asset is determined by reference to the value of income, cash flow or cost savings generated by the asset. It is usually difficult to identify and/or allocate an *income approach* to individual assets. Adoption of this approach is usually the exception for *plant and equipment* assets, and any application may need to align with inputs used by other *valuation* specialisms (refer to VPGA 3).

Cost approach

9.7 The *cost approach* provides an indication of value using the economic principle that a buyer will pay no more for an asset than the cost to obtain an asset of equal utility, whether by purchase or construction, unless undue time, inconvenience, risk or other factors are involved. The approach provides an indication of value by calculating the current gross replacement cost of an asset and making deductions for physical deterioration and all other relevant forms of obsolescence.

9.8 This approach is typically applied where there is no active market for the asset being valued, i.e. there is no useful or relevant evidence of recent sales transactions to refer to for *valuation* purposes.

9.9 The *cost approach* may also align with *depreciated replacement cost* (DRC) (refer to RICS' Depreciated replacement cost method of valuation for financial reporting). In the DRC methodology, 'depreciation' refers to the reduction, or writing down, of the cost of a modern equivalent asset to reflect the subject asset's physical condition and utility, together with obsolescence and relative impairments affecting the actual asset. Depreciation in this context is not the same as that applied in the accounting stage of financial reporting.

9.10 The following points should be considered when valuing *plant and equipment*.

- Determining the current gross replacement cost based on market data is preferred, where possible, although historical cost information adjusted to reflect changing costs since acquisition (referred to as the reproduction cost) may also be considered. It should be noted that market data would typically reflect the modern equivalent asset; this may not be accurately reflected in the reproduction cost.
- When calculating the reproduction cost, the valuer should ensure they are confident regarding the accuracy of the historical cost data provided. In some instances, historical costs may reflect second-hand or transfer costs, discounts or previous *valuations*, all of which may impact the *valuation* outcome. Older assets (where significant cost inflation has occurred) do not typically lend themselves to *valuation* on this basis.

- The asset information provided should include sufficient data to identify assets to obtain confirmation regarding their physical existence.
- A comparison is required between the asset being valued and a modern equivalent.
- *Plant and equipment* may include assets under construction (also referred to as construction in progress), which may be any category of *plant and equipment* where construction is not yet complete. *Valuation* consideration should reflect whether there will be a continued requirement for the asset and hence retention at its stated current cost.
- The valuer should perform market benchmarking and evaluation of each *valuation* input and *assumption* wherever possible, in order to ensure they provide an independent *valuation*.
- In some instances, the valuer may refer to other *valuation* workstreams to identify any macroeconomic factors that may not otherwise be reflected in the *cost approach* – this is particularly relevant when valuing assets as part of a business. If the overall business value does not support the *plant and equipment valuation*, this may be an indicator that an economic obsolescence adjustment is required.

VPGA 6 Valuation of intangible assets

1 Scope

1.1 The guidance below provides additional commentary on the *valuation* of *intangible assets* and the practical application of IVS 210 Intangible Assets.

1.2 It covers the *valuation* of *intangible assets* in respect of business combinations and the acquisition of a collection of assets, sale of businesses or parts of businesses, and purchases and sales of *intangible assets*.

2 Introduction

2.1 An *intangible asset* is defined as a non-monetary asset that manifests itself by its economic properties. It does not have physical substance but grants rights and/or economic benefits to its owner.

2.2 It is therefore an asset that is capable of being separated or divided from a business entity and sold, transferred, licensed, rented or exchanged individually or with a related asset, liability or contract. Non-identifiable *intangible assets* arising from contractual or legal rights that may or may not be separable from the entity, or other rights and obligations, are generally termed '*goodwill*'.

2.3 Identified *intangible assets* include:

- marketing related assets: typically associated with, and primarily used in, the marketing or promotion of a company's products or services (trademarks, brands, trade names, trade dress, internet domain names, newspaper mastheads)
- customer or supplier related assets: arise from relationships with, or knowledge of, customers and suppliers, and are used in the development, procurement, management and maintenance of a company's customers (customer lists, order or production backlog, customer contracts and related relationships, non-contractual customer relationships)
- artistic related assets: arise from artistic products or services that are protected by a contractual or legal right (copyright and design), and give rise to benefits, including royalties from artistic works (plays, operas, ballet, books, magazines, newspapers, musical works, pictures, photographs, videos, films, television programmes)
- technology related assets: these represent the value of technological innovation or advancements, and can arise from non-contractual rights to use technology, or be protected through legal or contractual rights (patented technology, software,

unpatented technology, databases, trade secrets, in-process research and development, manufacturing processes and know-how)

- contract-based assets: represent the value of rights that arise from contractual arrangements (non-compete contracts, licensing, royalty and standstill agreements; contracts for advertising, construction, management, service or supply lease agreements; construction permits; franchise agreements; operating and broadcasting rights; contractual use rights other than those expressly classified or properly regarded as tangible assets; servicing contracts; and employment contracts).

2.4 A major *intangible asset* is *goodwill*, which is defined as any future economic benefit arising from a business, an interest in a business or the use of a group of assets that is not separable. The benefits that may form part of *goodwill* include synergies that follow a business combination. Examples of this include:

- economies of scale not otherwise reflected in the values of other assets
- growth opportunities, such as expansion into other markets and
- organisational capital, for instance the benefits obtained from an assembled workforce.

Goodwill is typically measured as the residual amount remaining after the value of all separable and identifiable assets have been deducted from the overall value of the business. This definition is commonly used for accounting purposes.

2.5 *Intangible assets* are differentiated from one another by characteristics such as ownership, function, market position and image. Businesses with strong brands generally trade at a premium as compared to unbranded and less recognised peers, reflecting the value of the *intangible asset*. In addition, while *intangible assets* within the same class will inevitably have similar characteristics, there will also be aspects that differentiate them from other similar ones.

2.6 It is important that the valuer is regularly involved in *intangible asset valuation*, as practical knowledge of the factors affecting investment in any particular asset is essential (see PS 2 section 2).

3 Terms of engagement

3.1 The *valuation* knowledge of clients will vary widely. Some will have a thorough understanding of intangible property rights and *intangible asset valuation*, while others will be unfamiliar with the terms and concepts used by valuers of *intangible assets*.

3.2 The *terms of engagement* **must** be understood and agreed between the valuer and the client prior to commencement of the assignment (VPS 1). Any supplementary or contributory assets should be identified and factored into the *valuation* analysis. Contributory assets are those used in conjunction with the subject asset to generate cash flows. Where contributory assets are not to be valued, it is important to clarify whether the intention is therefore for the principal asset to be valued on a standalone basis.

3.3 There may be situations where the interest in the asset to be valued is shared with others, and in such cases, it should be clearly specified.

3.4 The valuer **must** produce *terms of engagement* that comply with the minimum terms set out in VPS 1.

4 Valuation concepts

4.1 The reason why the valuer has been instructed to perform a *valuation* is important to understand, as the *intangible asset valuation* may be required for a wide variety of purposes. Examples include financial reporting, tax, public sector assignments, transactions and flotations, fairness opinions, banking arrangements, insolvency and administration or portfolio review. The answer will introduce various concepts of value, some governed by statute and case law, and others by international and national standards of professional *valuation* practice.

4.2 *Valuation* bases typically encountered for these types of *valuations* (not all of which are recognised by IVS or Red Book Global Standards) are definitions such as IFRS *fair value*, fair *market value* and *market value* (refer to VPS 2). In addition, valuers should also be mindful of the requirements of PS 1 section 1, where a written *valuation* is provided.

4.3 Depending on the rules and practice followed in respect of the concept, the *valuation* conclusion in respect of the same asset may be different. For example, because of the rules concerning capital tax *valuations*, a tax authority could view *valuation* differently to how a litigant, merger partner or *special purchaser* would.

4.4 Except in the case where there are strong indications to the contrary, the presumption of the *valuation* is that of a ‘going concern’, but in most cases *intangible assets* do not have a remaining economic life that goes into perpetuity. In some cases, the remaining economic life will be based on what is specified either by law, or under the terms of any relevant agreements or protocols that govern the asset.

4.5 In many cases it may be necessary to apply more than one *valuation* method, if possible, particularly where there is insufficient information or evidence to enable the valuer to rely on just one. In such cases, the valuer may use additional methods to arrive at the final *valuation*, indicating why preference is given to any one or more methodologies. The valuer should also consider all *valuation* approaches, giving reasons why any particular approach has not been completed.

5 Valuation due diligence

5.1 In line with PS 2 section 2, valuers **must** have appropriate competency in *intangible asset valuation*. As a minimum requirement, a valuer should not contemplate carrying out a *valuation* in the absence of a detailed knowledge and understanding of such issues as:

- the rights of the owners of the asset(s)

- the history of, and activities associated with, the asset(s)
- as appropriate, the state of the subject industry, the general economic outlook and political factors.

5.2 Typical information requirements to assist the valuer in understanding the subject asset(s) could include:

- most recent income statements associated with the subject asset, and details of current and prior projections or forecasts
- description and history of the subject asset, including legal protections and rights associated with it (the extent to which such legal rights have been assessed should be disclosed)
- information about the asset and supporting *documentation* (for example, registrations, territorial applications, marketing, technical research and development, documentation, design graphics and manuals)
- other collateral agreements
- details of the precise activities exploiting the *intangible asset*
- previous *valuation* reports
- details of recent transactions involving the company/asset
- product(s) dealt in, supported or extended by the business and intangibles
- whether anyone else is permitted to use the *intangible asset(s)*, and whether there are plans to do so
- the company's market(s) and competition, barriers to entry in such markets, business and marketing plans, due diligence
- licensing, strategic alliances and joint venture detail
- whether contractual arrangements can be assigned or transferred in any *intangible asset* or royalty agreement
- major customers and suppliers
- objectives, developments or trends expected in the industry, and how these are likely to affect the company or asset
- accounting policies
- strengths, weaknesses, opportunities and threats (SWOT) analysis
- key market factors (for example, monopoly or dominant market position, market share)
- major capital expenditure in prospect
- competitor positions
- seasonal or cyclical trends
- technological changes affecting the asset

- vulnerability of any source of raw materials or supplier arrangement
- whether there have been any recent acquisitions or mergers in this sector around the *valuation date*, and the criteria that were applied
- management of research and development (non-disclosure agreements, subcontractors, training and incentives)
- whether there is an intellectual property asset schedule setting out the extent of intellectual property right (IPR) ownership and the interests of *third parties* (if any)
- examination of existing licences for the asset or comparable licensing of similar assets.

5.3 The valuer **must**, as far as it is possible, verify facts and information used in arriving at the *valuation* and benchmark, where possible, inputs to the *valuation* (VPS 4).

5.4 Much of the information relied on by the valuer will be provided by the client(s), and it may not be possible to verify it. In such cases, the *valuation* report should make this clear.

6 Valuation approaches

6.1 In broad terms, *valuation* theory recognises three distinct approaches in *valuation*, including for intangibles. These are the:

- *market approach*
- *income approach* and
- *cost approach*.

6.2 Each approach requires the valuer to adopt an estimate of the asset's remaining useful life. This could be a finite period set by the length of a contract or normal life expectancy in the sector, or it could be indefinite. Several factors will have to be considered in determining life expectancy, including legal, technical, economic and functional aspects. The presumed life expectancy of an asset that has been licensed for a particular period may be shorter if a superior competitor product is likely to reach the market before the licence expiration. In such a case, the valuer would need to use the most realistic estimate of the asset life, not the contractual life.

Market approach

6.3 Under the *market approach*, the value of an *intangible asset* is determined by reference to market activity (for example transactions involving identical or similar assets).

6.4 The *market approach* measures the value of an asset by comparing recent sales or offerings of similar or substitute property and related market data. However, it is rarely possible to find such evidence relating to identical assets.

6.5 The *market approach* uses data based on historical transactions that have occurred in the subject asset's direct or related industries.

6.6 In certain industries, assets are bought and sold on the basis of established market practices, often (though not exclusively) derived from data or percentages of turnover, and not directly linked to profit generation. Care should be taken that the 'established market practice' has not been superseded by changes in circumstances over time. Where such market practices exist, they need to be related to other measures of value.

Income approach

6.7 The *income approach* has a number of methods that may be applicable to *intangible assets*. When applied (using, for example, the discounted cash flow (DCF) method), it measures the value of an asset by the present value of its future economic benefits. These benefits can include earnings, cost savings, tax deductions and proceeds from its disposal.

6.8 When applied to an *intangible asset valuation*, value indications are developed by discounting expected cash flows to their present value at a rate of return that considers the risks associated with the underlying business and the corresponding asset.

6.9 The *income approach* also embraces methods such as the relief-from-royalty method. This is defined in IVS 210 Intangible Assets as being 'determined by reference to the value of the hypothetical royalty payments that would be saved through owning the asset compared with licensing the intangible asset from a third party'.

6.10 There is also the 'multi-period excess earnings' method. This is a method of estimating the economic benefits of an *intangible asset* over multiple time periods by identifying the cash flows associated with the use of the asset and deducting a periodic charge reflecting a fair return on contributory assets. A charge for the return of many contributory assets (depreciation or attrition) should also be included. This method is reserved for the primary *intangible asset* within any business enterprise.

6.11 There are other *income approach* methods that are explained in IVS 210 Intangible Assets.

6.12 The *income approach* is common in *intangible asset valuation*. A thorough understanding of accounting and economic profits, their historical record and forecasting is necessary in each case.

6.13 Appraisal of *intangible assets*, including Intellectual Property Rights, involves techniques to identify the earnings specifically associated with the subject asset, such as gross profit differential, excess profits and relief from royalty. A thorough understanding of the historic and forecast earnings is necessary.

6.14 Care should be taken when several *income approach* methods are used simultaneously to value different *intangible assets*. Specific cross-check would be required to ensure robustness of each analysis (see contributory asset charges definition in IVS 210 Intangible Assets).

Cost approach

6.15 The *cost approach* indicates the value of an asset by the cost to create or replace it with another similar asset. When applied to *intangible asset valuation*, obsolescence, maintenance and the time value of money are considerations. When the *basis of value* in the *valuation* is *market value*, the indications of obsolescence should be supported by market data. This approach is used for certain secondary assets or where there is anabsence of forecasts associated with the asset. In practice, the *cost approach* is used for purchased software, internally developed software and assembled workforce.

7 Discounted cash flow techniques

7.1 DCF techniques measure the value of an asset by the present value of its future economic cash flow, which is cash that is generated over a period of time by an asset, group of assets or business enterprise. All the *income approach* methods presented above are examples of DCF techniques.

7.2 Issues to consider in relation to this technique include:

- the number of years over which the cash flow is applied
- the capitalisation rate or discount rate applied at the end of the term
- the discount rate(s) adopted
- whether inflation is built into the cash flow
- what other variables need to be considered in respect of the cash flow in the future
- the trading profile of the asset
- the internal rate of return (IRR) and terminal value.

7.3 If the *valuation* is for a specific *intangible asset*, before undertaking the detailed cash flow modelling, the valuer is required to quantify the remaining useful life and deterioration rate associated specifically with the use of the asset. Typically, this remaining useful life analysis will quantify the shortest of the following:

- physical life (for example, of an underlying tangible asset)
- functional life (for example, of an underlying tangible asset)
- technological life
- economic life
- legal life.

7.4 DCF *valuation* will involve these key components: a financial forecast identifying the specific *intangible assets* and associated earnings, and the appropriate discount rate (cost of capital). Relevant discount rates for *intangible assets* are usually estimated by reference to the weighted average cost of capital (WACC) or its components (cost of equity and cost of debt). The selection of the appropriate discount rate will depend on the nature and riskiness of the underlying asset.

7.5 Valuers may be required to consider *intangible assets* in a licensing context, for example, the licensing in or out of technology or patents. Much of what has been covered in this VPGA is relevant in the calculation of an appropriate royalty rate or similar financial metrics. In practice, the rate is estimated by reference to some or all of the following:

- existing licences for the intangibles (internal/external data)
- industry norms for licences for similar assets
- allocation technique to derive the relevant economic benefits for the use of the asset, for example the patented invention (sometimes referred to as the available profits)
- licensing practice.

7.6 Licensing appraisal examines specifics such as (but not restricted to):

- how other relevant licences were negotiated
- *intangible asset* and support
- length of the licence agreement
- exclusivity
- special terms for special deals
- geography
- sector in which the *intangible asset* is licensed
- any special relationships.

7.7 Even if previous licensing practice is comparable, it can only provide a benchmark. Intangibles, by their nature, are unique. The use of similar or comparable royalty rates may require some adjustment to reflect the uniqueness or specific nature of the *intangible asset* valued.

7.8 Consideration may need to be given to the tax amortisation benefit, and this is explained in IVS 210 Intangible Assets.

8 Reports

8.1 The valuer **must** produce a report that complies with the minimum terms set out in **VPS 6**. Generally, the report has a brief introductory section or executive summary that defines the assignment, summarises the conclusion and outlines details of the report. The structure should move from the general to the specific, providing a logical flow of data and analysis within which all the necessary considerations can be incorporated, leading to *valuation* conclusions.

8.2 Most situations will easily form into major sections as follows, although not necessarily in this order:

- introduction
- purpose and *basis of value*
- *date of valuation*
- *assumptions* and *special assumptions*
- subject of *valuation*
- description and history of the asset(s), and the business entity in which it has (they have) been used
- accounting and accounting policies
- *financial statement* analysis, if appropriate
- business and marketing plan analysis, and prospects
- search results for comparative transactions if using the *market approach*
- industry in which the asset is used
- economic context and environment, yields and risk assessment
- *valuation* methods and conclusion
- caveats, disclaimer and limitations.

8.3 Some reports will have a separate section containing a general discussion of *valuation* methodology, which will often follow the introduction. If national, regional and economic data are important to the company and asset, each may have its own section.

8.4 Where appropriate, information, or sources thereof, should be identified either in the body of the report or in the appendices. Where the report is that of an expert required for litigation purposes, it must adhere to the requirements imposed by the local jurisdiction and **must** therefore contain all relevant disclosures, including the statement of the expert's qualifications and the statement of truth (VPS 6).

9 Confidentiality

9.1 Information in respect of many *intangible assets* will be confidential. Valuers should use their best endeavours to preserve such confidentiality, including information obtained in respect of comparable assets. Where required by the client, valuers of *intangible assets* will comply with any requests to enter into non-disclosure or similar agreements.

VPGA 7 Valuation of arts and antiques

1 Introduction and scope

1.1 It is essential to be clear about the *purpose of the valuation*, which will dictate the *basis of value* to be used. See **VPS 1**.

1.2 This guidance provides additional commentary on the application of IVS and **VPSs 1–6** to art and antiques, being those assets and/or liabilities specified in 1.3 below.

1.3 For the purpose of this VPGA, art and antiques (the term '*personal property*' is additionally used to describe arts and antiques in some jurisdictions) means assets and/or liabilities not permanently attached to land or buildings, with the exception of public art and murals. Further:

- including, but not limited to, fine and decorative arts, antiques, paintings, gems and jewellery, collectables, fixtures and furnishings, non-fungible tokens (NFT) and other general contents
- excluding trade fixtures and fittings, *plant and equipment* (covered separately in VPGA 5) and businesses or business interests (covered separately in VPGA 3).

1.4 *Valuations* of art and antiques may arise in many different contexts and for a variety of purposes that may include, but are not restricted to:

- insurance coverage
- damage or loss due to fire, water or other reason
- taxation (charitable contribution, gift tax, estate tax, casualty loss)
- financial reporting
- business transactions
- litigation, including claims of fraud
- estate planning, equitable distribution and probate
- prenuptial agreements
- dissolution of marriage
- dissolution of business
- advice on the acquisition or disposition of property for investment or personal consumption
- loan collateral

- bankruptcy
- inventory *valuation*.

1.5 This list is not definitive and allows for national or regional variations. Statutory requirements within a given jurisdiction will take precedence. This may especially be the case where *valuations* are prepared for the assessment of tax liabilities, including probate or for accounting purposes.

2 Terms of engagement

2.1 When agreeing to the *terms of engagement*, the valuer should advise the client of the possible effect on value of any other relevant matters such as the asset's provenance, legal restrictions, authenticity and the impact of a group of assets being valued as a collection, rather than individually. The language **must** be clear, accurate and not ambiguous, as per VPS 1.

3 Identifying the market

3.1 *Valuations* are based on an understanding of the market in which the *valuation* takes place. Valuers should assess the nature and state of the market that provides the context for their investigations and value conclusions. Considerations that the valuer should take into account include the level of activity, confidence and trends. Valuers should also consider the legal and regulatory position pertaining to the subject property, and any proposals or implications that could influence the behaviour of market participants.

3.2 Art and antiques valuers should recognise that different market segments exist for a particular asset, each potentially generating its specific price levels. In particular, an asset may have a different value at the wholesale level of trade, the retail level of trade or when trading at auction. The valuer **must** identify the relevant market segment for the asset being valued, the *purpose of the valuation* and the identity of the intended user(s). While *market value* is typically defined as the best price achievable in the open market, the valuer should consider whether the owner's access to this market is restricted. Any limitations on market access should be clearly explained in both the *valuation* report and *terms of engagement*. This information will influence the *valuation* approach and the *basis of value* adopted. For example, in respect of *valuations* for insurance purposes, the *basis of value* to be determined will typically be defined in the policy, whereas in the case of *valuations* for court purposes, Red Book Global Standards may not be applicable (see PS 1 section 5).

3.3 In identifying the market, art and antiques valuers should be aware that the method of sale could affect the resultant sale price. However, valuers should be aware that the quality of information and matters such as commissions and costs of sale associated with the purchase should be considered.

3.4 In art and antiques, groups of assets are often held as collections that, if divided, may be worth significantly more or less per item than when held collectively. The valuer will need to assess whether holding assets collectively has any impact on their *valuation* and advise accordingly.

4 Inspection, research and analysis

4.1 Valuers of art and antiques should:

- collect, verify and analyse pertinent sales data
- investigate and assess pertinent economic and market conditions and
- consider any additional related information necessary to generate realistic and credible value conclusions.

VPS 4 sets out the requirements for conducting investigations.

4.2 Art and antiques valuers should be aware that the degree of reliability of previous sales data may be limited, and should assess the reliability of data used to support the analysis. They should document the sources of information used in the analysis.

4.3 Any limitations or conditions that impede the *inspection*, research and/or analysis should be taken into account by the valuer. If there are such limitations, the valuer may need to make *assumptions/special assumptions*. **VPS 2** sets out the requirements relating to *assumptions* and *special assumptions*. Any *assumptions* **must** be discussed and agreed with the client prior to the conclusion of the *valuation*, and clearly documented in both the *terms of engagement* and the report.

4.4 The valuer should consider economic and market data, such as supply and demand in the marketplace and market movements. When there is a degree of uncertainty with respect to the information used or the state of the market, the valuer should refer to **VPS 6**.

4.5 The valuer should undertake an appropriate level of due diligence in relation to establishing the provenance of the item to be valued, as this may have a significant impact on value. Establishing provenance, in addition to expert knowledge in the field, may involve archival research and/or forensic examination. Provenance is necessary for due diligence. The valuer should consult with the client to establish the level of investigation that should be undertaken, and any implication this may have in respect of fees or *third-party* work to be undertaken before a *valuation* can be provided.

4.6 When the valuer is required to consult with specialists/professionals to the extent necessary for the *purpose of the valuation*, they have an inherent duty to verify that the specialist or professional is appropriately qualified to provide advice and that the services are carried out competently.

5 Valuation approaches and applications

5.1 The three approaches to arriving at *market value* (as defined in IVS 103 paragraph 10.01) for arts and antiques are:

a the market comparison approach

b the *cost approach* and

c the *income approach*.

The market comparison approach

5.2 This provides an indication of value by comparing the subject asset to similar assets for which sales data is available. This approach is the most commonly used in the *valuation* of arts and antiques. When applying this approach, the valuer should be careful in the analysis of the appropriate comparable sales data, in accordance with section 4 above. Where it is possible to assess the value by reference to comparables, it is normally the preferred approach.

The cost approach

5.3 This provides an indication of value based on the estimated current costs to reproduce or create a property of equal quality, service potential/capacity, utility and marketability. This approach includes replacement with a copy or replacement produced by other means, such as a facsimile. A copy is a generic term used when the original item is reproduced as near as possible to the original in terms of nature, quality, use and age of materials and production technique. Where the copy is produced by the original artist, it is termed a replica. A facsimile is an exact copy of the original item, created with materials of a closely similar nature, quality and age, using techniques or fabrication methods of the original period. All of these approaches (i.e. copy, replica and facsimile) are usually only adopted for insurance purposes where it is not practicable to establish a value using another method.

5.4 When applying the *cost approach*, the valuer should analyse pertinent and appropriate cost data to estimate the cost of replacement. The valuer should be aware that the nature of reproduction (copy, replica or facsimile) will have a significant bearing on the resultant value and adjust their *valuation* accordingly.

The income approach

5.5 This provides an indication of value by calculating the anticipated monetary benefits (such as a stream of income) for the subject asset. When applying this approach, the valuer should analyse pertinent and appropriate data to reliably estimate the income in the relevant marketplace of the property. Valuers should base projections of anticipated monetary benefits on an analysis of past and current data, trends and competitive factors. This method is also relevant when a historic *real estate* property with embedded works of art, such as frescoes, is involved, where the value of the overall holding and each component should be considered. In such cases, valuers should determine whether to integrate or separate the values based on the interdependence of the art and the property, legal protections and market conditions.

5.6 In all approaches, the valuer should use prudent and well-informed judgement to consolidate the data collected and the analysis thereof into a logical value conclusion.

5.7 All *valuation* conclusions should be reasonably based and clearly supported by appropriate evidence, including that relating to provenance. If more than one *valuation* approach has been used in the analysis, the valuer should include both and then reconcile the results.

5.8 RICS does not prescribe the method(s) that a valuer should use. However, the valuer should be prepared to justify the rationale for the approach and method adopted.

Other valuation considerations

5.9 In addition to the requirements of VPS 6, the valuer's research and analysis should consider:

- the comprehensibility of communication with the client and other intended users. The valuer should take account of the fact that the *valuation* knowledge of clients will vary, and should communicate information that can be understood by all intended users of the report
- the interest to be valued (there may be situations in which the interest in arts and antiques to be valued is shared with others, and in such cases it should be clearly specified)
- the characteristics required to establish the identity of the property (including, but not limited to, artist or maker, material or medium, size, title, origin, style, age, provenance or history, condition, forensic examination, exhibition history and citations in the literature)
- the *basis of value* to be adopted (for example, *market value*, replacement value, etc.) and the source of the definition for that value
- any special assignment conditions, and legal, regulatory or statutory requirements
- restrictions, encumbrances, leases, covenants, contracts or any other such considerations that may affect the *valuation* or ownership of the arts and antiques to be valued
- the degree to which *third-party* information can be verified and relied on
- the relationship of the object to any real property or *intangible assets* that may affect the *valuation* of the property
- the importance of individual assets in an instruction that includes multiple objects with a wide range of values
- analysis of prior sales of the property or similar comparable properties being valued, if relevant
- the degree to which the current market conditions and the economy affect the level of certainty of the *valuation* conclusion.

6 Reports

6.1 When arriving at a *valuation* based on any *assumptions* or *special assumptions* (such as when an aggregated value is being determined – see VPS 2 section 9 and section 10) the effect on value, if any, should be specifically stated.

6.2 The valuer **must** comply with the minimum requirements listed in VPS 6 and incorporate all the *valuation* considerations listed in paragraph 5.9. Additionally, when the valuer has consulted a specialist or professional individual or *firm* in the process of preparing the *valuation*, the sources and credentials should in each instance be identified and the nature of the input acknowledged (see paragraph 4.6 above).

6.3 The level of detail provided in the *valuation* report should properly address the needs of the client and the intended user(s), the nature of the property and the intended use of the *valuation*. The terminology used in the report should be capable of being understood by all intended users.

6.4 The valuer should state any limitations or conditions regarding *inspection*, research or analysis, and explain any effect on the valuer's conclusions.

6.5 The *purpose of the valuation* (for example, equitable distribution), the *basis of value* (for example, *market value*) and the market in which the (notional or actual) transaction is presumed to take place (for example, auction) should be set out clearly within the report.

6.6 The valuer should report, if necessary, that the conclusion complies with any special requirements of the client, regulatory rules or pertinent laws.

6.7 The valuer should summarise the research conducted and the data used in the analysis. The valuer should state the *valuation* approach(es) used (i.e. comparison, cost or income), as well as the rationale for choosing it (them). The valuer should also state why other approaches were considered but rejected. If multiple approaches were used in the analysis, these should be detailed in the report and a reconciliation of the results should be included.

6.8 When arriving at a *valuation* based on any *assumptions* or *special assumptions* (such as when an aggregated value is being determined – see VPS 2 section 9 and section 10), it should specifically state the effect on value, if any. In particular, where the valuer has been unable to fully establish provenance with full certainty, this should be reported, together with any *assumptions* that have been made.

6.9 The valuer should comment on any issues affecting the certainty of the *valuation*. The extent of the commentary will vary, depending on the *purpose of the valuation* and the knowledge of the user.

6.10 Photographs should be appropriate and used as required by the assignment. If any alterations were made to the photographs, these should be noted.

VPGA 8 Valuation of real property interests

1 Inspection

1.1 Sections 1 and 2 relate to *inspections* and investigations involving *real estate*, more specifically where the asset to be valued is a right of ownership, control, use or occupation of land and buildings.

1.2 Many matters may or will have an impact on the market's perception of the value of the relevant interest, aspects of which may only become fully apparent during an *inspection* of the property. These can include:

a characteristics of the locality and surrounding area, and the availability of communications, services and facilities that affect value

b characteristics of the property and its use, including:

   i dimensions, areas and use(s) of constituent elements

   ii age, construction and nature of buildings or structures, including construction materials

   iii accessibility both for occupiers and for visitors

   iv installations, amenities and services

   v fixtures, fittings and improvements

   vi *plant and equipment* that would normally form an integral part of the building (see also VPGA 5)

   vii apparent state of repair and condition

   viii hazardous materials kept on the property, such as (but not limited to) regulated items including chemicals, radioactive substances, explosive materials, asbestos, ozone depleting substances, oils, etc. or regulated activities being conducted, such as waste management activity.

c characteristics of the site, including ground condition, soil conditions and productivity generating attributes where applicable. Also including:

   i natural hazards such as ground instability, mining or mineral extraction, and risk of flooding from all mechanisms, including pluvial and fluvial sources

   ii non-natural hazards such as ground contamination where there are substances in, on or under the ground resulting from historic or current uses (see also (b) above).

d potential for development or redevelopment, and any physical restrictions on further development, if appropriate.

1.3 Other matters on which relevant information may be acquired during, or further enquiries made prompted by, an *inspection* may include:

a improvements to leasehold properties: when valuing leases and reversions, where the property included in the original letting may subsequently have been altered or improved, care needs to be taken to ascertain what is to be valued as it may not exactly equate with what is seen and (as appropriate) measured on the ground. If the valuer is unable to inspect the lease, or due to the absence of documented licences the extent of alterations or improvements cannot be confirmed, the valuer should proceed on the basis of stated *assumptions*

b planning (zoning) controls: controls and the need for licences or permissions for increased or altered use, including development, will vary between countries or states, and the extent of the particular enquiries that are appropriate and need to be made in individual cases will be informed by the valuer's knowledge of the relevant market, by the nature and extent of the property, and by the *purpose of the valuation*

c where relevant, information on any substantial outgoings and running costs, and the level of recovery from the occupier. Energy efficiency and carbon emissions may be among a number of relevant factors when considering *sustainability* and *ESG* issues (see section 3 below).

1.4 The extent to which a valuer considers and provides *valuation* advice in relation to the above matters is subject to them being competent and expert to do so. Any relevant limitations **must** be recorded in the *terms of engagement*, *valuation records* and report. Reference should also be made to 2.3 below.

2 Investigations and assumptions

2.1 Introduction

2.1.1 The following aspects are common to many *valuations* involving *real estate*, and often raise issues about the extent of investigation that is appropriate or about the nature of the *assumptions* that might validly be made. The guidance below cannot cover all circumstances – a valuer's knowledge, experience and judgement will always need to be brought to bear on individual assignments, and in some cases appropriate limitations will have been specified by, or discussed and agreed with, the client as part of the *terms of engagement*. Similarly, the relevance and appropriateness of *assumptions* can only be judged on a 'case-by-case' basis – what follows is not in any way prescriptive.

2.2 Title

2.2.1 The valuer **must** have information on the essential details of the interest being valued. This may take one of a number of forms, such as but not limited to a synopsis obtained from the client or a *third party*, copies of the relevant documents or a current detailed report on title by the client's lawyers.

2.2.2 The valuer **must** state what information has been relied on and, where appropriate, what *assumptions* have been made. For example, if a lease document is not available, the valuer might need to make an *assumption* that the terms advised and stated are those in the actual lease. However, if an assurance of good title has been provided, the valuer might reasonably rely on the correctness of this information – but this would ultimately be a matter for lawyers, and where appropriate the valuer might specifically note that the position must be checked by the client's legal advisers. A valuer would not expect to take responsibility or liability for the true interpretation of the client's legal title in the property or asset.

2.3 Condition and construction of buildings

2.3.1 Even if competent to do so, a valuer would not normally undertake a building survey to establish the details of any building defects, disrepair or information related to construction materials. However, it would also be wrong for the valuer to ignore obvious defects that would have an impact on the value, unless a *special assumption* to that effect has been agreed. The valuer should therefore clearly state that the *inspection* will not amount to a full building survey. In addition, the limits that will apply to the valuer's responsibility to investigate and comment on the structure, construction materials or any defects **must** be defined. It should also be stated, wherever appropriate, that an *assumption* will be made that the building(s) is in good repair, except for any (minor) defects specifically noted.

2.4 Services

2.4.1 The presence and efficiency of building services and any associated *plant and equipment* will often have a significant impact on value; however, detailed investigation will normally be outside the scope of the *valuation*. The valuer will need to establish what sources of information are available, and the extent to which these can be relied on, in undertaking the *valuation*. It is usual to agree on an *assumption* that the services and any associated controls or software are in working order or free from defect.

2.5 Planning (zoning)

2.5.1 Where there is an element of doubt, the valuer may need to establish whether the property has the necessary statutory consents for the current buildings and use, or advise that verification should be sought, and whether there are any policies or proposals by statutory authorities that could impact the value positively or adversely. This information will often be readily available, but delays or expenses may be incurred in obtaining definitive information. The valuer should, among other things, state what investigations are proposed, or what *assumptions* will be made, where verification of the information is impractical within the context of the *valuation*.

3 Sustainability and environmental, social and governance (ESG) matters

3.1 Introduction

3.1.1 Potential or actual constraints on the enjoyment and use of property caused by *sustainability* and environmental factors may result from natural causes (such as flooding, severe storms and wildfires), from non-natural causes (such as contamination) or sometimes from a combination of the two (such as subsidence resulting from the historic extraction of minerals). There may also be *sustainability* and environmental factors beyond the directly physical, such as carbon emissions. Environmental factors represent only one of the pillars of *ESG*; guidance on social and governance elements are included in section 3.6 below. When considering each of the three pillars, other stakeholders such as, but not limited to, the client, occupiers and managing agents may need to be consulted.

3.1.2 Despite the considerable diversity of circumstances, the key question is always the extent to which the factors identified affect value. Particular care should be taken when assessing or commenting on *ESG* factors, as valuers may not have the specialist knowledge and experience required. An increasingly prevalent example of this globally is the assessment of capital expenditure required to meet market and regulatory energy efficiency and decarbonisation requirements by a specific target date. In appropriate cases, the valuer may recommend making further enquiries and/or obtaining further specialist or expert advice in respect of these matters.

3.2 Natural environmental constraints

3.2.1 Some property will be affected by environmental factors that are an inherent feature either of the property itself or of the surrounding area, and which have an impact on the value of the property interest. Examples include ground instability issues (such as swelling and shrinking clay, subsidence resulting from historic or current mineral extraction, etc.) and the risk of flooding from any mechanism. Resilience protection measures may alleviate the impact of the factor.

3.2.2 Although detailed commentary on both the risks and the effects may be outside the realm of the valuer’s direct knowledge and expertise, the presence, or potential presence, of these factors is something that can often be established in the course of a *valuation inspection* through normal enquiries or by local knowledge. It is not just the risk of a particular event occurring that needs to be considered, but also the various consequences. For example, if the property has suffered a recent event, such as flooding, this may affect the availability of insurance cover, which, if material, should be reflected in the *valuation*.

3.2.3 The valuer should be careful to state the limits that will apply to the extent of the investigations and the *assumptions* that will be made in relation to environmental matters, and should state any sources of information relied upon.

3.3 Non-natural constraints (contamination and hazardous substances)

3.3.1 A valuer may not be competent to advise on the nature or risks of contamination or hazardous substances, or on any costs involved with their removal. However, a valuer who has prior knowledge of the locality and experience of the type of property being valued may be able to comment on the potential that exists for contamination, and the impact that this could have on value and marketability.

3.3.2 The nature and risks may of course be directly attributable to the use of the property itself. For example, a number of businesses depend on activities that involve the use of hazardous substances, or operate waste management activities that may be regarded as a nuisance by *third parties*. Although detailed commentary on such effects may be outside the realm of the valuer's expertise, their presence, or potential presence, is something that can often be established in the course of a *valuation inspection* through normal enquiries or by local knowledge.

3.3.3 The valuer should state the limits on the investigations that will be undertaken and state any sources of information or *assumptions* that will be relied on.

3.4 Transition and stranding risk

3.4.1 The Paris Agreement is a legally binding international treaty on climate change adopted by 196 parties globally. Its goal is to limit global warming to well below 2, preferably to 1.5, degrees Celsius compared to pre-industrial levels. Many countries globally have adopted additional regulation and legislation to achieve this transition, and it is subsequently a factor in many market decisions and in lending, investment and financial reporting.

3.4.2 The importance of transition risk to market stakeholders means that they are increasingly asking for it to be modelled explicitly. This may be in terms of the planned capital expenditure and operational costs and income needed to meet regulatory and/or market objectives. Valuers have a role to play in this process, including explicit *ESG* requirements in VPS 1, VPS 4 and VPS 6. However, valuers may not have the expertise to provide, evaluate or comment on the reliance of transition risk modelling within *valuation* and **must not** do so if they lack the requisite competence or experience.

3.4.3 Stranding risk refers to potential write-downs due to direct climate change impacts and devaluations related to the transition to a 'low-carbon economy' (CRREM definition). An analysis of stranding risk highlights the point at which an asset becomes obsolete without intervention to support decarbonisation. Understanding this allows a suitable decarbonisation pathway to be chosen, and market participants are often interested in the short-, medium- and longer-term impacts of this on value. Valuers **must** again be careful of their role in supporting any analysis of stranding risk or commenting on value impacts within this context, which is a specialist area.

3.4.4 Transition risk can also be considered through the appropriate use of *special assumptions*. For example, it may be appropriate to consider the real asset both in its actual state and with a *special assumption* assuming full compliance with regulatory requirements related to energy efficiency. *Special assumptions* may only be made if they can reasonably be regarded as realistic, relevant and valid for the particular circumstances of the *valuation* (**VPS 2**), and **must** be expressly agreed and confirmed in writing to the client before the report is issued (see **VPS 1**).

3.4.5 The transition plans of a particular owner or occupier may not be reflective of the market, and any consideration of transition should be appropriate for the *basis(es) of value* adopted.

3.5 Circularity

3.5.1 Circularity is a process that considers the potential for recovery, reuse and recycling of items following circular economy principles. A circular economy is one that is restorative and regenerative by design, and that aims to keep products, components and materials at their highest utility and value at all times, distinguishing between technical and biological cycles (these definitions are taken from RICS' Whole life carbon assessment for the built environment).

3.5.2 In many cases circularity may not explicitly form part of *valuation* considerations. However, some specialist *valuations*, particularly those undertaken in respect of development, may include the explicit consideration of circularity, which **must** only be considered in accordance with **VPS 1**, including **paragraph 3.2(s)**, and only by suitably experienced and competent professionals. This is a highly specialist area and often requires data and expertise (such as building survey and cost consultancy) that may go beyond the expertise of the valuer.

3.5.3 Circularity in the context of *valuation* can (where relevant, appropriate and part of the *terms of engagement*) include the consideration of the residual value of a building's component materials and products by (and/or with the support of) a specialist or specialists of the required level of experience and competence. It may necessitate the consideration of a number of matters such as, but not limited to, ongoing maintenance, deconstruction, remediation, recalibration and recertification after initial usage. Those valuers instructed to undertake *valuations* that consider circularity should appropriately investigate, record and consider data related to construction materials.

3.6 Social and governance considerations

3.6.1 The environmental aspect of *ESG* is generally the factor most explicitly considered in the *valuation* of real property interests as it is often the most visible, measurable and transparent in terms of physical and market impact. Environmental regulation also tends to be the most development in terms of the *ESG* factors.

3.6.2 For the first time, IVS 104 includes a data and inputs appendix that explicitly sets out examples of social and governance factors, as well as environmental. This is a helpful starting point, but it should be noted that this IVS section covers all asset types (including businesses and financial instruments) and *bases of value* (including calculations of worth), and therefore some factors may not be relevant to, for example, a market *valuation* of real property.

3.6.3 Paragraph 3.7.4 below refers to several non-environmental *ESG* factors such as location, mobility and connectivity. These typically reflect the overall quality and useability of an asset, which are also factors capable of being captured within a *valuation* of real property. This is distinct from the general value of wider benefits to the community or society (sometimes referred to as social value), which would not necessarily be observable within a market *valuation* of a particular asset or liability. Social value considerations are often a specialist area within the planning, development and repurposing of real property interests and may require additional expertise.

3.6.4 Work undertaken by RICS members and *RICS-regulated firms* is done so within a mandatory governance framework that aligns with *ESG* considerations. Governance and ethical considerations form the core part of these standards (**PS 1** and **PS 2**) and the RICS Rules of Conduct. Application of RICS standards supports better governance by enhancing transparency, accountability and appropriate objectivity. RICS produces other specific mandatory professional standards that support the monitoring and application of good governance, such as RICS' Countering bribery and corruption, money laundering and terrorist financing and RICS' Conflicts of interest. Explicit reference to the application of these documents within *valuation terms of engagement* and reports can support the transparent consideration of the governance within *ESG*.

3.6.5 RICS aligns with and sits within a global framework of standards that enhance and support better governance (e.g. IVS, IFRS). Similar to environmental and social considerations, the specific role of the valuer in terms of wider governance reporting is a consideration within the *terms of engagement* (**VPS 1**).

3.7 Sustainability and ESG – assessing the implications for value

3.7.1 *Sustainability* and *ESG* are defined terms in these standards (see the Glossary).

3.7.2 The range of *sustainability* issues and concerns includes, but is not limited to, key physical risks, such as flooding, heat, wildfires and severe storms; and transitional risks such as energy efficiency, carbon emissions and climate impact. There are also relevant social and governance risks highlighted in 3.6 above. The impact of all these *ESG* risks can be influenced by current and historic land use, as well as matters of design, configuration, accessibility, legislation, management and fiscal considerations. *Sustainability* matters can impact occupier preferences and purchaser behaviour, and may also be a consideration for investors, secured lenders, insurers and public bodies.

3.7.3 The pace at which *sustainability* and *ESG* is impacting *valuation* judgements directly or indirectly has jurisdictional variations. In order to respond appropriately as markets change, valuers should continuously seek to enhance their knowledge. The role of valuers is to assess value in the light of obtainable evidence. While valuers should reflect markets, not lead them, they should be aware of *sustainability* and *ESG* features and wider trends related to them, and the implications these could have on property values in the short, medium and longer term.

3.7.4 The following factors may be of relevance in *inspection* and investigation, and *valuation* reporting and *documentation*, in relation to real property interests, and should be considered where relevant and appropriate for the individual *valuation* instruction. This list is not intended to be exhaustive and may differ depending on the jurisdiction and/or market in question. Some items may be more or less relevant to, for example, residential property and commercial property, property that is open to the public and property that is private. The *basis of value* may be important when considering the below, as some items may reflect individual rather than market matters. The following should not be read as a checklist, as the relevance of each item is subject to the *valuation* being undertaken. The items on the list have been broadly categorised, but note some items intersect with multiple *ESG* pillars.

Environmental

a Details of regulatory or legally imposed energy rating schemes and related proposed and/or required improvements, including income and capital costs relevant to enhancement.

b Energy consumption (with reference to heating, cooling and lighting). This may include energy use intensity measures benchmarked against the relevant *real estate* sector/class.

c Type(s) of energy used (for example electricity, oil, natural gas).

d Details of any onsite energy generation (including renewable energy).

e Quantity and specification of renewable energy systems (e.g. solar panels, heat pumps, biomass, wind turbines).

f Labels and certificates (for example BREEAM, LEED, WELL).

g Greenhouse gas emissions.

h Emissions pathway analysis (for example, in Europe, CRREM pathway analysis).

i Physical climate risk factors (such as flood, heat, drought, sea level).

j Water usage (for example, is the property adapted to reduce water consumption? Potential measures include whether there is a water management system in place and the levels of water consumption).

k Biodiversity (relevant data may include, for example, the share of non-vegetated surface area compared to total surface area, activities negatively affecting biodiversity-sensitive areas, use of pesticides, the existence of a biodiversity action plan and the approximate area of planting or any roof coverings).

l Materials used in construction and/or renovation.

Social

m Location characteristics (connectivity and infrastructure).

n Mobility (for example, number of electric vehicle charging points, bicycle parking spaces for residents/occupiers).

o Building access for people with disabilities and associated requirements.

p Indoor air quality (relevant measures include the ventilation rate, details of filtration, CO_2 level and temperature).

q Community impact (for example zoning and occupier mix, provision of recreational space, green space and community facilities, interactivity with local businesses, light, air or noise pollution, traffic congestion, etc.). Note, with reference to 3.6 above, these are community impacts on the value of the real property interest being valued, not general value to the community.

r Adaptability (the ease with which the building is adaptable for different needs).

Governance

s Safety (whether the property meets safety regulations and market expectations of safety).

t Risks around ownership, occupation and the source of any relevant transaction funds in relation to criminal activity, including but not limited to money laundering, terrorist finance, modern slavery, and breach of national and international sanctions.

u The impact of ownership and/or occupation where there is a negative public and/or market perception of their *ESG* credentials and application.

v Diversity, equity and inclusion (DEI) (for example, does the design of the building encourage inclusive use, e.g. for neurodivergent individuals, different generations, etc.).

w Consideration of leases and other relevant contracts with specific *sustainability/ESG* provisions.

x Planning (zoning), registration, licensing, heritage and related legal matters.

3.7.5 The above list is specific to real property interests. Attention may also need to be given to IVS 104 [ESG] Data and Inputs: Appendix paragraph A10, which is relevant to all asset and liability types. This refers to additional factors (including additional social and governance considerations).

3.7.6 *ESG* and *sustainability inspection* and investigation may require the additional expertise of specialists.

3.7.7 When considering the effects of *ESG* factors influencing the value of real property interests, additional stakeholders might need to be taken into consideration, such as property users, occupiers and property management. The valuer may need to consider a range of market information that might be influenced by *ESG* factors, such as but not limited to void periods, capital incentives, rent-free periods, lease length, capital and operational expenditure, operational income and the market's perception of property management and service quality.

3.7.8 Where assessing *market value*, the valuer will need to be careful to distinguish *ESG* attributes and circumstances specific to individuals and those reflective of the market. The (positive or negative) impact of market conditions on demand for *ESG*-relevant characteristics should also be considered.

3.7.9 Only where existing market evidence would support this, or where in the valuer's judgement market participants would expressly reflect such matters in their bids, should *sustainability* and *ESG* characteristics directly influence the value(s) reported. Unless otherwise agreed, the valuer's role is limited to reporting on *ESG* matters that impact value for the purpose and on the basis the *valuation* is being undertaken. The valuer does not have a general duty to undertake *ESG* risk assessment or assess the property's *ESG* credentials beyond this.

3.7.10 Valuers are often asked to provide additional comment and strategic advice or property risk advice about *ESG* and *sustainability*. Such advice should be reported separately or clearly demarcated within the report.

3.7.11 To comply with the reporting requirements included in VPS 6, valuers should, where appropriate:

a provide a description of the *sustainability* and *ESG*-related property characteristics and attributes that have been collected

b assess the extent to which the subject property currently meets the *sustainability* and *ESG* criteria typically expected within the context of its market standing (there may be no expectation)

c provide an opinion of the relationship between *sustainability/ESG* factors and *valuation* within the subject market (if any), including a comment on the current benefits/risks that are associated with these characteristics, or the lack of benefits/risks

d arrive at an informed view on the likelihood of these impacting on value (if at all), e.g. how a well-informed purchaser would take account of them in making a decision as to offer price

e provide an opinion on the potential impact of identified *sustainability/ESG* benefits and/or risks (if any) to relative property values over time.

3.7.12 The current edition of RICS' Sustainability and ESG in commercial property valuation and strategic advice provides guidance on the identification, assessment and impact of *sustainability* and *ESG* issues for commercial property *valuations*.

VPGA 9 Valuing portfolios and groups of assets

1 Scope

1.1 This guidance provides additional commentary on the identification of portfolios and groups of assets (also sometimes referred to as collections and lots) for reporting in accordance with **VPS 6**.

1.2 A number of key principles should be applied, such as, but not limited to:

- the need to agree whether to value individually, as a whole or in specific groups
- subject to the *purpose of valuation*, identifying whether a discount or premium exists if the portfolio is sold as a whole or in a specific lot/group
- valuing on an *assumption* that groups assets in an artificial manner should normally be declined.

1.3 The IVS 102 Appendix refers to *synergistic value* as 'the result of a combination of two or more assets or interests where the combined value is more than the sum of the separate values'. Of particular relevance for the *valuation* of portfolios and groups of properties is:

> 'If the synergies are only available to one specific buyer then synergistic value will differ from market value, as the synergistic value will reflect particular attributes of an asset that are only of value to a specific purchaser. The added value above the aggregate of the respective interests is often referred to as "marriage value" in some jurisdictions.'

2 Purpose of the valuation

2.1 The *purpose of the valuation* can impact the way portfolios and groups of properties are considered, for example, there may be a requirement for the value of the assets to be reported individually. The extent of what comprises an individual property or other asset **must** be appropriately reflected in the *terms of engagement* (**VPS 1**) and subsequent reporting and *documentation* (**VPS 6**).

2.2 Requests to value properties on an *assumption* that lots them in an artificial manner should normally be declined. However, in certain circumstances, unusual lotting may be dealt with using a *special assumption* (see **VPS 2 section 10**).

2.3 Once the valuer has identified the lots in a portfolio that are to be valued separately, consideration needs to be given to any particular *assumptions* or *special assumptions* that may be necessary. These **must** be documented in the *terms of engagement* (see **VPS 1**) and in the report (see VPS 6). Examples of situations where different *assumptions* can have a material effect on the *valuation* of a portfolio are discussed in the following paragraphs.

2.4 If a whole portfolio, or a substantial number of properties within it, were to be placed on the market at the same time, it could effectively flood the market, which could lead to a reduction in values. Conversely, the opportunity to purchase a particular group of properties might produce a premium. In other words, the value of the whole could exceed the sum of the individual parts, and vice versa.

2.5 If valuing for a purpose that assumes that the portfolio will continue to remain in existing ownership or occupation, for example, for inclusion in *financial statements*, it would be inappropriate to make any reduction or allowance in the *valuation* to reflect the possible effect of flooding the market. A statement to this effect should be made in the report.

2.6 If the same portfolio were to be valued as security for secured lending, the possible adverse effect on individual properties if the whole portfolio were placed on the market at the same time should not be ignored. In such a case, it would normally be appropriate to state that the *assumption* has been made that the properties would be marketed in an orderly way and would not all be placed on the market at the same time. However, if circumstances existed that such an *assumption* would not be made by the market, for example, if it were known that the current owner was in financial difficulty, this would become a *special assumption* and its effect on the *valuation* should be clearly stated (see VPS 2 section 10).

2.7 Likewise, where the valuer ascribes a single value to a group of separate properties, any *assumptions* necessary to support that approach should be stated. If the valuer considers that the treatment of the portfolio on this basis is not one that the market would necessarily make, such an *assumption* would become a *special assumption* (see VPS 2 section 10).

2.8 In any case where the total value of the properties within a portfolio would differ significantly depending on whether they were disposed of individually, in groups or as a single lot, this should be stated clearly in the report. The lotting and grouping *assumptions* made should also be included in any published reference.

2.9 Where a portfolio or group of properties or assets has been valued on the *assumption* that it would be sold as a single entity, the reported *value* will relate to the whole of the group. Any breakdown of the *value* of the individual properties or assets should be clearly expressed as such, with a statement that this apportionment does not necessarily equate to the *value* of the interest in any individual property or asset.

2.10 Conversely, if the total of the *values* for each individual property or asset in a portfolio as an aggregated figure is provided, care should be taken not to present this as the *value* of the entire portfolio.

2.11 Where a portfolio premium or discount is applied, valuers should expressly state the primary reason(s) for the difference and provide a rationale for such adjustments.

3 Examples

3.1 Examples of situations where portfolio and grouping considerations may need to be made include (this list is not exhaustive):

a physically adjoining properties that have been acquired separately by the current owner (for example, where a developer has assembled a site with a view to future redevelopment, or where an investor is building a strategic stake in the locality)

b physically separate properties that are occupied by the same entity and where there is a functional dependence between the properties (for example, a car park that is separate from, but exclusively used by, the occupier of a building)

c where ownership of a number of separate properties or assets would be of particular advantage to a single owner or occupier because of economies that may result from either increased market share or savings in administration or distribution, as with a block of flats or hotels, and

d where each individual property is an essential component of an operation covering a large geographical area (for example, as part of a national or regional utility network, such as telecommunication masts).

VPGA 10 Material valuation uncertainty (MVU)

1 Scope

1.1 This guidance provides additional commentary on matters that may give rise to material valuation uncertainty (MVU) with specific requirements set out in VPS 6 paragraph 2.2(o), commonly referred to as an MVU declaration or clause.

1.2 All *valuations* are estimates and therefore always subject to a degree of uncertainty. However, this ordinary uncertainty should not be confused with MVU. VPS 6 paragraph 2.2(o) explains 'material' as where the degree of uncertainty in a *valuation* falls outside any parameters that might normally be expected and accepted. Some examples are provided in paragraph 2.1 below.

1.3 In some jurisdictions, the reporting of MVU can lead to market and regulatory impacts, and due care must therefore always be taken. Financial reporting, collective investment scheme and banking standards set by an authority such as a regulator or government can, and often do, have specific disclosure requirements in relation to MVU, although that particular term may not be expressly used. Compliance with those requirements is **mandatory** in cases to which they apply.

1.4 Valuers should also note that similar terminology around materiality may be used in the context of, for example, accountancy, and therefore the valuer should be clear that what they are reporting is MVU as set out in these standards.

2 Examples

2.1 It is not possible to provide an exhaustive list of circumstances in which MVU may arise; however, the examples below represent three common circumstances.

a Particular characteristics that make it difficult for the valuer to form an opinion of the likely value, regardless of the approach or method used. For example, the asset or liability may be very unusual, or even unique. Similarly, the quantification of how purchasers would reflect a potential significant change, such as a potential planning permission, may be highly dependent on the *special assumptions* made. For some assets or liabilities, the market may be so limited that there are few, if any, relevant transactions that can be analysed to provide reliable inputs into the *valuation*.

b Information available to the valuer is highly limited or restricted, either by the client or the circumstances of the *valuation*, and the matter cannot be sufficiently addressed by adopting one or more reasonable *assumptions*. In such a situation, less certainty can be attached to the *valuation* than would otherwise be the case.

c Significant market disruption arising due to unforeseen financial, macroeconomic, legal, political or even natural events. If the *valuation date* coincides with, or is in the immediate aftermath of, such an event, there may be a reduced level of certainty that can be attached to a *valuation* due to:

i inconsistent, or an absence of, data

ii the valuer being faced with a highly abnormal or unexpected set of circumstances on which to base a judgement.

In such situations, demands placed on valuers can be unusually testing. Although valuers should still be able to make a judgement, it is important that the context of that judgement is clearly expressed.

3 Reporting

3.1 The overriding requirement is that a *valuation* report **must not** be misleading or create a false impression (VPS 6 section 1). The valuer should expressly draw attention to, and comment on, any issues resulting in MVU as at the specified *valuation date*. Such comment should not be about the general risk of future market movements or the inherent risk involved in forecasting future cash flows – both of which can and should be considered and reflected as part of the *valuation* process (for example, the *valuation* of an *investment property* that is subject to a very uncertain future cash flow could nevertheless be underpinned by a depth of consistent comparable transaction information) – but should be related to the risk surrounding the *valuation* of that asset.

3.2 Where MVU exists, it will normally be expressed in qualitative and narrative terms, indicating the valuer's confidence in the *valuation* opinion offered by use of a suitable form of words. Indeed, this may be the only realistic way in which to do so, given that the very conditions that create MVU will frequently mean there is an absence of empirical data to inform or support a quantitative estimate.

3.3 In most cases it is either inappropriate or impractical to reflect MVU in the *valuation* figure quantitatively, and indeed any attempt to do so might well seem contradictory. If a mathematical measure of uncertainty is included in any report, it is essential that the method or model used is adequately explained, with any limitations appropriately highlighted. In some limited circumstances, a sensitivity analysis may be judged appropriate to illustrate the effect that clearly stated changes to specified variables could have on the reported *valuation*, which should be accompanied by suitable explanatory comment. It will be appreciated that the inherent risk with quantification of any sort is that it might convey an impression of precision that could be misleading.

3.4 In other cases, where the valuer can reasonably foresee that different values may arise under different but well-defined circumstances, an alternative approach is for the valuer to enter into a dialogue with the client to consider alternative *valuations* using *special assumptions* that reflect those different circumstances. However, *special assumptions* may only be used if they can be regarded as realistic, relevant and valid in connection with the circumstances of the *valuation*. Where different values arise under different circumstances, they can be reported separately on the stated *special assumptions*.

3.5 A *valuation* report should not just have a standard general caveat to deal with MVU, but should also include further specific commentary about the circumstances in question. The degree to which an opinion is uncertain will normally be unique to the specific *valuation,* although it is accepted that common references to unforeseen events may be made. The use of standard clauses without any other relevant considerations and commentary can devalue or bring into question the authority of the advice given.

3.5 During major global and national events, RICS has provided additional industry support outside Red Book Global Standards on MVU reporting. This does not replace the requirements of these standards, judgement of valuers or conclusions of a *valuation* report.

3.6 Stating a range of values is not an acceptable way of disclosing MVU. In most cases the valuer has to provide a single figure in order to comply with the client's requirements and *terms of engagement*. Similarly, the use of qualifying words such as 'in the region of' would not normally be appropriate or adequate to convey MVU without further explicit comment, and such wording should not be used for this purpose. Where different values may arise under different circumstances, it is preferable to provide them on stated *special assumptions* (see paragraph 3.4 above).

4 Removal of MVU declarations

4.1 MVU should only be reported in circumstances where the condition(s) set out in the examples at paragraph 2.1 or something equivalent continue(s) to be in existence. It is not appropriate to wait until a 'normal' market resumes before 'removing' MVU declarations from reports. However, it is accepted that while market disruption can occur suddenly, market correction and adjustment will generally occur more gradually. It is particularly important that generalisation is avoided – it is theoretically possible, but in practice unlikely, that a single moment in time will be recognisable as the point at which all, or even most, MVU declarations can be removed. It is more likely that an approach to removing declarations reflecting, for example, different sectors, markets and jurisdictions will be justifiable, probably supported by an emerging consensus of opinion and market sentiment, even if data remains limited.

4.2 When making judgements about whether to continue to report MVU declarations in respect of a factor referenced in the examples above, some or all of the following criteria may be informative (the list is not exhaustive).

- Price discovery indicates a sufficient number of completed market transactions have been instigated since the circumstances that led to MVU. Note that relevant evidence may also be gleaned from other forms of market activity in addition to completed transactions, such as aborted transactions.

- There is contemporary evidence of a sufficient number of willing sellers, buyers and where relevant occupiers of a reasonable covenant for a normal functioning market.
- There is evidence from economic indicators relevant to the particular market to support *valuation*. This might include, for assets principally rented, rent and service charge collection levels.
- Government, institutional, private, fund or lender finance is available for the relevant sector, sub-sector, asset type or typical occupier to facilitate liquidity, transactions and the immediate financial security of occupiers.
- There is no sector- or sub-sector-specific statute, government advice or other relevant regulation that materially prevents the operational use of the asset(s) being valued.
- There is no government, regulatory or other imposition on the appropriate *inspection* of the asset(s) (where relevant).
- The asset(s) being valued have greater certainty around security of occupational income due to, for example, being long-dated annuity income with a secure covenant, such as government or very strong investment grade annuities.

VPGA 11 Relationship with auditors

1 Scope

1.1 In many jurisdictions, auditors have a statutory obligation to express an opinion on whether an entity's financial reports:

- have been properly prepared in accordance with the relevant legislation (particularly in accordance with disclosure requirements)
- have been prepared in accordance with applicable accounting standards and
- give a true and fair view.

1.2 In order to express this opinion, auditors may need to obtain reasonable assurance from valuers that *valuations* prepared for *financial statements* under IFRS or local accounting standards (see VPGA 1) are correct at the *date of valuation* and further information may be requested.

1.3 The International Auditing and Assurance Standards Board (IAASB) produces International Standards on Auditing (ISA) and a Handbook of International Quality Management, Auditing, Review, Other Assurance, and Related Services Pronouncements. The latest editions can be accessed via the IAASB's website. It is important that valuers acting as experts as described here have a working knowledge and understanding of their content so far as it applies to them. As they are revised and updated from time to time, they are not reproduced here.

1.4 An independent auditor may look to an expert valuer for information or assistance in determining whether the values of assets or liabilities included in *financial statements* are reasonable and well supported. Where this is so, it is important for the valuer to be clear about the exact nature of their role and the responsibilities involved.

1.5 The valuer may be engaged by either:

a the reporting entity to supply a *valuation* figure for management's inclusion in the relevant *financial statement* (management's expert) or

b the auditor to assist with independent review of the relevant entity's report (auditor's expert).

1.6 In respect of the former, a valuer provides a *valuation* figure as an input to the *financial statement* preparation process. While their expertise is crucial, the valuer does not assume responsibility for the final *fair values* reported in the *financial statements*. Management is responsible for considering the valuer's input alongside other relevant information and exercising judgement to determine the appropriate *fair value*. Ultimately, management bears full responsibility for the accuracy and completeness of the *financial statements*.

2 The role of the independent auditor

2.1 The responsibility of the auditor is to design and perform audit procedures to obtain sufficient appropriate evidence to be able to draw reasonable conclusions on which to base their audit opinion and report. Procedures to obtain audit evidence can include *inspection*, observation, confirmation, recalculation, re-performance and analytical procedures, often in some combination, in addition to inquiry.

2.2 The auditor must obtain 'reasonable assurance' that the *financial statements* as a whole are free from material misstatement and therefore present a 'true and fair' view of the reporting entity's position. Reasonable assurance is a high but not absolute level of assurance, due to the inherent limitations of an audit – much of the evidence on which auditors draw their conclusions and base their opinions is persuasive rather than conclusive. In evaluating evidence, auditors are required to apply professional scepticism in reaching a judgement as to whether that evidence is relevant, reliable, sufficient and appropriate.

2.3 Consistent with the 'reasonable assurance' objective, auditors also apply the concept of materiality in performing their work. Under most financial reporting frameworks, misstatements (including omissions) are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions taken based on the *financial statements*.

2.4 Auditors remain solely responsible for the audit opinion at all times, regardless of the degree of use of an expert's work as audit evidence.

3 The valuer as management's expert

3.1 Under ISA, the management's expert may be either an individual or an organisation, and may be either employed (in the case of an individual) or engaged by the reporting entity.

3.2 If information to be used as audit evidence has been prepared using the work of the management's expert, the auditor will need to consider and evaluate the significance of the expert's work, having regard to:

- the competence, capabilities and objectivity of the expert
- an understanding of the work of the expert and
- the appropriateness of the expert's work as evidence for the 'relevant assertion' (in this particular context, the *valuation* opinion).

3.3 When accepting an instruction to provide a *valuation(s)* for financial reporting, valuers should establish whether they may be required to discuss the *valuation(s)* with the client's auditors and, if so, include this in their *terms of engagement*.

3.4 It is self-evident that, seen from the auditor's viewpoint, there could potentially be a greater threat to a valuer's objectivity through being an employee of the entity rather than being independently engaged by it. This is something that both entity and expert will need to bear in mind.

3.5 Other considerations the auditor will need to take into account include:

- the relevance and reasonableness of the expert's findings or conclusions, their consistency with other evidence, and whether they have been appropriately reflected in the *financial statements*
- the relevance and reasonableness of any significant *assumptions* or methods
- the relevance, completeness and accuracy of significant source data used and
- whether the valuer has exercised appropriate professional scepticism in assessing information provided to them and on which they have relied; see PS 2 paragraph 1.5.

3.6 The nature, timing and extent of audit procedures to assess these various criteria will depend on several factors. In essence they relate to:

- the nature of the valuer's employment/engagement relationship with the entity
- the valuer's scope of work and how much control over that work is exercised by the entity
- the valuer's professional standards and how they are regulated
- the risk of error affecting value and
- what alternative evidence is available (to the auditor).

4 The valuer as auditor's expert

4.1 An auditor's expert can again be either internal or external. The expert could be a partner or a staff member of the auditor's *firm* or a network *firm*, including a temporary staff member. Where the audit *firm* does not have in-house capability, or chooses to supplement its resource, then an external appointment might be made.

4.2 In all cases, the auditor will need to check the valuer's competence, capabilities and objectivity for the relevant purpose, which will include checking for any potential or actual conflict of interest.

4.3 It is essential that the *terms of engagement* are clear, particularly regarding:

- the roles and responsibilities of both auditor and expert
- the nature, scope and objectives of the work itself and
- the communication arrangements between the two.

4.4 In general, similar criteria apply as in paragraph 3.6, in relation to the auditor's reliance on the work of the expert.

4.5 In most cases, an auditor's expert will not be requested to provide an independent opinion of value, assuming they can satisfy the criteria necessary to do so, but instead will be asked to focus on matters such as the *valuation* approach, the evidence relied on and the *assumptions* made. Attention is drawn to the requirements of **PS 2 section 6** regarding *assumptions*.

5 The auditor's requests and the valuer's response

5.1 It is clearly in a reporting entity's interest overall to facilitate the audit process and deal properly with requests for information or clarification. Where acting as the management's expert, a valuer is expected to support the entity in this aim (while maintaining their objectivity), but there are some points that such an expert will need to bear in mind. For obvious reasons, where acting as the auditor's expert, such provisos do not arise as there is a direct (contractual) relationship between valuer and auditor.

5.2 Legal advice obtained by RICS (applicable in the UK only) confirms there is no legal relationship between the auditor and a valuer external to the company acting as the management's expert. If the *terms of engagement* do not provide for discussion with an auditor, the valuer should first obtain the permission of the client before divulging confidential information, and adjust the *terms of engagement* to reflect any additional scope as necessary. This does not apply to a valuer internal to the company, who is an officer of the company, and so must cooperate.

5.3 However, if a valuer external to the company refuses to cooperate, this could constitute a limitation on the scope of the auditor's work. It may therefore lead the auditor to qualify any report on the accounts and make some comment that it was not possible to obtain all the information and explanations necessary to achieve the reasonable assurance sought.

5.4 Where cooperation with the client's auditor is within the scope of a valuer's instructions, the valuer should cooperate reasonably and responsibly with them, for example by providing details of the key inputs and *assumptions* adopted, and the rationale for the reported *valuation*.

5.5 In order to avoid any breach of a duty of confidentiality, the client's written instructions should be obtained before cooperating with any request from the auditors. It should be noted that an auditor cannot unilaterally force a valuer to disclose confidential information. Where necessary, the directors' permission to override any confidentiality obligations in the valuer's engagement contract with the company should be obtained. Valuers **must** also have regard to **PS 2 paragraphs 3.5–3.8** and section 4.5 of RICS' Comparable evidence in real estate valuation when confidential data has been used to support the *valuation*.

5.6 As the role of the auditor is to understand the valuer's approach, methodology and any evidence used in forming an opinion of value, the valuer needs to be able to provide enough information to support their opinion. Any evidence and methodology will often be stated in the *valuation* report. In the case of large portfolios however, detailed commentary of the evidence and approach for each property may not be feasible within the *valuation* report. In such cases, valuers should consider the inclusion of a summary schedule of *valuation*, which lists tenancy data and key *valuation* inputs, for example, *market rent*, voids and yield profile.

5.7 Commentary on the reason for any change in value since the last reporting period is helpful (this may simply be market movement or a new tenancy, for example).

5.8 Prior to issuing the report, the valuer should also be prepared to bring to the auditor's attention, and discuss as appropriate, matters relating to the *valuation* that may have an impact on the audit and the auditor's responsibilities. This is important because, in most jurisdictions, it is illegal to make a statement to an auditor that is knowingly or recklessly misleading, false or deceptive. Additionally, there will be occasions when the valuer will welcome the opportunity to verify information and *assumptions* relevant to *valuations*. In some cases, a discussion between the auditor and the valuer before the latter starts to fulfil the audited entity's instructions can be helpful to both parties, and will assist the smooth completion of the audit. A valuer acting as the management's expert should maintain good liaison with their client to ensure that there are no misunderstandings regarding compliance with the law and maintenance of confidentiality.

5.9 Some properties will be selected by auditors for detailed review, and the following information will typically be required.

a A short description of each property including commentary on quality, location and other important *valuation* characteristics that impact value. Sometimes this can be found in one-page proforma reports provided to the client already, which could be shared with the auditors to avoid additional work.

b Key evidence per property/sector that is used to inform the *valuation* inputs used, such as the estimated *market rent*, other income, discount rates, yields, etc.

Part 6: International Valuation Standards

The IVS are reproduced with kind permission from IVSC. They were approved by the IVSC Standards Board with an effective date of 31 January 2025.

INTERNATIONAL VALUATION STANDARDS

EFFECTIVE 31 JANUARY 2025

IVSC

INTERNATIONAL VALUATION
STANDARDS COUNCIL

The adoption or use of any International Valuation Standards Council standards by any entity is entirely voluntary and at the user’s risk. The International Valuation Standards Council does not control how or if any entity chooses to use the standards and does not and cannot ensure or require compliance with the standards. The International Valuation Standards Council does not audit, monitor, review, or control in any way the manner in which users apply the standards.

Copyright © 2024 International Valuation Standards Council. All rights

reserved.

No part of this publication may be translated, reprinted or reproduced or utilised in any form either in whole or in part or by any electronic, mechanical or other means, now known or hereafter invented, including photocopying and recording, or in any information storage and retrieval system, without permission in writing from the International Valuation Standards Council.

Please address publication and copyright matters to:
International Valuation Standards Council, 20 St Dunstan’s Hill, LONDON, EC3R 8HL, UK
United Kingdom Email: contact@ivsc.org www.ivsc.org

ISBN: 978-0-9931513-7-8

The International Valuation Standards Council, the authors and the publishers do not accept responsibility for loss caused to any person who acts or refrains from acting in reliance on the material in this publication, whether such loss is caused by negligence or otherwise.

Typeset by Page Bros, Norwich

INTERNATIONAL VALUATION STANDARDS

Effective 31 January 2025

IVSC

In Memory of
Rt Hon Alistair Darling

Chairman, Board of Trustees 2019–2023

This edition of the International Valuation Standards (IVS) honours the memory of Rt Hon Alistair Darling, former Chair of the International Valuation Standards Council (IVSC), who passed away in November 2023. A dedicated advocate for advancing global standards, Alistair's influence significantly shaped the field of valuation and the wider financial system.

Alistair's leadership at the IVSC, informed by his experience as UK Chancellor of the Exchequer during the Global Financial Crisis, was characterised by a commitment to transparency, collaboration, and professional excellence. His focus was always on improving standards in the public interest, enhancing the integrity and trust in global valuation practices.

We remember Alistair Darling for his exceptional leadership and dedication to public service. His contributions have left a legacy that continues to guide the work of the IVSC and the entire valuation profession, towards a more transparent, reliable, and strong financial world.

Contents

Foreword 5

Glossary 8

General Standards 12

IVS 100 *Valuation Framework* 13

IVS 101 *Scope of Work* 16

IVS 102 *Bases of Value* 19

IVS 103 *Valuation Approaches* 31

IVS 104 *Data and Inputs* 52

IVS 105 *Valuation Models* 56

IVS 106 *Documentation and Reporting* 59

Asset Standards 62

IVS 200 *Businesses and Business Interests* 63

IVS 210 *Intangible Assets* 76

IVS 220 *Non-Financial Liabilities* 92

IVS 230 *Inventory* 102

IVS 300 *Plant, Equipment and Infrastructure* 110

IVS 400 *Real Property Interests* 122

IVS 410 *Development Property* 131

IVS 500 *Financial Instruments* 145

IVS Foreword

The International Valuation Standards Council (IVSC) is an independent, not-for-profit organisation committed to advancing quality in the valuation profession. Our primary objective is to build confidence and public trust in valuation by producing transparent and consistent standards and securing their universal adoption and implementation for the valuation of assets across the world. International Valuation Standards (IVS) are a fundamental part of the financial system.

Valuations are widely used and relied upon in financial markets and other settings, whether for inclusion in financial statements, for regulatory compliance or to support secured lending and transactional activity.

The purpose of IVS is to promote and maintain a high level of public trust in valuation practice. As such, they establish appropriate global requirements for valuations that apply both to the parties involved in the process and to those who oversee this process.

IVS are international principle-based valuation standards. They outline a process that can be used in conjunction with other standards, laws, and regulations requiring a value.

IVS describe the valuation process, which may involve multiple parties (including specialists and service organisations). The valuer is ultimately responsible for the assertion of compliance with IVS.

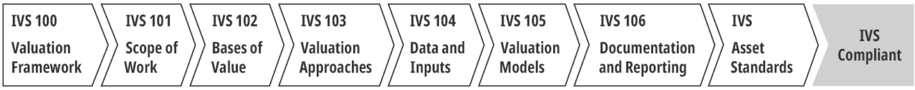
IVS are drafted on the basis that valuers who use the standards are competent and have the requisite knowledge, skills, experience, training, and education to perform valuations. For the purposes of IVS, a valuer is defined as an individual, group of individuals or individual within an entity, regardless of whether employed (internal) or engaged (contracted/external), possessing the necessary qualifications, ability and experience to execute a valuation in an objective, unbiased, ethical and competent manner. In some jurisdictions, licensing is required before an entity or an individual can act as a valuer (see IVSC *Code of Ethical Principles for Valuers*).

The use of IVS can either be mandated or voluntarily adopted by:

- a body having legal jurisdiction over the purpose for which the valuation is required, or
- a valuation professional organisation requiring their use by members for specific purposes, or
- agreement between the party requiring the valuation and a valuer.

Structure of International Valuation Standards (IVS)

International Valuation Standards comprise General Standards that are applicable across all valuations, and Asset Standards that relate to specific valuation disciplines. Appendices, which are part of International Valuation Standards, provide additional information for certain concepts articulated. In order to provide an IVS-compliant valuation, all IVS General Standards, Asset Standards and Appendices must be followed.


IVS 100 Valuation Framework
IVS 101 Scope of Work
IVS 102 Bases of Value
IVS 103 Valuation Approaches
IVS 104 Data and Inputs
IVS 105 Valuation Models
IVS 106 Documentation and Reporting
IVS Asset Standards
IVS Compliant

General Standards

General Standards apply to all valuations. The General Standards are structured as follows.

IVS 100 *Valuation Framework*

IVS 101 *Scope of Work*

IVS 102 *Bases of Value*

Appendix: IVS-Defined Bases of Value
Other Bases of Value
Premise of Value

IVS 103 *Valuation Approaches*

Appendix: Valuation Method

IVS 104 *Data and Inputs*

Appendix: Environmental, Social and Governance Considerations

IVS 105 *Valuation Models*

IVS 106 *Documentation and Reporting*

Asset Standards

In addition to the requirements of the General Standards, Asset Standards apply to specific types of assets and liabilities as follows:

IVS 200 *Businesses and Business Interests*

IVS 210 *Intangible Assets*

IVS 220 *Non-Financial Liabilities*

IVS 230 *Inventory*

IVS 300 *Plant, Equipment and Infrastructure*

IVS 400 *Real Property Interests*

IVS 410 *Development Property*

IVS 500 *Financial Instruments*

Glossary

This glossary forms an integral part of the standards and defines certain terms used in IVS. All glossary definitions are italicised.

10. Defined Terms

10.01 Asset or Assets

The right to an economic benefit.

10.02 Automated Valuation Model (AVM)

A type of model that provides an automated calculation for a specified *asset* at a specified date, using an algorithm or other calculation techniques without the *valuer* applying *professional judgement* over the model, including assessing, and selecting *inputs* or reviewing outputs.

10.03 Basis (bases) of Value

The fundamental premises on which the reported *values* are or will be based (examples are included in IVS 102 *Bases of Value*, section 10).

10.04 Client(s)

The person who engages the *valuer* for a given *valuation*. “Clients” may be internal (ie, *valuations* performed for an employer) or external (ie, when the *valuer* is engaged by a third-party).

10.05 Cost(s) (noun)

The consideration or expenditure required to acquire or create an *asset*.

10.06 Data

Quantitative and qualitative information available to the *valuer*.

10.07 Discount Rate(s)

A rate of return used to convert a monetary sum, payable or receivable in the future, into a present value.

10.08 Environmental, Social and Governance (ESG)

The criteria that together establish the framework for assessing the impact of the sustainability and ethical practices, financial performance or operations of a company, *asset* or *liability*. *ESG* comprises three pillars: *Environmental, Social and Governance*, all of which may collectively impact performance, the wider markets and society.

10.09 Equitable Value

This is the estimated price for the transfer of an *asset* or *liability* between identified knowledgeable and willing parties that reflects the respective interests of those parties.

10.10 Input

Data, assumptions, and adjustments determined to be relevant and assessed or selected by the *valuer* to be used in the *valuation*, based upon *professional judgement*.

10.11 Intangible Asset

An identifiable non-monetary *asset* with no physical substance.

10.12 Intended Use

The reason(s) for which a *value* is developed as described in the scope of work. This is also known as intended purpose.

10.13 Intended User

Any party identified by the *client* and *valuer* in the scope of work as users of the *valuation*.

10.14 Investment Value

The value of an *asset* to the owner or a prospective owner given individual investment or operational objectives. This may also be known as “worth”.

10.15 Jurisdiction

The legal and regulatory environment in which a *valuation* is performed.

10.16 Liability

The present obligation to transfer an economic benefit. A *liability* has the following two essential characteristics:

(a) it is a present obligation,

(b) the obligation requires an entity to transfer or otherwise provide economic benefits to others.

10.17 Liquidation Value

The gross amount that would be realised when an *asset* or group of *assets* are sold from a liquidation sale, with the seller being compelled to sell as of a specific date. *Liquidation value* can be determined under two different premises of value (see IVS 102 *Bases of Value*, Appendix A60):

(a) an orderly transaction with a typical marketing period, or

(b) a forced transaction with a shortened marketing period.

10.18 Market Value

The estimated amount for which an *asset* or *liability should* exchange on the *valuation date* between a willing buyer and a willing seller in an arm’s length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion.

10.19 Must

Actions or procedures that are mandatory.

10.20 Observable Data

Information that is readily available to market participants about actual events or transactions that are used in determining the *value* for the *asset* and/or *liability*.

10.21 Price (noun)

The monetary or other consideration asked, offered or paid for an *asset* or to transfer a *liability*. *Price* and *value* may be different.

10.22 Professional Judgement

The use of accumulated knowledge and experience, as well as critical reasoning, to make an informed decision.

10.23 Professional Scepticism

Professional scepticism is an attitude that includes a questioning mind and critical assessment of valuation evidence.

10.24 Service Organisation

An entity (or segment of an entity) that provides information, reports or opinions including but not limited to providing market data, credit ratings or other services to support the *valuation*.

10.25 Should

The *valuer* is expected to comply with requirements of this type unless the *valuer* can demonstrate that alternative actions are sufficient.

10.26 Significant

Any aspect of a *valuation* which, in the *professional judgement* of the *valuer*, greatly impacts the resultant *value*.

10.27 Specialist

An individual or group of individuals possessing technical skills, experience and knowledge required to perform or assist in the *valuation* or the review and challenge process. A *specialist* can be internally employed or externally engaged.

10.28 Synergistic Value

The result of a combination of two or more *assets* or interests where the combined *value* is more than the sum of the separate *values*. If the synergies are only available to one specific buyer, then *synergistic value* will differ from *market value*, as the *synergistic value* will reflect particular attributes of an *asset* that are only of *value* to a specific purchaser. The added *value* above the aggregate of the respective interests is often referred to as marriage value.

10.29 Tangible Asset

A physical measurable *asset* such as, but not limited to, property, plant, and equipment.

10.30 Valuation

The act or process of forming a conclusion on a *value* as of a *valuation date* that is prepared in compliance with IVS.

10.31 Valuation Approach

A generic term for the use of the cost, income or market approach.

10.32 Valuation Date

The point in time to which the *valuation* applies.

10.33 Valuation Method

Within a *valuation approach*, a specific technique to conclude a *value*.

10.34 Valuation Model

A quantitative implementation of a method in whole or in part that converts *inputs* into outputs used in the development of a *value*.

10.35 Valuation Process Review

An analysis by the *valuer* to assess compliance with IVS or a component of IVS applicable as at a *valuation date*. This does not include an opinion on the *value*.

10.36 Valuation Review

A *valuation review* is either a *valuation process review* or a *value review* or both.

10.37 Valuation Risk

The possibility that the *value* is not appropriate for its *intended use*.

10.38 Value (noun)

The *valuer's* quantitative conclusion on the results of a *valuation* process that is fully compliant with the requirements of IVS as of a *valuation date*.

10.39 Valuer

An individual, group of individuals or individual within an entity, regardless of whether employed (internal) or engaged (contracted/external), possessing the necessary qualifications, ability and experience to execute a *valuation* in an objective, unbiased, ethical and competent manner. In some jurisdictions, licensing is required before one can act as a *valuer*.

10.40 Value Review

An analysis by the *valuer* applying IVS to assess and provide an opinion on the *value* of another *valuer's* work. This does not include an opinion on the *valuation* process.

10.41 Weight

The amount of reliance placed on a particular indication of *value* in reaching a conclusion of value.

General Standards

IVS 100 Valuation Framework

Contents	Paragraphs
Valuer Principles	10
Valuation Process Quality Control	20
Use of a Specialist or Service Organisation	30
Compliance	40
Effective Date	50

General Standards apply to all *assets* and *liabilities* and are the starting point for any *valuation*. Asset Standards provide requirements in addition to the General Standards for specific types of *assets* and *liabilities*.

Compliance with IVS includes adherence to General Standards, applicable Asset Standards, and the Appendices.

In performing *valuations*, the *valuer must* comply with the Valuer Principles.

10. Valuer Principles

10.01 Ethics

The *valuer* must follow the ethical principles of integrity, objectivity, impartiality, confidentiality, competence, and professionalism to provide a non-biased *valuation* and to promote and preserve the public trust.

10.02 Competency

The *valuer must* have the technical skills, knowledge and experience required to appropriately complete a *valuation*.

10.03 Compliance

The *valuer must* disclose or report that IVS were used for the *valuation* and that they complied with those standards in performing the *valuation*.

10.04 Professional Scepticism

The *valuer must* apply an appropriate level of *professional scepticism* at every stage of the *valuation*.

20. Valuation Process Quality Control

20.01 There *must* be valuation process quality controls ("the controls") around the valuation process.

20.02 The controls help ensure that *valuations* are performed objectively, transparently, without bias and in compliance with IVS.

20.03 The extent of the controls *should* be determined having regard to the *intended use, intended user*, the *asset* and/or *liability* being valued and the complexity of the *valuation.*

20.04 The controls *should* assess the judgements made during the *valuation* including their reasonableness and freedom from bias in determining the *value*.

20.05 The controls *should* be documented. The documentation *should* contain sufficient detail to allow another *valuer*, applying *professional judgement*, to understand the effectiveness of the controls.

20.06 There *should* be periodic assessment of the controls to ensure that their integrity and completeness are appropriate as of the *valuation date*. The periodic assessment *should* be documented.

20.07 If the *valuer* is able to address *valuation risk* they may then perform monitoring procedures with respect to their own compliance and control policies and procedures.

20.08 The *valuer should* conclude that the level of *valuation risk*, subject to controls in place, is appropriate given the *intended use, intended user*, the characteristics of the *asset* or *liability* being valued and the complexity of the *valuation*.

30. Use of a Specialist or Service Organisation

30.01 If the *valuer* does not possess the necessary technical skills, experience, *data* or knowledge to perform all aspects of a *valuation*, it is acceptable for the *valuer* to seek assistance from a *specialist* or *service organisation*, providing this is agreed and disclosed.

30.02 Prior to using a *specialist* or *service organisation* the *valuer must* assess and document the knowledge, skill and ability of the *specialist or service organisation*. Relevant factors include but are not limited to:

(a) experience in the type of work performed,

(b) professional certification, licence, or professional accreditation of the *specialist* or *service organisation* in the relevant field,

(c) reputation and standing of the *specialist* or *service organisation* in the particular field.

30.03 When a *specialist* or *service organisation* is used, the *valuer must* obtain an understanding of the process and findings to establish a reasonable basis to rely on their work based on the *valuer's professional judgment*.

40. Compliance

40.01 In order to be IVS compliant, the *valuation must* meet the requirements of the General Standards, the Appendices, as well as Asset Standards, if applicable.

40.02 IVS consist of mandatory requirements that *must* be followed in order to state that a *valuation* was performed in compliance with IVS.

40.03 Certain aspects of IVS do not direct or mandate any specific action but provide fundamental principles and concepts that *should* be considered in undertaking a *valuation*.

40.04 If legal, statutory, regulatory and/or other authoritative requirements appropriate for the purpose and *jurisdiction* of the *valuation* conflict with IVS, such requirements *should* be prioritised, explained, documented, and reported in order to remain compliant with IVS.

40.05 If there are any legal, statutory, and regulatory or other authoritative requirements that *significantly* affect the nature of the procedures performed, *inputs* and assumptions used, and/or *value(s*), the *valuer must* also disclose the specific legislative, regulatory or other authoritative requirements and the *significant* ways in which they differ from the requirements of IVS (for example, identifying that the relevant *jurisdiction* requires the use of only a market approach in a circumstance where IVS would indicate that the income approach *should* be considered).

40.06 Any other deviations would render the *valuation* not compliant with IVS.

40.07 For *assets* and/or *liabilities* that may fall within multiple Assets Standards (IVS 200 *Businesses and Business Interests* to IVS 500 *Financial Instruments*), the *valuer should* follow the General Standards and explain, justify and document which of the Asset Standard(s) were used. For example, both IVS 200 *Businesses and Business Interests* and IVS 500 *Financial Instruments* apply to some *assets* and/or *liabilities*.

40.08 In certain instances, the *valuer* may be asked to conduct a *valuation review* for compliance with IVS. In such instances, the *valuer should* comply with IVS and the applicable review framework as defined in the scope of work.

50. Effective Date

50.01 This version of International Valuation Standards is published on 31 January 2024, with an effective date of 31 January 2025 for *valuations* performed on or after this date. The IVSC permits early adoption from the date of publication.

50.02 When undertaking *valuations* or *valuation reviews* with a retrospective or historical *valuation date*, the *valuer* should document the editions of IVS that:

(a) they have relied upon, and

(b) are applicable at the *valuation date*.

IVS 101 Scope of Work

IVS 100 Valuation Framework | IVS 101 Scope of Work | IVS 102 Bases of Value | IVS 103 Valuation Approaches | IVS 104 Data and Inputs | IVS 105 Valuation Models | IVS 106 Documentation and Reporting

Contents | **Paragraphs**

Introduction 10
Valuation Requirements 20
Valuation Process Review and Value Review Requirements 30

This section requires the *client* and *valuer* to agree the scope of work for a *valuation* or *valuation review* that is appropriate for the *intended use*. It provides the minimum *valuation* or *valuation review* requirements for that scope of work.

10. Introduction

10.01 A scope of work (sometimes referred to as terms or letter of engagement) describes the fundamental terms of a *valuation* or *valuation review*. These include but are not limited to the *asset(s)* and/or *liability(ies)* being valued, the *intended use* of the *valuation* and the responsibilities of parties involved in the *valuation*.

10.02 A scope of work for a *valuation review* describes the fundamental terms such as the components of the *valuation* or *value* being reviewed.

10.03 A scope of work is required for all *valuations* and *valuation reviews* whether the *values* are for internal or external use.

10.04 The *client* and the *valuer must* agree on the scope of work and that the *valuation* or *valuation review* scope is appropriate for the *intended use*.

10.05 If, in the *valuer's professional judgement*, the scope of work is overly restrictive, then this may not result in an IVS-compliant *valuation*.

20. Valuation Requirements

20.01 The scope of work *must* specify the following:

(a) *asset(s)* and/or *liability(ies)* being valued; the subject *asset(s)* and/or *liability(ies)* in the *valuation* must be clearly identified. The *client* is responsible for the accuracy and completeness of that information.

(b) *clients;* the person, persons, or entity who appoints the *valuer* for a given *valuation*. *clients* may be internal (ie, *valuations* performed for an employer) or external (ie, when the *valuer* is engaged by a third-party client).

(c) *intended use* (if any): the reason for which a *valuation* is developed,

(d) *intended user* (if any); any party, as identified, by the *client* in the scope of work as a user of the *valuation.*

(e) the *valuer*: The *valuer* may be an individual, group of individuals, or an individual within an entity, regardless of whether employed (internal) or engaged (contracted/external), possessing the necessary qualifications, ability and experience to execute a *valuation* in an objective, unbiased, ethical and competent manner. The *valuer must* disclose any potential conflict of interest or bias.

(f) *valuation* currency: The currency for the *valuation* and the final valuation report or conclusion *must* be established.

(g) *valuation date*: The *valuation date must* be stated. If the *valuation date* is different from the date on which the *valuation* is reported, then that date *should* also be stated.

(h) *basis/bases of value* used: As required by IVS 102 *Bases of Value*, the *valuation must* be appropriate for the *intended use*. The source of the definition of any *basis of value* used *must* be cited or the basis explained.

(i) the nature and extent of the *valuer's* work and any limitations thereon: Any limitations or restrictions on the inspection, enquiry and/or analysis in the *value must* be identified. If relevant information is not available because the conditions of the *valuation* restrict the investigation, these restrictions and any necessary assumptions or special assumptions (see IVS 102 *Bases of Value*, paras 50.01-50.04) made as a result of the restriction *must* be identified.

(j) the nature and sources of information upon which the *valuer* relies: The nature and source of *significant* information upon which the *valuer* relies and *significant* verification or controls to ensure the accuracy of that information.

(k) special assumptions: any agreed special assumptions that are known prior to the *valuation should* be recorded in the scope of work.

(l) *specialist*: the use and role of a *specialist*.

(m) *Environmental, Social and Governance* factors: Any requirements in relation to the consideration of *significant environmental, social and governance* factors.

(n) the type of report or other documentation being prepared: A clear description of how the *valuation* results will be reported or a sample of the deliverable that will be supplied to the *client*. This *should* include a description of the type and extent of supporting documentation that will be supplied.

(o) restrictions on use, distribution and publication of the report: where it is necessary or desirable to restrict the use of the *valuation* or those relying on it, the *intended users* and restrictions *must* be clearly communicated.

(p) IVS compliance: a statement that the *valuation* will be prepared in compliance with IVS *must* be disclosed in the scope of work and that the *valuer* will assess the appropriateness of all *significant inputs*. If, during the course of a *valuation*, it becomes clear to the *valuer* that the scope of work will not result in an IVS-compliant *valuation*, this *must* be communicated to the *client* in writing.

20.02 The scope of work *must* be established and agreed between the *client* and the *valuer* in writing prior to the completion of the *valuation* report. Any changes to the scope of work prior to the completion of the *valuation must* be communicated and agreed upon in writing.

20.03 If, during the course of a valuation engagement, it becomes clear that the scope of work will not result in an IVS-compliant *value*, the *valuation* will not comply with IVS.

30. Valuation Process Review and Value Review Requirements

30.01 A *valuation review* is not a *valuation*. The scope of work *must* state whether the *valuation review* is a *valuation process review* or a *value review* or both.

(a) a *valuation process review* addresses compliance with IVS,

(b) a *value review* addresses the reasonableness of a *value*.

30.02 The scope of work of an engagement that is either a *valuation process review* or a *value review*, or both, *must* include the following at a minimum:

(a) the type of review being conducted,

(b) the agreed scope as to whether the review is a *valuation process review*, a *value review* or both,

(c) the *asset(s)* and/or *liability(ies)* being reviewed,

(d) the identity of the valuation reviewer,

(e) the identity of the *client*,

(f) the *intended use*,

(g) the *intended users*, if applicable,

(h) *significant* or special assumptions and/or limiting conditions pertaining to the *valuation* to be reviewed,

(i) the use and role of a *specialist* or service provider, if used, as part of the *valuation review*,

(j) procedures to be undertaken, and the documentation to be reviewed.

IVS 102 Bases of Value

IVS 100 Valuation Framework | IVS 101 Scope of Work | **IVS 102 Bases of Value** | IVS 103 Valuation Approaches | IVS 104 Data and Inputs | IVS 105 Valuation Models | IVS 106 Documentation and Reporting

Contents	**Paragraphs**
Introduction	10
Bases of Value	20
Entity-Specific Factors	30
Synergies	40
Assumptions	50
Special Assumptions	60
Transaction Costs	70
Allocation of Value	80
Appendix	
IVS-Defined Bases of Value	
Market Value	A10
Market Rent	A20
Equitable Value	A30
Investment Value	A40
Synergistic Value	A50
Liquidation Value	A60
Other Bases of Value	
Fair Value (IFRS)	A70
Fair Value (Legal/Statutory)	A80
Premise of Value	
Highest and Best Use	A90
Current Use/Existing Use	A100
Orderly Liquidation	A110
Forced Sale	A120

This section requires the *valuer* to select the appropriate *basis* (or *bases*) of *value* and follow all applicable requirements associated with that *basis* (or *bases*) *of value*, whether those requirements are included as part of this standard (for IVS-defined *bases of value*) or not (for non-IVS-defined *bases of value*).

10. Introduction

10.01 *Bases of value* describes the fundamental premises or requirements on which the reported *values* will be based. It is critical that the *basis (or bases)* *of value* be appropriate to the terms and *intended use* of the *valuation*, since a *basis of value* may influence or dictate the *valuer's* selection of methods, *inputs* and assumptions, and the ultimate *value*.

10.02 There are different *bases of value* used in *valuations*. The *valuer* may be required to use *bases of value* that are defined by statute, regulation, private contract or another framework.

10.03 A premise of value or assumed use describes the circumstances of how an *asset* and/or *liability* is used. Different *bases of value* may require a particular premise of value or allow the consideration of multiple premises of value. The most common premises of value used in IVS are (see IVS 102 *Bases of Value*, Appendix A90-A120 for further description);

(a) highest and best use,

(b) current use/existing use,

(c) orderly liquidation, and

(d) forced sale.

10.04 The *valuation date* will influence what information and *data* the *valuer* considers in a *valuation*. The *valuer should* be aware that most *bases of value* prohibit the consideration of information or market sentiment that would not be known or knowable with reasonable due diligence on the measurement/*valuation date* by participants.

10.05 Most *bases of value* reflect assumptions that may include but not be limited to one or more of the following characteristics, such as;

(a) hypothetical buyer or seller,

(b) known or specific parties,

(c) members of an identified/described group or potential parties,

(d) whether the parties are subject to particular conditions or motivations at the assumed date (eg, duress), and/or

(e) an assumed knowledge level.

20. Bases of Value

20.01 IVS-defined *bases of value* are listed at para 20.02. Other non-IVS-defined *bases of value* are prescribed by individual jurisdictional law, local regulators, applicable standards, or those recognised and adopted by international agreement.

20.02 IVS-defined *bases of value* are (see IVS 102 *Bases of Value,* Appendix A10-A60);

(a) *Market value* A10,

(b) Market rent A20,

(c) *Equitable value* A30,

(d) *Investment value*/worth A40,

(e) *Synergistic value*, A50, and

(f) *Liquidation value* A60.

20.03 Other *bases of value* may be required for financial reporting, tax reporting, or in other legal or regulatory contexts. Depending on the promulgator of the *basis of value*, the same words may be defined differently or require different *valuation approaches*. Therefore, care *should* be taken to identify, articulate and apply the appropriate *basis of value* for a given *valuation*. (A non-exhaustive illustrative list of other *bases of value* is included at IVS 102 *Bases of Value*, Appendix A70-A80).

20.04 In accordance with IVS 101 *Scope of Work*, the *basis of value must* be appropriate for the *intended use* and the source of the definition of any *basis of value* used *must* be cited or the basis explained.

20.05 The valuer is responsible for understanding the regulation, case law and other interpretive guidance related to all *basis(es) of value* used.

20.06 The *bases of value* illustrated in IVS 102 *Bases of Value*, Appendix A70-A80, are defined by organisations other than the IVSC and the onus is on the *valuer* to ensure they are using the relevant definition.

30. Entity-Specific Factors

30.01 For most *bases of value*, the factors that are specific to a particular buyer or seller and not available to participants generally are excluded from the *inputs* used in a market-based valuation. Entity-specific factors that may not be available to participants include but are not limited to:

(a) additional *value* or reduction in *value* derived from the creation of a portfolio of similar *asset(s)*,

(b) unique synergies between the *asset*(s) and other *asset(s)* owned by the entity,

(c) legal rights or restrictions applicable only to the entity,

(d) tax benefits or tax burdens unique to the entity, and

(e) an ability to exploit an *asset* that is unique to that entity.

30.02 Whether such factors are specific to the entity or would be available to other participants in the market generally is determined on a case-by-case basis. For example, an *asset* may not normally be transacted as a stand-alone item but as part of a group of *assets*. In that case, any synergies with related *assets* would transfer to participants along with the transfer of the group and therefore are not entity specific.

30.03 If the objective of the *basis of value* used in a *valuation* is to determine the *value* to a specific owner (such as *investment value*/worth discussed in IVS 102 *Bases of Value*, Appendix A40) in entity-specific factors *should* be reflected in the *valuation* of the *asset(s)* and/or *liability(ies)*. Situations in which the *value* to a specific owner may be required include but are not limited to the following examples:

(a) supporting investment decisions, and

(b) reviewing the performance of an *asset*.

40. Synergies

40.01 Synergies refer to the benefits associated with combining *assets* and/or *liabilities*. When synergies are present, the value of a group of *assets* and/or *liabilities* is greater than the sum-of-the-values of the individual *assets* and *liabilities* on a stand-alone basis. Synergies typically relate to a reduction in *costs*, and/or increase in revenue, and/or a reduction in risk.

40.02 Whether synergies *should* be considered in a *valuation* depends on the *basis(es) of value*. For most *bases of value*, only those synergies available to other participants generally will be considered (see discussion of Entity-Specific Factors in paras 30.01-30.03) of this standard.

40.03 An assessment of whether synergies are available to other participants may be based on the amount of the synergies rather than a specific way to achieve that synergy.

50. Assumptions

50.01 In addition to stating the *basis of value*, it is often necessary to make one or multiple assumptions to clarify either:

(a) the state of the *asset* in the hypothetical exchange, or

(b) the circumstances under which the *asset* and/or *liability* is assumed to be exchanged.

50.02 Such assumptions can have a *significant* impact on *value*.

50.03 Assumptions related to facts that are consistent with, or could be consistent with, those existing at the *valuation date* may be the result of a limitation on the extent of the investigations or enquiries undertaken by the *valuer*. Examples of such assumptions include but are not limited to:

(a) an assumption that an *asset* and/or *liability* employed in a business is transferred as a complete operational entity,

(b) an assumption that an *asset* and/or *liability* employed in a business are transferred without the business, either individually or as a group,

(c) an assumption that an individually valued *asset* and/or *liability* is transferred together with other complementary *asset(s)* and/or *liability(ies)*, and

(d) an assumption that a holding of shares is transferred either as a block or individually.

50.04 All *significant* assumptions *must* be reasonable under the circumstances, be supported by evidence and be relevant having regard to the *intended use* for which the *valuation* is required in order to provide an IVS-compliant *valuation*.

60. Special Assumptions

60.01 Where assumed facts differ from those existing at the *valuation date*, it is referred to as a “special assumption”. Special assumptions are often used to illustrate the effect of possible changes on the *value* of an *asset.* They are designated as “special” so as to highlight to a valuation user that the *valuation* is contingent upon a change in the current circumstances or that it reflects a view that would not be taken by participants generally on the *valuation date*. Examples of such assumptions include but are not limited to:

(a) an assumption that a property is freehold with vacant possession,

(b) an assumption that a proposed building had actually been completed on the *valuation date*,

(c) an assumption that a specific contract was in existence on the *valuation date* which had not actually been completed, and

(d) an assumption that a financial instrument is valued using a yield curve that is different from that which would be used by a participant.

60.02 All *significant* special assumptions *must* be reasonable under the circumstances, be supported by evidence and be relevant having regard to the *intended use* for which the *valuation* is required in order to provide an IVS-compliant *valuation*.

70. Transaction Costs

70.01 Most *bases of value* represent the estimated *price* of an *asset* without adjustment for the seller's *costs* of sale or the buyer's *costs* of purchase and any taxes payable by either party as a direct result of the transaction.

80. Allocation of Value

80.01 Allocation of *value* is the separate apportionment of *value* of an *asset* on an individual or component basis.

80.02 When apportioning *value*, the allocation method *must* be consistent with the overall valuation premise/basis and the *valuer must*:

(a) follow any applicable legal or regulatory requirements,

(b) set out a clear description of the *intended use* of the allocation,

(c) consider the facts and circumstances, such as the relevant characteristic(s) of the item(s) being apportioned,

(d) adopt appropriate methodology(ies) in the circumstances.

IVS 102 Bases of Value: Appendix

IVS-Defined Basis of Value

The *bases of value* appear in the Appendix. The Appendix *must* be followed when using the stated *basis of value* as applicable.

A10. Market Value

A10.01 *Market value* is the estimated amount for which an *asset* and/or *liability should* exchange on the *valuation date* between a willing buyer and a willing seller in an arm's-length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion.

A10.02 The definition of *market value must* be applied in accordance with the following conceptual framework:

(a) "The estimated amount" refers to a *price* expressed in terms of money payable for the *asset* in an arm's-length market transaction. *Market value* is the most probable *price* reasonably obtainable in the market on the *valuation date* in keeping with the *market value* definition. It is the best *price* reasonably obtainable by the seller and the most advantageous price reasonably obtainable by the buyer. This estimate specifically excludes an estimated price inflated or deflated by special terms or circumstances such as atypical financing, sale and leaseback arrangements, special considerations or concessions granted by anyone associated with the sale, or any element of *value* available only to a specific owner or purchaser.

(b) An *asset* or *liability should* exchange "refers to the fact that the *value* of an *asset* or *liability* is an estimated amount rather than a pre-determined amount or actual sale *price*. It is the *price* in a transaction that meets all the elements of the *market value* definition at the *valuation date*.

(c) "On the *valuation date*" requires that the *value* is time specific as of a given date. Because markets and market conditions may change, the estimated value may be incorrect or inappropriate at another time. The valuation amount will reflect the market state and circumstances as at the *valuation date*, not those at any other date.

(d) "Between a willing buyer" refers to one who is motivated, but not compelled, to buy. This buyer is neither over-eager nor determined to buy at any *price*. This buyer is also one who purchases in accordance with the realities of the current market and with current market expectations, rather than in relation to an imaginary or hypothetical market that cannot be demonstrated or anticipated to exist. The assumed buyer would not pay a higher *price* than the market requires. The present owner is included among those who constitute "the market".

(e) "And a willing seller" is neither an over-eager nor a forced seller prepared to sell at any *price,* nor one prepared to hold out for a *price* not considered reasonable in the current market. The willing seller is motivated to sell the *asset* at market terms for the best *price* attainable in the open market after proper marketing, whatever that *price* may be. The factual circumstances of the actual owner are not part of this consideration because the willing seller is a hypothetical owner.

(f) "In an arm's-length transaction" is one between parties who do not have a particular or special relationship, eg, parent and subsidiary companies or landlord and tenant, that may make the price level uncharacteristic of the market or inflated. The *market value* transaction is presumed to be between unrelated parties, each acting independently.

(g) "After proper marketing" means that the *asset* has been exposed to the market in the most appropriate manner to affect its disposal at the best *price* reasonably obtainable in accordance with the *market value* definition. The method of sale is deemed to be that most appropriate to obtain the best *price* in the market to which the seller has access. The length of exposure time is not a fixed period but will vary according to the type of *asset* and market conditions. The only criterion is that there *must* have been sufficient time to allow the *asset* to be brought to the attention of an adequate number of market participants. The exposure period occurs prior to the *valuation date*.

(h) "Where the parties had each acted knowledgeably, prudently" presumes that both the willing buyer and the willing seller are reasonably informed about the nature and characteristics of the *asset*, its actual and potential uses, and the state of the market as of the *valuation date*. Each is further presumed to use that knowledge prudently to seek the *price* that is most favourable for their respective positions in the transaction. Prudence is assessed by referring to the state of the market at the *valuation date,* not with the benefit of hindsight at some later date. For example, it is not necessarily imprudent for a seller to sell *assets* in a market with falling prices at a *price* that is lower than previous market levels. In such cases, as is true for other exchanges in markets with changing prices, the prudent buyer or seller will act in accordance with the best market information available at the time.

(i) "And without compulsion" establishes that each party is motivated to undertake the transaction, but neither is forced or unduly coerced to complete it.

A10.03 The concept of *market value* presumes a *price* negotiated in an open and competitive market where the participants are acting freely. The market for an *asset* could be an international market or a local market. The market could consist of numerous buyers and sellers, or could be one characterised by a limited number of market participants. The market in which the *asset* is presumed exposed for sale is the one in which the *asset* notionally being exchanged is normally exchanged.

A10.04 The *market value* of an *asset* will reflect its highest and best use (see IVS 102 *Bases of Value*, Appendix A90). The highest and best use is the use of an *asset* that maximises its potential and that is possible, legally permissible and financially feasible. The highest and best use may be for continuation of an *asset*'s existing use or for some alternative use. This is determined by the use that a market participant would have in mind for the *asset* when formulating the *price* that it would be willing to bid.

A10.05 The nature and source of the *valuation inputs must* be consistent with the *basis of value*, which in turn *must* have regard to the valuation *intended use*. For example, various *valuation approaches* and *valuation methods* may be used to arrive at an opinion of value provided they use *observable data*. The market approach will, by definition, use market-derived inputs. To indicate *market value*, the income approach *should* be applied, using *inputs* and assumptions that would be adopted by participants. To indicate *market value* using the cost approach, the *cost* of an *asset* of equal utility and the appropriate adjustments for physical, functional and economic obsolescence *should* be determined by analysis of market-based costs and depreciation.

A10.06 The *data* available and the circumstances relating to the market for the *asset* being valued *must* determine which *valuation method* or *methods* are most relevant and appropriate. If based on appropriately analysed *observable data*, each *valuation approach* or *valuation method* used *should* provide an indication of *market value*.

A10.07 *Market value* does not reflect attributes of an *asset* that are of *value* to a specific owner or purchaser that are not available to other buyers in the market. Such advantages may relate to the physical, geographic, economic or legal characteristics of an *asset*. *Market value* requires the disregard of any such element of *value* because, at any given date, it is only assumed that there is a willing buyer, not a particular willing buyer.

A20. Market Rent

A20.01 Market rent is the estimated amount for which an interest in real property *should* be leased on the *valuation date* between a willing lessor and a willing lessee on appropriate lease terms in an arm’s-length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion.

A20.02 Market rent may be used as a *basis of value* when valuing a lease or an interest created by a lease. In such cases, it is necessary to consider the contract rent and, where it is different, the market rent.

A20.03 The conceptual framework supporting the definition of *market value* (see section A10) can be applied to assist in the interpretation of market rent. In particular, the estimated amount excludes a rent inflated or deflated by special terms, considerations or concessions. The “appropriate lease terms” are terms that would typically be agreed in the market for the type of property on the *valuation date* between market participants. An indication of market rent *should* only be provided in conjunction with an indication of the principal lease terms that have been assumed.

A20.04 Contract rent is the rent payable under the terms of an actual lease. It may be fixed for the duration of the lease, or variable. The frequency and basis of calculating variations in the rent will be set out in the lease and *must* be identified and understood in order to establish the total benefits accruing to the lessor and *liability* of the lessee.

A20.05 In some circumstances the market rent may have to be assessed based on terms of an existing lease (eg, for rental determination purposes where the lease terms are existing and therefore not to be assumed as part of a notional lease).

A20.06 In calculating market rent, the *valuer must* consider the following:

(a) in regard to a market rent subject to a lease, the terms and conditions of that lease are the appropriate lease terms unless those terms and conditions are illegal or contrary to over-arching legislation, and

(b) in regard to a market rent that is not subject to a lease, the assumed terms and conditions are the terms of a notional lease that would typically be agreed in a market for the type of property on the *valuation date* between market participants.

A30. Equitable Value

A30.01 *Equitable value* is the estimated price for the transfer of an *asset* or *liability* between identified knowledgeable and willing parties that reflects the respective interests of those parties.

A30.02 *Equitable value* requires the assessment of the *price* that is fair between two specific, identified parties considering the respective advantages or disadvantages that each will gain from the transaction. In contrast, *market value* requires any advantages or disadvantages that would not be available to, or incurred by, market participants generally to be disregarded.

A30.03 *Equitable value* is a broader concept than *market value*. Although in many cases the *price* that is fair between two parties will equate to that obtainable in the market, there will be cases where the assessment of *equitable value* will involve taking into account matters that have to be disregarded in the assessment of *market value*, such as certain elements of *synergistic value* arising because of the combination of the interests.

A30.04 Examples of the use of *equitable value* include:

(a) determination of a *price* that is equitable for a shareholding in a non-quoted business, where the holdings of two specific parties may mean that the *price* that is equitable between them is different from the *price* that might be obtainable in the market, and

(b) determination of a *price* that would be equitable between a lessor and a lessee for either the permanent transfer of the leased *asset* or the cancellation of the lease *liability*.

A40. Investment Value/Worth

A40.01 *Investment value* is the *value* of an *asset* to a particular owner or prospective owner for individual investment or operational objectives.

A40.02 *Investment value* is an entity-specific *basis of value*. Although the *value* of an *asset* to the owner may be the same as the amount that could be realised from its sale to another party, this *basis of value* reflects the benefits received by an entity from holding the *asset* and therefore does not involve a presumed exchange. *Investment value* reflects the circumstances and financial objectives of the entity for which the *valuation* is being produced. It is often used for measuring investment performance.

A50. Synergistic Value

A50.01 *Synergistic value* is the result of a combination of two or more *assets* or interests where the combined *value* is more than the sum of the separate *values*. If the synergies are only available to one specific buyer then *synergistic value* will differ from *market value*, as the *synergistic value* will reflect particular attributes of an *asset* that are only of *value* to a specific purchaser. The added *value* above the aggregate of the respective interests is often referred to as “marriage value” in some *jurisdictions*.

A60. Liquidation Value

A60.01 *Liquidation value* is the amount that would be realised when an *asset* or group of *assets* are sold from a liquidation sale, with the seller being compelled to sell as of a specific date. *Liquidation value* can be determined under two different premises of value:

(a) an orderly transaction with a typical marketing period, or

(b) a forced transaction with a shortened market period.

A60.02 The *valuer must* disclose which premise of value is assumed.

Other Bases of Value

A70. Fair Value (International Financial Reporting Standards) (IFRS)

A70.01 IFRS 13 defines fair value as the *price* that would be received to sell an *asset* or paid to transfer a *liability* in an orderly transaction between market participants at the measurement date.

A70.02 For financial reporting purposes, over 130 countries require or permit the use of International Accounting Standards published by the International Accounting Standards Board. In addition, the Financial Accounting Standards Board in the United States uses the same definition of fair value in Topic 820.

A80. Fair Value (Legal/Statutory) in different jurisdictions

A80.01 Many national, state and local agencies use fair value as a *basis of value* as defined by courts in prior cases.

IVS-defined Premise of Value

The premises of value appear in the Appendix. The Appendix *must* be followed when using the stated premises of value as applicable.

A90. Highest and Best Use

A90.01 Highest and best use is the use, from a participant perspective, that would produce the highest *value* for an *asset*.

A90.02 The concept of highest and best use is most frequently applied to non-financial *assets.* As many financial *assets* do not have alternative uses, there may be circumstances where the highest and best use of financial *assets* needs to be considered.

A90.03 The highest and best use *must* be physically possible (where applicable), financially feasible, legally allowed and result in the highest *value*. If different from the current use, the *costs* to convert an *asset* to its highest and best use would impact the *value*.

A90.04 The highest and best use for an *asset* may be its current or existing use when it is being used optimally.

A90.05 The highest and best use of an *asset* valued on a stand-alone basis may be different from its highest and best use as part of a group of *assets*, when its contribution to the overall *value* of the group *must* be considered.

A90.06 The determination of the highest and best use involves consideration of the following:

(a) To establish whether a use is physically possible, regard will be had to what would be considered reasonable by participants.

(b) To reflect the requirement to be legally permissible, any legal restrictions on the use of the *asset*, eg, town planning/zoning designations, need to be taken into account as well as the likelihood that these restrictions will change.

(c) The requirement that the use be financially feasible takes into account whether an alternative use that is physically possible and legally permissible will generate sufficient return to a typical participant, after taking into account the *costs* of conversion to that use, over and above the return on the existing use.

A100. Current Use/Existing Use

A100.01 Current use/existing use is the current way an *asset, liability*, or group of *assets* and/or *liabilities* is used. The current use may be, but is not necessarily, also the highest and best use.

A110. Orderly Liquidation

A110.01 An orderly liquidation describes the *value* of a group of *assets* that could be realised in a liquidation sale, given a reasonable period of time to find a purchaser (or purchasers), with the seller being compelled to sell on an as-is, where-is basis.

A110.02 The reasonable period of time to find a purchaser (or purchasers) may vary by *asset* type and market conditions.

A120. Forced Sale

A120.01 The term “forced sale” is often used in circumstances where a seller is under compulsion to sell and that, as a consequence, a proper marketing period is not possible and buyers may not be able to undertake adequate due diligence. The *price* that could be obtained in these circumstances will depend upon the nature of the pressure on the seller and the reasons why proper marketing cannot be undertaken. It may also reflect the consequences for the seller of failing to sell within the period available. Unless the nature of, and the reason for, the constraints on the seller are known, the *price* obtainable in a forced sale cannot be realistically estimated. The *price* that a seller will accept in a forced sale will reflect its particular circumstances, rather than those of the hypothetical willing seller in the market value definition. A "forced" sale is a description of the situation under which the exchange takes place, not a distinct *basis of value*.

A120.02 If an indication of the *price* obtainable under forced sale circumstances is required, it will be necessary to clearly identify the reasons for the constraint on the seller, including the consequences of failing to sell in the specified period by setting out appropriate assumptions. If these circumstances do not exist at the *valuation date*, these *must* be clearly identified as special assumptions.

A120.03 A forced sale typically reflects the *price* that a specified property is likely to bring under all of the following conditions:

(a) consummation of a sale within a short time period,

(b) the *asset* is subjected to market conditions prevailing as of the *valuation date* or assumed timescale within which the transaction is to be completed,

(c) both the buyer and the seller are acting prudently and knowledgeably,

(d) the seller is under compulsion to sell,

(e) the buyer would receive only benefits that are available to others and would derive no material benefit(s) from the transaction not available to other market participants,

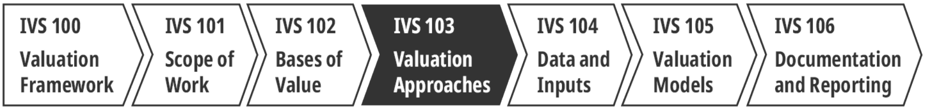
(f) both parties are acting in what they consider their best interests, and

(g) a normal marketing effort is not possible due to the brief exposure time.

A120.04 Sales in an inactive or falling market are not automatically "forced sales" simply because a seller might hope for a better *price* if conditions improved. Unless the seller is compelled to sell by a deadline that prevents proper marketing, the seller will be a willing seller within the definition of market value (see IVS 102 *Bases of Value*, Appendix A10).

A120.05 While confirmed "forced sale" transactions would generally be excluded from consideration in a *valuation* where the *basis of value* is *market value*, it can be difficult to verify that an arm's-length transaction in a market was a forced sale.

IVS 103 Valuation Approaches


IVS 100
Valuation Framework
IVS 101
Scope of Work
IVS 102
Bases of Value
IVS 103
Valuation Approaches
IVS 104
Data and Inputs
IVS 105
Valuation Models
IVS 106
Documentation and Reporting

Contents	**Paragraphs**
Introduction	10
Market Approach	20
Income Approach	30
Cost Approach	40
Appendix	
Market Approach Methods	A10
Income Approach Methods	A20
Cost Approach Methods	A30

IVS 103 *Valuation Approaches* requires the *valuer* to consider and select the most relevant and appropriate *valuation approaches* for the *valuation* of the *asset* and/or *liability* based on its *intended use(s).*

10. Introduction

10.01 Consideration *must* be given to the relevant and appropriate *valuation approaches*. One or more *valuation approaches* may be used in order to arrive at the *value* in accordance with the *basis of value*. The three approaches described and defined below are the principle *valuation approaches*:

(a) market approach,

(b) income approach, and

(c) cost approach.

10.02 The selection of the approach *should* seek to maximise the use of observable *inputs*, as appropriate.

10.03 Each of these *valuation approaches* includes different, detailed methods of application (see IVS 103 *Valuation Approaches*, Appendix A10-A30).

10.04 The goal in selecting *valuation approaches* and *methods* for an *asset* and/or *liability* is to find the most appropriate method under the particular circumstances of the *valuation*. No single method is suitable in every possible situation. In their selection process, the *valuer should* consider at a minimum:

(a) the appropriate *basis(es) of value* and premise(s) of value, determined by the terms and *intended use* of the *valuation*,

(b) the respective strengths and weaknesses of the possible *valuation approaches* and *valuation methods*,

(c) the appropriateness of each method in view of the nature of the *asset(s)* and/or *liability/ies*, and the *valuation approaches* or *valuation methods* used by participants in the relevant market,

(d) the availability of reliable information needed to apply the method(s), and

(e) price information from an active market.

10.05 The *valuer* is not required to use more than one method for the *valuation* of an *asset* and/or *liability,* particularly when the *valuer* has a high degree of confidence in the accuracy and reliability of a single method, given the facts and circumstances of the *valuation*.

10.06 The *valuer should* consider the use of multiple approaches and methods. More than one *valuation approach* or *valuation method should* be considered and may be used to arrive at an indication of *value*, particularly when there are insufficient factual or observable *inputs* for a single method to produce a reliable conclusion.

10.07 Where more than one *valuation approach* and *valuation method* is used, or even multiple methods within a single approach, the *value* based on those multiple approaches and/or methods *should* be reasonable and the process of analysing and reconciling the differing *values* into a single conclusion, without averaging, *should* be described by the *valuer* in the report.

10.08 While this standard includes discussion of certain *valuation methods* within the cost, market and income approaches, it does not provide a comprehensive list of all possible *valuation methods* that may be appropriate. It is the *valuer'*s responsibility to choose the appropriate method(s) for each valuation engagement. Compliance with IVS may require the *valuer* to use a method not defined or mentioned in IVS.

10.09 When different *valuation approaches* and/or *valuation methods* result in widely divergent indications of *value*, the *valuer should* perform procedures to understand why the *value* indications differ, as it is generally not appropriate to simply weight two or more *significantly* divergent indications of value. In such cases, the *valuer should* reconsider the guidance in IVS 103 *Valuation Approaches*, para 10.04, to determine which one of the *valuation approaches* and/or *valuation methods* provides a better or more reliable indication of *value*.

10.10 The *valuer should* maximise the use of relevant observable market information in all three approaches. Regardless of the source of the *inputs* and assumptions used in a *valuation,* the *valuer must* perform appropriate analysis to evaluate those *inputs* and assumptions and their appropriateness for the *intended use* of the *valuation*.

10.11 The *valuer should* exercise *professional judgement* in determining the *valuation approaches, valuation methods*, and procedures. If, in the *valuer's professional judgment*, the limitations placed on the *valuer's* selection of the *valuation approaches, valuation methods*, and procedures for the *valuation* are overly restrictive then this may not result in an IVS-compliant *valuation*. (see IVS 101 *Scope of Work*, para 10.05).

10.12 No one approach or method is applicable in all circumstances, with price information from an active market generally considered to be the strongest evidence of *value*. Some *bases of value* may prohibit the *valuer* from making subjective adjustments to price information from an active market. Price information from an inactive market may still be good evidence of *value*, but subjective adjustments may be needed.

10.13 A *valuation* may be limited or restricted where the *valuer* is not able to employ the *valuation approaches, valuation methods* and procedures that a reasonable and informed third party would perform, and it is reasonable to expect that the effect of the limitation or restriction on the estimate of *value* could be *significant.*

20. Market Approach

20.01 The market approach provides an indication of *value* by comparing the *asset* and/or *liability* with identical or comparable (that is similar) *asset* and/or *liability* for which price information is available.

20.02 The market approach *should* always take into account trading volume, trading frequency, range of observed *prices*, and proximity to the *valuation date*. The market approach *should* be applied and afforded *significant weight* under the following circumstances:

(a) the subject *asset* has recently been sold in a transaction appropriate for consideration under the *basis of value*,

(b) the subject *asset* or substantially similar *assets* are actively publicly traded, and/or

(c) there are frequent and/or recent observable transactions in substantially similar *assets*.

20.03 Although the above circumstances would indicate that the market approach *should* be applied and afforded *significant weight*, when using the market approach under the following circumstances, the *valuer should* consider whether any other approaches can be applied and *weighted* to corroborate the *value* indication from the market approach.

(a) transactions involving the subject *asset* or substantially similar *assets* are not recent enough considering the levels of volatility and activity in the market,

(b) the *asset* or substantially similar *assets* are publicly traded, but not actively,

(c) information on market transactions is available, but the comparable *assets* have *significant* differences to the subject *asset,* potentially requiring subjective adjustments,

(d) information on recent transactions is not reliable (ie, hearsay, missing information, synergistic purchaser, not arm’s length, distressed sale, etc).

20.04 The heterogeneous nature of many *assets* means that it is often not possible to find market evidence of transactions involving identical or similar *assets.* Even in circumstances where the market approach is not used, the use of observable *inputs should* be maximised in the application of other approaches (eg, market-based valuation metrics such as effective yields and rates of return).

20.05 When comparable market information does not relate to the exact or substantially the same *asset,* the *valuer must* perform a comparative analysis of qualitative and quantitative similarities and differences between comparable *assets* and the subject *asset*. It will often be necessary to make adjustments based on this comparative analysis. Those adjustments *must* be reasonable and the *valuer must* document the reasons for the adjustments and how they were quantified.

20.06 The market approach often uses market multiples derived from a set of comparables, each with different multiples. The selection of the appropriate multiple within the range may require adjustment and judgement, considering qualitative and quantitative factors.

30. Income Approach

30.01 The income approach provides an indication of *value* by converting projected cash flows to a single current *value*. Under the income approach, the *value* of an *asset* is determined by reference to the *value* of income, cash flow or cost savings generated by the *asset*.

30.02 The income approach *should* be applied and afforded *significant weight* under the following circumstances:

(a) the income-producing ability of the *asset* is the critical element affecting *value* from a participant perspective, and/or

(b) reasonable projections of the amount and timing of future income are available for the subject *asset*, but there are no relevant and reliable market comparables.

30.03 Although the above circumstances would indicate that the income approach *should* be applied and afforded *significant weight*, when using the income approach under the following circumstances, the *valuer should* consider whether any other approaches can be applied and weighted to corroborate the indication of *value* from the income approach:

(a) the income-producing ability of the subject *asset* is only one of several factors affecting *value* from a participant perspective,

(b) there is *significant* uncertainty regarding the amount and timing of future income related to the subject *asset*,

(c) there is a lack of access to information related to the subject *asset* (for example, a minority owner may have access to historical financial statements but not forecasts/budgets), and/or

(d) the subject *asset* has not yet begun generating income, but is projected to do so.

30.04 A fundamental basis for the income approach is that investors expect to receive a return on their investments and that such a return *should* reflect the perceived level of risk in the investment.

30.05 Generally, investors can only expect to be compensated for systematic risk (also known as "market risk" or "undiversifiable risk").

40. Cost Approach

40.01 The cost approach provides an indication of *value* using the economic principle that a buyer will pay no more for an *asset* than the *cost* to obtain an *asset* of equal utility, whether by purchase or by construction, unless undue time, inconvenience, risk or other factors are involved. The approach provides an indication of *value* by calculating the current replacement or reproduction cost of an *asset* and making deductions for all relevant forms of obsolescence.

40.02 The cost approach *should* be applied and afforded *significant weight* under the following circumstances:

(a) participants would be able to recreate an *asset* with substantially the same utility as the subject *asset*, without regulatory or legal restrictions, and the *asset* could be recreated quickly enough that a participant would not be willing to pay a *significant* premium for the ability to use the subject *asset* immediately,

(b) the *asset* is not directly income-generating and the unique nature of the *asset* makes using an income approach or market approach unfeasible,

(c) the *basis of value* being used is fundamentally based on replacement cost, and/or

(d) the *asset* was recently created or issued and sold to market participants, such that there is a high degree of reliability in the assumptions used in the cost approach.

40.03 Although the circumstances in para 40.02 would indicate that the cost approach *should* be applied and afforded *significant weight*, when using the cost approach under the following circumstances, the *valuer should* consider whether any other approaches can be applied and weighted to corroborate the indication of *value* from the cost approach:

(a) participants might consider recreating an *asset* of similar utility, but there are potential legal or regulatory hurdles or *significant* time involved in recreating the *asset,*

(b) when the cost approach is being used as a reasonableness check to other approaches (for example, using the cost approach to confirm whether a business valued as a going concern might be more valuable on a liquidation basis).

40.04 The *value* of a partially completed *asset* will generally reflect the *costs* incurred to date in the creation of the *asset* (and whether those *costs* contributed to *value*) and the expectations of participants regarding the *value* of the *asset* when complete, but also consider the *costs* and time required to complete the *asset* and appropriate adjustments for profit and risk.

IVS 103 Valuation Approaches: Appendix

The *valuation methods* provided in this appendix may not apply to all asset classes or use cases. However, the appendix *must* be followed when using the applicable *valuation method*.

A10. Market Approach Methods

Comparable Transactions Method

A10.01 The comparable transactions method, also known as the guideline transactions method, utilises information about transactions involving *assets* that are the same or similar to the subject *asset* to arrive at an indication of *value*.

A10.02 When the comparable transactions considered involve the subject *asset,* this method is sometimes referred to as the prior transactions method.

A10.03 If few recent transactions have occurred, the *valuer* may consider the *prices* of identical or similar *assets* that are listed or offered for sale, provided the relevance of this information is clearly established, critically analysed and documented. This is sometimes referred to as the comparable listings method and *should* not be used as the sole indication of *value* but can be appropriate for consideration together with other methods. When considering listings or offers to buy or sell, the *weight* afforded to the listings/offer price *should* consider the level of commitment inherent in the price and how long the listing/offer has been on the market. For example, an offer that represents a binding commitment to purchase or sell an *asset* at a given price may be given more *weight* than a quoted price without such a binding commitment.

A10.04 The comparable transaction method can use a variety of different comparable evidence, also known as units of comparison, which form the basis of the comparison. For example, a few of the many common units of comparison used for real property interests include *price p*er square foot (or per square metre), rent per square foot (or per square metre) and capitalisation rates. A few of the many common units of comparison used in business valuation include EBITDA (Earnings Before Interest, Tax, Depreciation and Amortisation) multiples, earnings multiples, revenue multiples and book value multiples. A few of the many common units of comparison used in financial instrument valuation include metrics such as yields and interest rate spreads. The units of comparison used by participants can differ between asset classes and across industries and geographies.

A10.05 A subset of the comparable transactions method is matrix pricing, which is principally used to value some types of financial instruments, such as debt securities, without relying exclusively on quoted prices for the specific securities, but rather relying on the securities' relationship to other benchmark quoted securities and their attributes (ie, yield).

A10.06 The key steps in the comparable transactions' method are:

(a) identify the units of comparison that are used by participants in the relevant market,

(b) identify the relevant comparable transactions and calculate the key valuation metrics for those transactions,

(c) perform a consistent comparative analysis of qualitative and quantitative similarities and differences between the comparable *assets* and the subject *asset*,

(d) make necessary adjustments, if any, to the valuation metrics to reflect differences between the subject *asset* and the comparable *assets*,

(e) apply the adjusted valuation metrics to the subject *asset*, and

(f) if multiple valuation metrics were used, reconcile the indications of *value*.

A10.07 The *valuer should* choose comparable transactions within the following context:

(a) evidence of several transactions is generally preferable to a single transaction or event,

(b) evidence from transactions of very similar *assets* (ideally identical) provides a better indication of *value* than *assets* where the transaction *prices* require *significant* adjustments,

(c) transactions that happen closer to the *valuation date* are more representative of the market at that date than older/ dated transactions, particularly in volatile markets,

(d) for most *bases of value*, the transactions *should* be arm's length between unrelated parties,

(e) sufficient information on the transaction *should* be available to allow the *valuer* to develop a reasonable understanding of the comparable *asset* and assess the valuation metrics/comparable evidence

(f) information on the comparable transactions *should* be from a reliable and trusted source, and

(g) actual transactions provide better valuation evidence than intended transactions.

A10.08 The *valuer should* analyse and make adjustments for any *significant* differences between the comparable transactions and the subject *asset*. Examples of common differences that could warrant adjustments may include, but are not limited to:

(a) material characteristics (age, size, specifications, etc),

(b) size adjustments,

(c) size of the stake (partial or majority),

(d) relevant restrictions on either the subject *asset* or the comparable *assets*,

(e) geographical location (location of the *asset* and/or location of where the *asset* is likely to be transacted/used) and the related economic and regulatory environments,

(f) profitability or profit-making capability of the *assets*,

(g) historical and expected growth,

(h) yields/coupon rates,

(i) types of collateral,

(j) unusual terms in the comparable transactions,

(k) differences related to marketability and control characteristics of the comparable and the subject *asset*,

(l) differences in *ESG* considerations, and

(m) ownership characteristics (eg, legal form of ownership, amount percentage held).

Guideline publicly-traded comparable method

A10.09 The guideline publicly-traded method utilises information on publicly-traded comparables that are similar to the subject *asset* to arrive at an indication of *value*.

A10.10 This method is similar to the comparable transactions method. However, there are several differences due to the comparables being publicly traded, as follows:

(a) the valuation metrics/comparable evidence is available as of the *valuation date,*

(b) detailed information on the comparables is readily available in public filings,

(c) the information contained in public filings is prepared in accordance with accounting, regulatory and legal standards.

A10.11 The method *should* be used only when the subject *asset* is sufficiently similar to the publicly-traded comparables to allow for meaningful comparison.

A10.12 The key steps in the guideline publicly-traded comparables method are as follows:

(a) identify the valuation metrics/comparable evidence that are used by participants in the relevant market,

(b) identify the relevant guideline publicly-traded comparables and calculate the key valuation metrics for those transactions,

(c) perform a consistent comparative analysis of qualitative and quantitative similarities and differences between the publicly-traded comparables and the subject *asset*,

(d) make necessary adjustments, if any, to the valuation metrics to reflect differences between the subject *asset* and the publicly-traded comparables,

(e) apply the adjusted valuation metrics to the subject *asset*, and

(f) weight the indications of *value* if multiple valuation metrics were used.

A10.13 The *valuer should* choose publicly-traded comparables within the following context:

(a) consideration of multiple publicly-traded comparables is preferred to the use of a single comparable,

(b) evidence from similar publicly-traded comparables (for example, with similar market segment, geographic area, size in revenue and/or *assets*, growth rates, profit margins, leverage, liquidity and diversification) provides a better indication of *value* than comparables that require *significant* adjustments, and

(c) securities that are actively traded provide more meaningful evidence than thinly-traded securities.

A10.14 The *valuer should* analyse and make adjustments for any material differences between the guideline publicly-traded comparables and the subject *asset*. Examples of common differences that could warrant adjustments may include, but are not limited to:

(a) material characteristics (age, size, specifications, etc),

(b) relevant discounts and premiums (see IVS 103 *Valuation Approaches*),

(c) relevant restrictions on either the subject *asset* or the comparable *assets,*

(d) geographical location of the underlying company and the related economic and regulatory environments,

(e) profitability or profit-making capability of the *assets*,

(f) historical and expected growth,

(g) differences related to marketability and control characteristics of the comparable and the subject *asset*,

(h) differences in *ESG* considerations, and

(i) subordination.

Other Market-Approach Considerations

A10.15 The following paragraphs address a non-exhaustive list of certain special considerations that may form part of a market approach *valuation*.

A10.16 Anecdotal or “rule-of-thumb” valuation benchmarks are sometimes considered to be a market approach. However, indications of value 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.

A10.17 In the market approach, the fundamental basis for making adjustments is to adjust for differences between the subject *asset* and the guideline transactions or publicly-traded securities. Some of the most common adjustments made in the market approach are known as discounts and premiums.

(a) Discounts for Lack of Marketability (DLOM) *should* be applied when the comparables are deemed to have superior marketability to the subject *asset*. A DLOM reflects the concept that when comparing otherwise identical *assets*, a readily marketable *asset* would have a higher value than an *asset* with a long marketing period or restrictions on the ability to sell the *asset*. For example, publicly-traded securities can be bought and sold nearly instantaneously while shares in a private company may require a *significant* amount of time to identify potential buyers and complete a transaction. Many *bases of value* allow the consideration of restrictions on marketability that are inherent in the subject *asset* but prohibit consideration of marketability restrictions that are specific to a particular owner. DLOMs may be quantified using any reasonable method, but are typically calculated using option pricing models, studies that compare the value of publicly-traded shares and restricted shares in the same company, or studies that compare the value of shares in a company before and after an initial public offering.

(b) Control Premiums, sometimes referred to as Market Participant Acquisition Premiums (MPAPs) and Discounts for Lack of Control (DLOC), are applied to reflect differences between the comparables and the subject *asset* with regard to the ability to make decisions and the changes that can be made as a result of exercising control. All else being equal, participants would generally prefer to have control over a subject *asset* than not. However, participants' willingness to pay a Control Premium or DLOC will generally be a factor of whether the ability to exercise control enhances the economic benefits available to the owner of the subject *asset*. Control Premiums and DLOCs may be quantified using any reasonable method, but are typically calculated based on either an analysis of the specific cash flow enhancements or reductions in risk associated with control or by comparing observed *prices* paid for controlling interests in publicly-traded securities to the publicly-traded price before such a transaction is announced. Examples of circumstances where Control Premiums and DLOCs *should* be considered include where:

(i) Shares of public companies generally do not have the ability to make decisions related to the operations of the company (they lack control). As such, when applying the guideline public comparable method to value a subject *asset* that reflects a controlling interest, a control premium may be appropriate, or

(ii) The guideline transactions in the guideline transaction method often reflect transactions of controlling interests. When using that method to value a subject *asset* that reflects a minority interest, a DLOC may be appropriate.

(c) Blockage discounts are sometimes applied when the subject *asset* represents a large block of shares in a publicly-traded security such that an owner would not be able to quickly sell the block in the public market without negatively influencing the publicly-traded price. Blockage discounts may be quantified using any reasonable method but typically a model is used that considers the length of time over which a participant could sell the subject shares without negatively impacting the publicly-traded price (ie, selling a relatively small portion of the security's typical daily trading volume each day). Under certain *bases of value*, particularly fair value for financial reporting purposes, blockage discounts are prohibited.

A20. Income Approach Methods

A20.01 Although there are many ways to implement the income approach, methods under the income approach are effectively based on discounting future amounts of cash flow to present value. They are variations of the Discounted Cash Flow (DCF) method and the concepts in the following paragraphs apply in part or in full to all income approach methods.

Discounted Cash Flow (DCF) Method

A20.02 Under the DCF method the forecasted cash flow is discounted back to the *valuation date*, resulting in a present value of the *asset*.

A20.03 In some circumstances for long-lived or indefinite-lived *assets*, DCF may include a terminal value which represents the *value* of the *asset* at the end of the explicit projection period. In other circumstances, the *value* of an *asset* may be calculated solely using a terminal value with no explicit projection period. This is sometimes referred to as an income capitalisation method.

A20.04 The key steps in the DCF method are:

(a) choose the most appropriate type of cash flow for the nature of the subject *asset* and the *valuation* (ie, pre-tax or post-tax, total cash flows or cash flows to equity, real or nominal, etc),

(b) determine the most appropriate explicit period, if any, over which the cash flow will be forecast,

(c) prepare cash flow forecasts for that period,

(d) determine whether a terminal value is appropriate for the subject *asset* at the end of the explicit forecast period (if any) and then determine the appropriate terminal value for the nature of the *asset*,

(e) determine the appropriate *discount rate*, and

(f) apply the *discount rate* to the forecasted future cash flow, including the terminal value, if any.

Type of Cash Flow

A20.05 When selecting the appropriate type of cash flow for the nature of the *asset* or *valuation*, the *valuer must* consider the following factors. In addition, the *discount rate* and other *inputs must* be consistent with the type of cash flow chosen.

(a) Cash flow to whole *asset* or partial interest: typically cash flow to the whole *asset* is used. However, occasionally other levels of income may be used as well, such as cash flow to equity (after payment of interest and principal on debt) or dividends (only the cash flow distributed to equity owners). Cash flow to the whole *asset* is most commonly used because an *asset should* theoretically have a single *value* that is independent of how it is financed or whether income is paid as dividends or reinvested.

(b) The cash flow can be pre-tax or post-tax: the tax rate applied *should* be consistent with the *basis of value* and in many instances would be a participant tax rate rather than an owner-specific one.

(c) Nominal versus real: real cash flow does not consider inflation whereas nominal cash flows include expectations regarding inflation. If expected cash flow incorporates an expected inflation rate, the *discount rate* has to include an adjustment for inflation as well,

(d) Currency: the choice of currency used may have an impact on assumptions related to inflation and risk. This is particularly true in emerging markets or in currencies with high inflation rates. The currency in which the forecast is prepared and related risks are separate and distinct from risks associated with the country(ies) in which the *asset* resides or operates.

(e) The type of cash flow contained in the forecast: for example, probability-*weighted* scenarios, most likely cash flows, contractual cash flows, etc.

A20.06 The type of cash flow chosen *should* be in accordance with the participant's viewpoints. For example, cash flows and *discount rates* for real property are customarily developed on a pre-tax basis while cash flows and *discount rates* for businesses are normally developed on a post-tax basis. Adjusting between pre-tax and post-tax rates can be complex and prone to error and *should* be approached with caution.

A20.07 When a *valuation* is being developed in a currency ("the valuation currency") that differs from the currency used in the cash flow projections ("the functional currency"), the *valuer should* use one of the following two currency translation methods:

(a) Discount the cash flows in the functional currency using a *discount rate* appropriate for that functional currency. Convert the present value of the cash flows to the valuation currency at the spot rate on the *valuation date*.

(b) Use a currency exchange forward curve to translate the functional currency projections into valuation currency projections and discount the projections using a *discount rate* appropriate for the valuation currency. When a reliable currency exchange forward curve is not available (for example, due to lack of liquidity in the relevant currency exchange markets), it may not be possible to use this method and only the method described in para A20.07 (a) can be applied.

Explicit Forecast Period

A20.08 The selection criteria will depend upon the *intended use* of the *valuation*, the nature of the *asset*, the information available and the required *bases of value*. For an *asset* with a short life, it is more likely to be both possible and relevant to project cash flow over its entire life.

A20.09 The *valuer should* consider the following factors when selecting the explicit forecast period:

(a) the life of the *asset*,

(b) a reasonable period for which reliable *data* is available on which to base the projections,

(c) the minimum explicit forecast period which *should* be sufficient for an *asset* to achieve a stabilised level of growth and profits, after which a terminal value can be used,

(d) in the *valuation* of cyclical assets, the explicit forecast period *should* generally include an entire cycle, when possible, and

(e) for finite-lived *assets* such as most financial instruments, the cash flows will typically be forecast over the full life of the *asset*.

A20.10 In some instances, particularly when the *asset* is operating at a stabilised level of growth and profits at the *valuation date*, it may not be necessary to consider an explicit forecast period and a terminal value may form the only *basis of value* (sometimes referred to as an income capitalisation method).

A20.11 The intended holding period for one investor *should* not be the only consideration in selecting an explicit forecast period and *should* not impact the *value* of an *asset*. However, the period over which an *asset* is intended to be held may be considered in determining the explicit forecast period if the objective of the *valuation* is to determine its *investment value*.

Cash Flow Forecasts

A20.12 Cash flow for the explicit forecast period is constructed using prospective financial information (PFI) (projected income/inflows and expenditure/outflows).

A20.13 As required by IVS 103 *Valuation Approaches*, regardless of the source of the PFI (eg, management forecast), the *valuer must* perform analysis to evaluate the PFI, the assumptions underlying the PFI and their appropriateness for the *intended use* of the *valuation*. The suitability of the PFI and the underlying assumptions will depend on the *intended use* and the required *bases of value*. For example, cash flow used to determine *market value should* reflect PFI that would be anticipated by participants; in contrast, *investment value* can be measured using cash flow that is based on the reasonable forecasts from the perspective of a particular investor.

A20.14 The cash flow is divided into suitable periodic intervals (eg, weekly, monthly, quarterly or annually) with the choice of interval depending upon the nature of the *asset*, the pattern of the cash flow, the *data* available, and the length of the forecast period.

A20.15 The projected cash flow *should* capture the amount and timing of all future cash inflows and outflows associated with the subject *asset* from the perspective appropriate to the *basis of value*.

A20.16 Typically, the projected cash flow will reflect one of the following:

(a) contractual or promised cash flow,

(b) the single most likely set of cash flow,

(c) the probability-*weighted* expected cash flow, or

(d) multiple scenarios of possible future cash flow.

A20.17 Different types of cash flow often reflect different levels of risk and may require different *discount rates*. For example, probability-*weighted* expected cash flows incorporate expectations regarding all possible outcomes and are not dependent on any particular conditions or events (note that when a probability-*weighted* expected cash flow is used, it is not always necessary for the *valuer* to take into account distributions of all possible cash flows using complex models and techniques. Rather, the *valuer* may develop a limited number of discrete scenarios and probabilities that capture the array of possible cash flows). A single most likely set of cash flows may be conditional on certain future events and therefore could reflect different risk and warrant a different *discount rate*.

A20.18 While the *valuer* often receives PFI that reflects accounting income and expenses, it is generally preferable to use cash flow that would be anticipated by participants as the basis for *valuations*. For example, accounting non-cash expenses, such as depreciation and amortisation, *should* be added back, and expected cash outflows relating to capital expenditures or to changes in working capital *should* be deducted in calculating cash flow.

A20.19 The *valuer must* ensure that seasonality and cyclicality in the subject has been appropriately considered in the cash flow forecasts.

Terminal Value

A20.20 Where the *asset* is expected to continue beyond the explicit forecast period, the *valuer must* estimate the *value* of the *asset* at the end of that period. The terminal value is then discounted back to the *valuation date*, normally using the same *discount rate* as applied to the forecast cash flow.

A20.21 The terminal value *should* consider:

(a) whether the *asset* is deteriorating/finite-lived in nature or indefinite-lived, as this will influence the method used to calculate a terminal value,

(b) whether there is future growth potential for the *asset* beyond the explicit forecast period,

(c) whether there is a pre-determined fixed capital amount, capital expenditure or return condition expected to be received at the end of the explicit forecast period,

(d) the expected risk level of the *asset* at the time the terminal value is calculated,

(e) for cyclical assets, the terminal value *should* consider the cyclical nature of the *asset* and *should* not be performed in a way that assumes “peak” or “trough” levels of cash flows in perpetuity,

(f) the tax attributes inherent in the *asset* at the end of the explicit forecast period (if any) and whether those tax attributes would be expected to continue into perpetuity, and

(g) risks and opportunities associated with *environmental, social and governance* characteristics of the subject *asset*.

A20.22 The *valuer* may apply any reasonable method for calculating a terminal value. While there are many different approaches to calculating a terminal value, the three most commonly used are:

(a) Gordon growth model/constant growth model,

(b) market approach/exit value (appropriate for both deteriorating/finite-lived *assets* and indefinite-lived *assets*), and

(c) salvage value/disposal cost (appropriate only for deteriorating/finite-lived *assets*).

Gordon Growth Model/Constant Growth Model

A20.23 The Gordon growth/constant growth model assumes that the cash flow from the *asset* grows (or declines) at a constant rate into perpetuity.

Market Approach/Exit Value

A20.24 The market approach/exit value method can be performed in a number of ways, but the ultimate goal is to calculate the *value* of the *asset* at the end of the explicit cash flow forecast.

A20.25 Common ways to calculate the terminal value under this method include application of a market-evidence based capitalisation factor or a market multiple.

A20.26 When a market approach/exit value is used, the *valuer should* comply with the requirements in the market approach and market approach methods section of this standard (see IVS 103 *Valuation Approaches*, section 20 and Appendix A10). However, the *valuer should* also consider the expected market conditions at the end of the explicit forecast period and make adjustments accordingly.

Salvage Value/Disposal Cost

A20.27 The terminal value of some *assets* may have little or no relationship to the preceding cash flow. Examples of such *assets* include wasting assets such as a mine or an oil well.

A20.28 In such cases, the terminal value is typically calculated as the salvage value of the *asset*, less *costs* to dispose of the *asset*. In circumstances where the *costs* exceed the salvage value, the terminal value is negative and referred to as a disposal cost or an asset retirement obligation.

Discount Rate

A20.29 The rate at which the forecast cash flow is discounted *should* reflect not only the time value of money, but also the risks associated with the type of cash flow and the future operations of the *asset*.

A20.30 The *discount rate must* be consistent with the type of cash flow.

A20.31 The *valuer* may use any reasonable method for developing an appropriate *discount rate*. While there are many methods for developing a *discount rate* or determining the reasonableness of a *discount rate*, a non-exhaustive list of common methods includes:

(a) a capital asset pricing model (CAPM),

(b) a *weighted*-average-cost-of-capital (WACC),

(c) observed or inferred rates/yields,

(d) a build-up method.

A20.32 The *valuer should* consider corroborative analyses when assessing the appropriateness of a *discount rate*. A non-exhaustive list of common analysis *should* include:

(a) an internal rate of return (IRR),

(b) a *weighted* average return on assets (WARA),

(c) *value* indications from other approaches, such as market approach, or comparing implied multiples from the income approach with guideline company market multiples or transaction multiples.

A20.33 In developing a *discount rate*, the *valuer should* consider:

(a) the type of *asset* being valued. For example, *discount rates* used in valuing debt would be different to those used when valuing real property or a business,

(b) the rates implicit in comparable transactions in the market,

(c) the geographical location of the *asset* and/or the location of the markets in which it would trade,

(d) the life/term and/or maturity of the *asset* and the consistency of *inputs*. For example, the maturity of the risk-free rate applied will depend on the circumstances, but a common approach is to match the maturity of the risk-free rate to the time horizon of the cash flows being considered.

(e) the *bases of value* being applied, and

(f) the currency denomination of the projected cash flows.

A20.34 In developing a *discount rate*, the *valuer must*:

(a) document the method used for developing the *discount rate* and support its use,

(b) provide evidence for the derivation of the *discount rate*, including the identification of the *significant inputs* and support for their derivation or source.

A20.35 The *valuer must* consider the *intended use* for which the forecast was prepared and whether the forecast assumptions are consistent with the *basis of value* being applied. If the forecast assumptions are not consistent with the *basis of value*, it could be necessary to adjust the forecast or *discount rate.*

A20.36 The *valuer must* consider the risk of achieving the forecast cash flow of the *asset* when developing the *discount rate*. Specifically, the *valuer must* evaluate whether the risk underlying the forecast cash flow assumptions are captured in the *discount rate*.

A20.37 While there are many ways to assess the risk of achieving the forecast cash flow, a non-exhaustive list of common procedures includes:

(a) identify the key components of the forecast cash flow and compare the forecast cash flow key components to:

(i) historical operating and financial performance of the *asset*,

(ii) historical and expected performance of comparable *assets*,

(iii) historical and expected performance for the industry, and

(iv) expected near-term and long-term growth rates of the country or region in which the *asset* primarily operates,

(b) confirm whether the forecast cash flow represents expected cash flows (ie, probability-*weighted* scenarios), as opposed to most likely cash flows (ie, most probable scenario) of the *asset*, or some other type of cash flow,

(c) if utilising expected cash flows, consider the relative dispersion of potential outcomes used to derive the expected cash flows (eg, higher dispersion may indicate a need for an adjustment to the *discount rate*),

(d) compare prior forecasts of the *asset* to actual results to assess the accuracy and reliability of managements' estimates,

(e) consider qualitative factors,

(f) consider the value indications such as those resulting from the market approach, and

(g) consider the risks associated with *environmental, social and governance* characteristics of the subject *asset*.

A20.38 If the *valuer* determines that certain risks included in the forecast cash flow for the *asset* have not been captured in the *discount rate*, the *valuer must*:

(a) Adjust the forecast; when adjusting the cash flow forecast: The *valuer should* provide the rationale for why the adjustments were necessary, undertake quantitative procedures to support the adjustments, and document the nature and amount of the adjustments.

(b) Adjust the *discount rate* to account for those risks not already captured: When adjusting the *discount rate*, the *valuer should* document why it was not appropriate or possible to adjust the cash flow forecast, provide the rationale for why such risks are not otherwise captured in the *discount rate*, undertake quantitative and qualitative procedures to support the adjustments, and document the nature and amount of the adjustment. The use of quantitative procedures does not necessarily entail quantitative derivation of the adjustment to the *discount rate*. The *valuer* need not conduct an exhaustive quantitative process but *should* take into account all the information that is reasonably available.

A20.39 In developing a *discount rate*, it may be appropriate to consider the impact the *asset*'s unit of account has on unsystematic risks and the derivation of the overall *discount rate*. For example, the *valuer should* consider whether market participants would assess the *discount rate* for the *asset* on a stand-alone basis, or whether market participants would assess the *asset* in the context of a broader portfolio and therefore consider the potential diversification of unsystematic risks.

A20.40 The *valuer should* consider the impact of inter-company arrangements and transfer pricing on the *discount rate*. For example, it is not uncommon for inter-company arrangements to specify fixed or guaranteed returns for some businesses or entities within a larger enterprise, which would lower the risk of the entity forecasted cash flows and reduce the appropriate *discount rate*. However, other businesses or entities within the enterprise are deemed to be residual earners in which both excess return and risk are allocated, thereby increasing the risk of the entity forecasted cash flows and the appropriate *discount rate*.

A30. Cost Approach Methods

A30.01 Broadly, there are three cost approach methods:

(a) replacement cost method: a method that indicates *value* by calculating the *cost* of a similar *asset* offering equivalent utility,

(b) reproduction cost method: a method under the *cost* that indicates *value* by calculating the *cost* to recreating a replica of an *asset*, and

(c) summation method: a method that calculates the *value* of an *asset* by the addition of the separate *values* of its component parts.

Replacement Cost Method

A30.02 Generally, replacement cost is the *cost* that is relevant to determining the *price* that a participant would pay as it is based on replicating the utility of the *asset,* not the exact physical properties of the *asset*.

A30.03 Usually replacement cost is adjusted for physical deterioration and all relevant forms of obsolescence. After such adjustments, this can be referred to as depreciated replacement cost.

A30.04 The key steps in the replacement cost method are:

(a) calculate all of the *costs* that would be incurred by a typical participant seeking to create or obtain an *asset* providing equivalent utility,

(b) determine whether there is any depreciation related to physical, functional and external obsolescence associated with the subject *asset*, and

(c) deduct total depreciation from the total *costs* to arrive at a *value* for the subject *asset*.

A30.05 The replacement cost is generally that of a modern equivalent *asset*, which is one that provides similar function and equivalent utility to the *asset* being valued, but which is of a current design and constructed or made using current cost-effective materials and techniques.

Reproduction Cost Method

A30.06 Reproduction cost is appropriate in circumstances such as the following:

(a) the *cost* of a modern equivalent *asset* is greater than the *cost* of recreating a replica of the subject *asset*, or

(b) the utility offered by the subject *asset* could only be provided by a replica rather than a modern equivalent.

A30.07 The key steps in the reproduction cost method are:

(a) calculate all of the *costs* that would be incurred by a typical participant seeking to create an exact replica of the subject *asset*,

(b) determine whether there is any depreciation related to physical, functional and external obsolescence associated with the subject *asset*, and

(c) deduct total depreciation from the total *costs* to arrive at a *value* for the subject *asset*.

Summation Method

A30.08 The summation method, also referred to as the underlying asset method, is typically used for investment companies or other types of *assets* or entities for which *value* is primarily a factor of the *values* of their holdings.

A30.09 The key steps in the summation method are:

(a) value each of the component *assets* that are part of the subject *asset* using the appropriate *valuation approaches*, and

(b) add the *value* of the component *assets* together to reach the *value* of the subject *asset*.

Cost Considerations

A30.10 The cost approach *should* capture all of the *costs* that would be incurred by a typical participant.

A30.11 The cost elements may differ depending on the type of *asset* and *should* include the direct and indirect costs that would be required to replace/recreate the *asset* as of the *valuation date*. Some common items to consider include, but are not limited to:

(a) direct costs:

(i) materials, and

(ii) labour

(b) indirect costs:

(i) transport costs

(ii) installation costs

(iii) professional fees (design, permit, architectural, legal, etc)

(iv) other fees (commissions, etc)

(v) overheads

(vi) taxes

(vii) finance costs (eg, interest on debt financing), and

(viii) profit margin/to the creator of the *asset* (eg, return to investors).

A30.12 An *asset* acquired from a third party would presumably reflect their *costs* associated with creating the *asset* as well as some form of profit margin to provide a return on their investment. As such, under *bases of value* that assume a hypothetical transaction, it may be appropriate to include an assumed profit margin on certain *costs* which can be expressed as a target profit, either a lump sum or a percentage return on *cost* or *value*. However, financing costs, if included, may already reflect participants' required return on capital deployed, so the *valuer should* be cautious when including both financing costs and profit margins.

A30.13 When *costs* are derived from actual, quoted or estimated prices by third party suppliers or contractors, these *costs* will already include a third parties' desired level of profit.

A30.14 The actual *costs* incurred in creating the subject *asset* (or a comparable reference *asset*) may be available and provide a relevant indicator of the *cost* of the *asset.* However, adjustments may need to be made to reflect the following:

(a) cost fluctuations between the date on which this *cost* was incurred and the *valuation date*, and

(b) any atypical or exceptional *costs*, or savings that are reflected in the cost data but that would not arise in creating an equivalent.

Depreciation/Obsolescence

A30.15 In the context of the cost approach, "depreciation" refers to adjustments made to the estimated *cost* of creating an *asset* of equal utility to reflect the impact on *value* of any obsolescence affecting the subject *asset*. This meaning is different from the use of the word in financial reporting or tax law where it generally refers to a method for systematically expensing capital expenditure over time.

A30.16 Depreciation adjustments are normally considered for the following types of obsolescence, which may be further divided into sub-categories when making adjustments:

(a) physical obsolescence: any loss of utility due to the physical deterioration of the *asset* or its components resulting from its age and usage,

(b) functional obsolescence: any loss of utility resulting from inefficiencies in the subject *asset* compared with its replacement such as its design, specification or technology being outdated,

(c) external or economic obsolescence: any loss of utility caused by economic or locational factors external to the *asset*. This type of obsolescence can be temporary or permanent.

A30.17 Depreciation/obsolescence *should* consider the physical and economic lives of the *asset*:

(a) The physical life is how long the *asset* could be used before it would be worn out or beyond economic repair, assuming routine maintenance but disregarding any potential for refurbishment or reconstruction,

(b) The economic life is how long it is anticipated that the *asset* could generate financial returns or provide a non-financial benefit in its current use. It will be influenced by the degree of functional or economic obsolescence to which the *asset* is exposed.

A30.18 Except for some types of economic or external obsolescence, most types of obsolescence are measured by making comparisons between the subject *asset* and the hypothetical *asset* on which the estimated replacement or reproduction cost is based. However, when market evidence of the effect of obsolescence on *value* is available, that evidence *should* be considered.

A30.19 Physical obsolescence can be measured in two different ways:

(a) curable physical obsolescence, ie, the *cost* to fix/cure the obsolescence, or

(b) incurable physical obsolescence which considers the *asset*'s age, expected total and remaining life where the adjustment for physical obsolescence is equivalent to the proportion of the expected total life consumed. Total expected life may be expressed in any reasonable way, including expected life in years, mileage, units produced, etc.

A30.20 There are two forms of functional obsolescence:

(a) excess capital cost, which can be caused by changes in design, materials of construction, technology or manufacturing techniques resulting in the availability of modern equivalent *assets* with lower capital costs than the subject *asset*, and

(b) excess operating cost, which can be caused by improvements in design or excess capacity resulting in the availability of modern equivalent *assets* with lower operating costs than the subject *asset*.

A30.21 Economic obsolescence may arise when external factors affect an individual *asset* or all the *assets* employed in a business and *should* be deducted after physical deterioration and functional obsolescence. For real estate, examples of economic obsolescence include but are not limited to:

(a) adverse changes to demand for the products or services produced by the *asset*,

(b) oversupply in the market for the *asset*,

(c) a disruption or loss of a supply of labour or raw material,

(d) the *asset* being used by a business that cannot afford to pay a market rent for the *assets* and still generate a market rate of return, and

(e) adverse changes in the *environmental, social and governance* characteristics of the subject *asset*.

A30.22 Cash or cash equivalents do not suffer obsolescence and are not adjusted.

IVS 104 Data and Inputs

IVS 100 Valuation Framework | IVS 101 Scope of Work | IVS 102 Bases of Value | IVS 103 Valuation Approaches | **IVS 104 Data and Inputs** | IVS 105 Valuation Models | IVS 106 Documentation and Reporting

Contents **Paragraphs**

Contents	Paragraphs
Introduction	10
Use of a Specialist or Service Organisation	20
Characteristics of Relevant Data	30
Input Selection	40
Data and Input Documentation	50
Appendix	
Environmental, Social and Governance (ESG) Considerations	A10

IVS 104 *Data* and *Inputs* deals with the selection and use of *data* to be used as *inputs* in the *valuation*. The aim of the *valuation* is to maximise the use of relevant and *observable data* to the degree that it is possible.

10. Introduction

10.01 *Data* and *inputs* are used in developing *values* for all types of *assets* and *liabilities*. *Inputs* are derived from *data*, along with assumptions and adjustments and are used in the quantitative development of a *value* conclusion.

10.02 *Data* and *inputs should* be based on factual information (such as measurements or published *prices*), but often include reasoning and analysis in order to arrive at an *input* to be used in the *valuation*.

10.03 The *valuation should* maximise the use of *observable data. Observable data* is defined as information that is readily available to market participants about actual events or transactions that are used in determining the *value* for the *asset* or *liability.*

10.04 The *valuer* is responsible for assessing and selecting the *data*, assumptions and adjustments to be used as *inputs* in the *valuation* based upon *professional judgement* and *professional scepticism.*

20. Use of a Specialist or Service Organisation

20.01 If the *valuer* does not possess all of the necessary *data* to perform all aspects of the *valuation*, it is acceptable for the *valuer* to engage a *specialist* or *service organisation*.

20.02 Prior to using a *specialist* or *service organisation*, the *valuer must* ensure their capabilities meet the requirements of the *intended use* and *must* document their capabilities.

30. Characteristics of Relevant Data

30.01 The *valuer must* determine the *data* that is relevant, which for the purposes of IVS 104 *Data and Inputs* means "fitness for use" in terms of the *asset* and/ or *liability* being valued, the scope of work, the *valuation method* and the *valuation model*.

30.02 The *valuer must* apply *professional judgement* to balance the characteristics of relevant *data* listed below in order to choose the *inputs* used in the *valuation*. The characteristics of relevant *data* are:

(a) accurate: *data* are free from error and bias and reflect the characteristics that they are designed to measure,

(b) complete: set of *data* are sufficient to address attributes of the *assets* or *liabilities*,

(c) timely: *data* reflect the market conditions as of the *valuation date*,

(d) transparent: the source of the data can be traced from their origin.

30.03 In certain cases, the *data* may not incorporate all of these characteristics. Therefore, the *valuer must* assess *data* and conclude, based on *professional judgement*, that the *data* is relevant to value the *assets* and/or *liabilities* in accordance with the scope of work and the *valuation method*.

40. Input Selection

40.01 *Inputs must* be selected from relevant *data* in the context of the *asset* or *liability* being valued, the scope of work, the *valuation method*, and the *valuation model*.

40.02 *Inputs must* be sufficient for the *valuation models* being used to value the *asset* and/or *liability* based on the *valuer* using *professional judgement*.

40.03 When valuing portfolios or groups of similar *assets* or *liabilities*, *inputs should* be selected appropriately across those portfolios or groups of *assets*.

40.04 If *significant inputs* are inadequate or cannot be sufficiently justified, the *valuation* would not comply with IVS.

50. Data and Input Documentation

50.01 The source, selection and use of *significant data* and *inputs must* be explained, justified, and documented.

50.02 Documentation *must* be sufficient to enable the *valuer* applying *professional judgement* to understand why specific *data* was determined to be relevant and *inputs* were selected and were considered reasonable.

50.03 The form and location of documentation may vary based on the scope of work.

IVS 104 Data and Inputs: Appendix

The *valuer should* be aware of relevant legislation and frameworks in relation to the *environmental, social and governance* factors impacting a *valuation*.

A10. Environmental, Social and Governance (ESG) Considerations

A10.01 The impact of *significant ESG* factors *should* be considered in determining the *value* of a company, *asset* or *liability*.

A10.02 *ESG* factors may impact *valuations* both from a qualitative and quantitative perspective and may pose risks or opportunities that *should* be considered.

A10.03 Examples of environmental factors may include but are not limited to the following:

(a) air and water pollution,

(b) biodiversity,

(c) climate change (current and future risks),

(d) clean water and sanitation,

(e) carbon and other gas emissions,

(f) deforestation,

(g) natural disaster,

(h) resource scarcity or efficiency (eg, energy, water and raw materials),

(i) waste management.

A10.04 Examples of social factors may include but are not limited to the following:

(a) community relations,

(b) conflict,

(c) customer satisfaction,

(d) data protection and privacy,

(e) development of human capital (health & education),

(f) employee engagement,

(g) gender equality and racial equality,

(h) good health and well-being,

(i) human rights,

(j) working conditions,

(k) working environment.

A10.05 Examples of governance factors may include but are not limited to the following:

(a) audit committee structure,

(b) board diversity and structure,

(c) bribery and corruption,

(d) corporate governance,

(e) donations,

(f) *ESG* reporting standards and regulatory costs,

(g) executive remuneration,

(h) institutional strength,

(i) management succession planning,

(j) partnerships,

(k) political lobbying,

(l) rule of law,

(m) transparency,

(n) whistle-blower schemes.

A10.06 *ESG* factors and the *ESG* regulatory environment *should* be considered in *valuations* to the extent that they are measurable and would be considered reasonable by the *valuer* applying *professional judgement.*

IVS 105 Valuation Models

Contents	**Paragraphs**
Introduction	10
Use of a Specialist or Service Organisation	20
Characteristics of Appropriate Valuation Models	30
Valuation Model Selection and Use	40
Valuation Model Documentation	50

IVS 105 *Valuation Models* addresses the selection and use of *valuation models* to be used in the *valuation* process.

No model without the *valuer* applying *professional judgement,* for example an *automated valuation model (AVM),* can produce an IVS-compliant *valuation*.

10. Introduction

10.01 A *valuation model* is a tool used for the quantitative implementation of a *valuation method* in whole or in part. A *valuation model* converts *inputs* into outputs used in the development of a *value*, whereas a *valuation method* is a specific technique to develop a *value*.

10.02 *Valuation models must* be suitable for the *intended use* of the *valuation* and consistent with *inputs*.

10.03 *Valuation models* can be developed internally or sourced externally from a *specialist* or *service organisation*.

10.04 *Valuation models* used *must* be tested to ensure accuracy of the output is appropriate for the *intended use, basis of value* and the *assets* and/or *liabilities* being valued.

10.05 In all cases the *valuer must* apply *professional judgement* and *professional scepticism* in the selection and use of *valuation models* and the application of *inputs* used in the *valuation model*.

20. Use of a Specialist or Service Organisation

20.01 If the *valuer* does not possess all of the necessary *valuation models* to perform all aspects of the *valuation*, it is acceptable for the *valuer* to engage a *specialist* or *service organisation* to provide a *valuation model*.

20.02 Prior to using a *specialist* or *service organisation*, the *valuer must* assess and document their capabilities.

30. Characteristics of Appropriate Valuation Models

30.01 The *valuer must* determine that the *valuation model* is appropriate, which for the purposes of IVS 105 *Valuation Models* means "fit for purpose" in terms of *assets* or *liabilities* being valued, the scope of work and the *valuation method.* The *valuer must* apply *professional judgement* to balance the characteristics of a *valuation model* in order to choose the most appropriate *valuation model*. The characteristics of appropriate *valuation models* are shown below:

(a) accuracy: the *valuation model* is free from error and functions in a manner consistent with the objectives of the *valuation*,

(b) completeness: the *valuation model* addresses all the features of the *asset* and/or *liability* to determine *value*,

(c) timeliness: the *valuation model* reflects the market conditions as of the *valuation date*,

(d) transparency: all persons preparing and relying on the *valuation model must* understand how the *valuation model* works and its inherent limitations.

30.02 In certain cases, the *valuation model* may not incorporate all of these characteristics. Therefore, the *valuer must* assess and conclude that the *valuation model* is appropriate to value the *assets* and/or *liabilities* in accordance with the scope of work and the *valuation method*.

40. Valuation Model Selection and Use

40.01 The *valuation model should* be selected in the context of the *intended use*, *basis of value* and the *asset* and/or *liability* being valued.

40.02 Regardless of whether the *valuation model* is developed internally or externally sourced the *valuer must* assess the *valuation model* in order to determine that the *valuation model* is fit for its *intended use.*

40.03 The *valuer must* understand the way the *valuation model* operates.

40.04 The *valuation model should* be tested for functionality and outputs *must* be analysed for accuracy. Any *significant* limitations *should* be identified, along with any potentially *significant* adjustments.

40.05 *Valuation models* used over time *should* be maintained, monitored, assessed, and adjusted to ensure that they remain appropriate, accurate and complete.

40.06 If *significant* limitations have been identified or adjustments required then these *must* be explained, justified, and documented.

40.07 If *significant* limitations or adjustments cannot be sufficiently justified, the *valuation* would not comply with IVS.

50. Valuation Model Documentation

50.01 A suitable *valuation model should* have documentation that includes the following information:

(a) support for the selection or creation of the *valuation model*,

(b) description of the *inputs* and outputs,

(c) *significant inputs*,

(d) limitations, and

(e) quality control procedures and results.

50.02 Documentation *should* be sufficient to describe why the *valuation model(s)* were selected and considered by the *valuer* applying *professional judgement*.

IVS 106 Documentation and Reporting

Contents	Paragraphs
Introduction	10
Documentation	20
Valuation Reports	30
Valuation Review Reports	40

Valuation reports and documentation are a critical and defining feature of IVS, which collectively assist in creating consistency, professionalism, transparency, comparability, and trust in *valuation* to serve the public interest.

10. Introduction

10.01 An IVS-compliant *valuation must* have sufficient documentation and reporting to describe and provide transparency to the *intended user* on the *valuation approach(es)*, *valuation methods*, *inputs*, *valuation models*, *professional judgement*, and resultant *value(s)*.

10.02 The results of a *valuation* or *valuation review must* be documented and reported in writing and may include paper, electronic files, or other forms of recorded media.

10.03 Documentation and reporting requirements apply regardless of whether the *valuer* is employed by the *client* or externally engaged by the *client*.

10.04 Documentation *must* be maintained throughout the *valuation* and *must* describe the *valuation* and the basis of conclusions made. The level of documentation *must* at a minimum meet the requirements contained in IVS 106 *Documentation and Reporting*, section 20.

10.05 Reporting *must* be provided to the *client* in writing (see para 10.02 of this standard). The level of reporting *must* at a minimum meet the requirements contained in section 30 of this standard.

20. Documentation

20.01 Documentation is the written record of the *valuation* or *valuation review* and may include communications with the *client*, working papers, or both, used to support the conclusions reached and compliance with IVS.

20.02 Documentation *must* be maintained to describe the *valuation* or *valuation review* and *must* be sufficient to describe the conclusion reached by the *valuer*. Documentation *must* be adequate to allow the *valuer* applying *professional judgement* to understand the scope of the *valuation*, the work performed, and the conclusions reached.

20.03 In some cases, all documentation is included in the *valuation* report or *valuation review* report. In other cases, depending on the agreed scope of work, additional documentation *must* be maintained. Documentation *should* include but is not limited to communications with the *client*, alternative methods explored, additional *data* and *inputs* considered, risks and biases addressed, *professional judgement* used, and the *valuation* quality control procedures followed.

20.04 In all cases, documentation *should* describe the *valuation* or *valuation review* and how the *valuer* managed *valuation risk*. The *valuer must* keep a copy of any report issued on the *value* and a record of the valuation work performed for a period in accordance with legal, regulatory, authoritative or contractual requirements relative to the *intended use*.

30. Valuation Reports

30.01 Valuation reports *must* provide, in sufficient detail, a clear and well-structured description of the basis for the conclusion of *value*.

30.02 Valuation reports may reference other documents. These documents may include but are not limited to scope of work, internal policies, and procedures.

30.03 Valuation reports *should* include all information necessary to provide the *client* with a clear description of the scope of work, the work performed, *professional judgements* made and the basis for conclusions reached.

30.04 The format of the valuation reports may range from comprehensive narrative reports to abbreviated summary reports.

30.05 Standing engagements that require frequent or repeated *valuations* may provide updates to an existing IVS-compliant report providing it is agreed upon in the scope of work.

30.06 Valuation reports *must* convey the following, at a minimum:

(a) agreed scope of the work,

(b) *assets* and/or *liabilities* being valued,

(c) the identity of the *valuer,*

(d) *client*,

(e) *intended use*,

(f) *intended users*, if applicable,

(g) valuation currency(ies) used,

(h) *valuation date(s)*,

(i) *basis/es of value* adopted,

(j) the *valuation approach(es)* adopted,

(k) *valuation method(s)* or *valuation model(s)* applied,

(l) sources and selection of *significant data* and *inputs* used,

(m) *significant environmental, social and governance* factors used and considered,

(n) *significant* or special assumptions, and/or limiting conditions,

(o) findings of a *specialist* or *service organisation*,

(p) *value* and rationale for *valuation*,

(q) IVS compliance statement,

(r) the date of the report (which may differ from the *valuation date*).

30.07 In all instances the valuation report *must* be sufficient to describe the conclusion reached and be considered reasonable by the *valuer* applying *professional judgement*.

30.08 If the *valuer* concludes that a limitation or restriction will impact compliance with IVS, the *valuer must* not state that the report is compliant with IVS.

40. Valuation Review Reports

40.01 A *valuation review* is not a *valuation*. A *valuation review must* state whether the review is a *valuation process review* or a *value review* or both:

(a) a *valuation process review* addresses compliance with IVS,

(b) a *value review* addresses the reasonableness of a *value*.

40.02 If a *value* is provided as part of the *value review*, then this is a *valuation* (see section 30 of this standard).

40.03 A *valuation review must* convey the following, at a minimum:

(a) agreed scope of the *valuation review*,

(b) *assets* and/or *liabilities* reviewed,

(c) the identity of the *valuation reviewer*,

(d) the identity of the *client*,

(e) *intended use*,

(f) *intended users,* if applicable,

(g) *significant* or special assumptions and/or limiting conditions pertaining to the *valuation* reviewed,

(h) the use of a *specialist* or *service organisation* if used, as part of the *valuation review*,

(i) procedures undertaken and the documentation reviewed,

(j) the *valuation reviewer's* conclusions about the work under review, including supporting reasons, and

(k) the subject of the review,

(l) the date of the valuation review report,

(m) the version of IVS that is applicable to the review.

40.04 In all instances the valuation review report *must* be sufficient to describe the conclusion reached and be considered reasonable by the *valuer* applying *professional judgement*.

Asset Standards

IVS 200 Businesses and Business Interests

IVS 200 Businesses and Business Interests | IVS 210 Intangible Assets | IVS 220 Non-Financial Liabilities | IVS 230 Inventory | IVS 300 Plant, Equipment and Infrastructure | IVS 400 Real Property Interests | IVS 410 Development Property | IVS 500 Financial Instruments

Contents

Contents	Paragraphs
Overview	10
Introduction	20
Bases of Value	30
Valuation Approaches and Methods	40
Market Approach	50
Income Approach	60
Cost Approach	70
Special Considerations for Businesses and Business Interests	80
Ownership Rights	90
Business Information	100
Economic and Industry Considerations	110
Operating and Non-Operating Assets	120
Capital Structure Considerations	130

10. Overview

10.01 The principles contained in the General Standards apply to *valuation*s of businesses and business interests. This standard contains additional requirements that apply to *valuation*s of businesses and business interests.

20. Introduction

20.01 The definition of what constitutes a business may differ depending on the *intended use* of a *valuation*, but generally involves an organisation or integrated collection of *assets* and/or *liabilities* engaged in commercial, industrial, service or investment activity. Generally, a business would include more than one *asset* (or a single *asset* and/or *liability* in which the *value* is dependent on employing additional *assets* and/or *liabilities*) working together to generate economic activity that differs from the outputs that would be generated by the individual *assets* and/or *liabilities* on their own.

20.02 Individual *intangible assets*, or a group of *intangible assets*, might not constitute a business but would nonetheless be within the scope of this standard if such *assets* generate economic activity that differs from the outputs that would be generated by the individual *assets* on their own. If the *assets* do not meet this criterion the *valuer should* defer to IVS 210 *Intangible Assets* or IVS 220 *Non-Financial Liabilities*.

20.03 The commercial, industrial, service or investment activity of the business may result in greater economic activity (ie, *value*), than those *assets* and/or *liabilities* would generate separately. The excess value is often referred to as goodwill. The absence of goodwill does not automatically imply that the *asset* or group of *assets* does not constitute a business. In addition, substantially all the *value* of *assets* and/or *liabilities* within a business may reside in a single *asset*.

20.04 Businesses can take many legal forms, including but not limited to corporations, partnerships, joint ventures and sole proprietorships. Businesses can also include subsets or specific business activities of an entity, such as a division, a branch, or a segment.

20.05 Interests in a business (eg, securities) can take many forms. To determine the *value* of a business interest, the *valuer should* apply these standards to determine the *value* of the underlying business. In such instances, business interests *should* fall within the scope of this standard. Depending on the nature of the interest, certain other standards may be applicable.

20.06 The *valuer must* establish whether the *valuation* is performed for the entire entity or business, shares, or a shareholding in the entity and whether it is a controlling or non-controlling interest, or a specific business activity of the entity.

20.07 The *valuer must* specify and define the business or business interest being valued. This includes but is not limited to:

(a) enterprise value: often described as the total *value* of the equity in a business plus the *value* of its debt or debt-related *liabilities*, minus any cash or cash equivalents available to meet those *liabilities*,

(b) total invested capital value: often described as the total amount of money currently invested in a business, regardless of the source, often reflected as the *value* of total *assets* less current *liabilities*,

(c) operating value: often described as the total *value* of the operations of the business, excluding the *value* of any non-operating *assets* and *liabilities*, and

(d) equity value: often described as the *value* of a business to all its equity shareholders.

20.08 The *valuer must* specify and define the proportion of the interest valued and its related impact on the *valuation*.

20.09 *Valuation*s of businesses are required for different *intended uses* including but not limited to acquisitions, mergers and sales of businesses, taxation, litigation, insolvency proceedings, and financial reporting. Business valuations may also be needed as an input or step in other *valuations* such as the *valuation* of stock options, particular class(es) of stock, or debt.

30. Bases of Value

30.01 In accordance with IVS 102 *Bases of Value*, the *valuer must* select the appropriate *basis(es) of value* when valuing a business or business interest.

30.02 Often, business valuations are performed using *bases of value* defined by entities/organisations other than the IVSC. Some examples of these *bases of value* are mentioned in IVS 102 *Bases of Value*.

30.03 It is the *valuer's* responsibility to understand and follow the legislation, regulation, case law and/or other interpretive guidance related to those *bases of value* effective at the *valuation date*.

40. Valuation Approaches and Methods

40.01 The three principal *valuation approaches* described in IVS 103 *Valuation Approaches* may be applied to the *valuation* of businesses and business interests.

40.02 When selecting a *valuation approach* and *valuation method*, in addition to the requirements of this standard, the *valuer must* follow the requirements of IVS 103 *Valuation Approaches*, including para 10.04.

50. Market Approach

50.01 The market approach is frequently applied in the *valuation* of businesses and business interests as these *assets* and/or *liabilities* often meet the criteria in IVS 103 *Valuation Approaches,* paras 20.02 and 20.03. When valuing businesses and business interests under the market approach, the *valuer should* follow the requirements of IVS 103 *Valuation Approaches*, including but not limited to sections 20 and Appendix A10.

50.02 The three most common sources of *data* used as *inputs* to value businesses and business interests using the market approach are:

(a) public markets in which ownership interests of similar businesses are traded,

(b) the acquisition market in which entire businesses or controlling interests in businesses are bought and sold, and

(c) prior transactions or offers for the ownership of the subject business.

50.03 There *must* be a reasonable basis for comparison with, and reliance upon, similar businesses in the market approach. These similar businesses *should* be in the same industry as the subject business or in an industry that responds to the same economic variables.

Factors that *should* be considered in assessing whether a reasonable basis for comparison between the subject company and the comparable companies exists include but are not limited to:

(a) similarity to the subject business in terms of qualitative and quantitative business characteristics,

(b) amount and verifiability of *data* on the similar business, and

(c) whether the *price* of the similar business represents a transaction consistent with the applicable *basis of value*.

50.04 When applying a market multiple, adjustments such as those specified in IVS 103 *Valuation Approaches,* Appendix A10.14 may be appropriate to both the subject company and the comparable companies.

50.05 The *valuer should* follow the requirements of IVS 103 *Valuation Approaches* Appendix A10.06–A10.08 when selecting and adjusting comparable transactions.

50.06 The *valuer should* follow the requirements of IVS 103 *Valuation Approaches*, Appendix A10.12–A10.14 when selecting and adjusting comparable public company information.

60. Income Approach

60.01 The income approach is frequently applied in the *valuation* of businesses and business interests as these *assets* and/or *liabilities* often meet the criteria in IVS 103 *Valuation Approaches*, paras 30.02 and 30.03.

60.02 When the income approach is applied, the *valuer should* follow the requirements of IVS 103 *Valuation Approaches*, section 30 and Appendix A20.

60.03 Income and cash flow related to a business or business interest can be measured in a variety of ways and may be determined on a pre-tax or post-tax basis. The capitalisation or *discount rate* applied *must* be consistent with the type of income or cash flow used.

60.04 The type of income or cash flow used *must* be consistent with the type of interest being valued. Examples of this requirement include but are not limited to:

(a) enterprise value: usually derived using cash flows before debt servicing costs and an appropriate *discount rate* applicable to enterprise-level cash flows, such as a *weighted*-average cost of capital, and

(b) equity value: usually derived using cash flows to equity after debt servicing costs, and an appropriate *discount rate* applicable to equity-level cash flows, such as a *cost* of equity.

60.05 The income approach requires the estimation of:

(a) a capitalisation rate when capitalising income, or

(b) cash flow and a *discount rate* when discounting cash flows.

60.06 In estimating the appropriate capitalisation rate, the *valuer should* consider factors including but not limited to the level of interest rates, rates of return expected by participants for similar investments and the risk inherent in the anticipated benefit stream (see IVS 103 *Valuation Approaches*, Appendix A20).

60.07 In methods that employ discounting, expected growth may be explicitly considered in the forecasted income or cash flow. In methods that employ capitalisation, expected growth is usually reflected in the capitalisation rate.

60.08 If a forecasted cash flow is expressed in nominal terms, a *discount rate* consistent with the expectation of future price changes due to inflation or deflation *should* be used. If a forecasted cash flow is expressed in real terms, a *discount rate* that takes no account of expected price changes due to inflation or deflation *should* be used.

60.09 Under the income approach, historical financial statements of a business entity are often used as a basis to estimate the future income or cash flow of the business. Determining the historical trends over time through ratio analysis may help provide the necessary information to assess the risks inherent in the business operations.

60.10 When historical financial results are used as a basis for determining future income or cash flows, adjustments may be appropriate to reflect differences between the actual historic cash flows and those that would be experienced prospectively at the *valuation date*. The adjustments *should* be consistent with the applicable *basis of value*.

Examples of such adjustments include but are not limited to:

(a) adjusting revenues and expenses to levels that are reasonably representative of expected continuing operations,

(b) presenting financial data of the subject business and comparison businesses on a consistent basis,

(c) adjusting non-arm’s length transactions (such as contracts with customers or suppliers) to market rates,

(d) adjusting the *cost* of labour or of items leased or otherwise contracted from related parties to reflect market prices or rates,

(e) reflecting the impact of non-recurring events from historic revenue and expense items. Examples of non-recurring events include losses caused by strikes, new plant start-up and weather phenomena. Forecast cash flows *should* reflect any non-recurring revenues or expenses that can be reasonably anticipated Past occurrences may be indicative of similar events in the future, and

(f) adjusting the accounting of inventory to accurately reflect economic reality or to allow a comparison with similar businesses whose accounts may be kept on a different basis from the subject business.

60.11 When using an income approach, it may also be necessary to adjust the *valuation* to reflect other matters that are not captured in either the cash flow forecasts or the *discount rate* adopted.

Examples of such adjustments include but are not limited to adjustments for the marketability of the interest being valued or adjustments reflecting whether the interest being valued is a controlling or non-controlling interest in the business.

60.12 The *valuer should* ensure that adjustments to the *valuation* do not reflect factors that were already reflected previously included in the cash flows or *discount rate*.

For example, forecast cash flows may already reflect that the interest being valued is a controlling or non-controlling interest in the business.

60.13 While many businesses may be valued using a single cash flow scenario, the *valuer* may also apply multi-scenario or simulation models, particularly when there is *significant* uncertainty as to the amount and/or timing of future cash flows.

70. Cost Approach

70.01 The cost approach is rarely applicable in the *valuation* of businesses and business interests as these *assets* and/or *liabilities* seldom meet the criteria in IVS 103 *Valuation Approaches*, paras 40.02 or 40.03.

The cost approach is sometimes applied in the *valuation* of businesses, particularly when:

(a) the business is an early stage or start-up business where profits and/or cash flow cannot be reliably determined and comparisons with other businesses under the market approach are impractical or unreliable,

(b) the business is an investment or holding business, in which case the summation method described in IVS 103 *Valuation Approaches*, Appendix A30.8–A30.9 is applicable, and/or

(c) the business does not represent a going concern and/or the *value* of its *assets* and/or *liabilities* in a liquidation may exceed the business' value as a going concern.

70.02 In the circumstances where a business or business interest is valued using a cost approach, the *valuer must* follow the requirements of IVS 103 *Valuation Approaches*, section 40 and Appendix A30.

80. Special Considerations for Businesses and Business Interests

80.01 The following sections address a non-exhaustive list of topics relevant to the *valuation* of businesses and business interests:

(a) Ownership Rights (section 90),

(b) Business Information (section 100),

(c) Economic and Industry Considerations (section 110),

(d) Operating and Non-Operating Assets (section 120),

(e) Capital Structure Considerations (section 130).

90. Ownership Rights

90.01 The rights, privileges or conditions that attach to the ownership interest, whether held in proprietorship, corporate or partnership form, require consideration in the *valuation.* Ownership rights are usually defined within a *jurisdiction* by legal documents such as articles of association, clauses in the memorandum of the business, articles of incorporation, bylaws, partnership agreements and shareholder agreements. These documents are collectively known as “corporate documents”.

90.02 In some situations, the *valuer* may be required to distinguish between legal and beneficial ownership of a business interest.

90.03 Corporate documents may contain restrictions on the transfer of an interest and/or other provisions relevant to *value*. For example, corporate documents may stipulate that the interest *should* be valued as a pro rata fraction of the entire issued share capital regardless of whether it is a controlling or non-controlling interest. In each case, the rights of the interest being valued and the rights attendant to other classes of interest *should* be considered.

90.04 The *valuer should* distinguish between rights and obligations inherent to the subject interest and those that may be applicable only to a particular shareholder For example, an agreement between current shareholders may not apply to a potential buyer of the ownership interest. Depending on the *basis(es) of value* used, the *valuer* may be required to consider only the rights and obligations inherent to the subject interest or both those rights and considerations inherent to the subject interest and those that apply to a specific owner.

90.05 All rights and preferences associated with a subject business or business interest *should* be considered in a *valuation*, including but not limited to:

(a) Where multiple classes of equity and/or hybrid securities exist, the *valuation should* consider the rights of each different class, including, but not limited to:

(i) liquidation preferences,

(ii) voting rights,

(iii) redemption, conversion and participation provisions, and

(iv) put and/or call rights.

(b) Where a controlling interest in a business may have a higher *value* than a non-controlling interest. Control premiums or discounts for lack of control may be appropriate depending on the *valuation method(s)* applied (see IVS 103 *Valuation Approaches*, Appendix A10.17 (b)) and/or the *intended use* of the *valuation*. When evaluating premiums paid in completed transactions, the *valuer should* consider whether the synergies and other factors that caused the acquirer to pay those premiums are applicable to the subject *asset* to a comparable degree.

100. Business Information

100.01 The *valuation* of a business entity or interest frequently requires reliance upon information received from management, representatives of the management or other experts.

As required by IVS 103 *Valuation Approaches*, Appendix A20.13 the *valuer must* assess the reasonableness of information received from management, representatives of management or other experts and evaluate whether it is appropriate to rely on that information for the *valuation*.

For example, prospective financial information provided by management may reflect specific synergies that may not be consistent with the requirements of the *valuation*.

100.02 Although the *value* on a given *valuation date* reflects the anticipated benefits of future ownership, the history of a business may provide useful guidance to set expectations for the future. The valuer *should* therefore consider the business' historical financial statements as an *input* to a *valuation*.

Where the future performance of the business is expected to deviate *significantly* from historical experience, the *valuer must* understand why historical performance is not representative of the future expectations of the business.

110. Economic and Industry Considerations

110.01 Awareness of relevant economic developments and specific industry trends is essential for all *valuation*s. Matters including but not limited to political outlook, government policy, exchange rates, inflation, interest rates and market activity may affect *assets* and/or *liabilities* in different locations and/or sectors of the economy quite differently.

These factors can be important in the *valuation* of businesses and business interests, since businesses may have complex structures involving multiple locations and types of operations.

For example, a business may be impacted by economic and industry-specific factors related to:

(a) the registered location of the business headquarters and legal form of the business,

(b) the nature of the business operations and where each aspect of the business is conducted (ie, manufacturing may be done in a different location to where research and development is conducted),

(c) where the business sells its goods and/or services,

(d) the currency(ies) the business uses,

(e) where the suppliers of the business are located, and

(f) the tax and legal *jurisdictions* the business operates in.

120. Operating and Non-Operating Assets

The *valuation* of an ownership interest in a business is only relevant in the context of the financial position of the business at a point in time. The *valuer should* determine which items are required for use in the operations of the business and which ones are redundant or “excess” to the business at the *valuation date*.

Most *valuation methods* do not capture the *value* of *assets* and/or *liabilities* that are not required for the operation of the business.

For example, the *valuation* of a business using a multiple of EBITDA would only capture the *value* the *assets* utilised in generating that level of EBITDA. If the business has non-operating *assets* or *liabilities*, such as an idle manufacturing plant, the *value* of that non-operating plant would not be captured in the *value*. Depending on the scope of the valuation engagement (see para 120.03 of this standard), the *value* of non-operating *assets* and/or *liabilities* may need to be separately determined and added to the *value* of the operating assets to determine the *value*.

When separately considering non-operating *assets* and *liabilities*, the *valuer should* ensure that the income and expenses associated with non-operating *assets* and/or *liabilities* are excluded from the cash flow measurements and projections used in the *valuation* of the operating business.

For example, if a business has a *significant liability* associated with an underfunded pension and that *liability* is valued separately, the cash flows used in the *valuation* of the business *should* exclude any "catch-up" payments related to that *liability*.

Businesses may have unrecorded *assets* and/or *liabilities* that are not reflected on the balance sheet. Such *assets* and/or *liabilities* could include *intangible assets*, machinery and equipment that is fully depreciated, and legal liabilities/lawsuits. The *valuer should* consider whether these *assets* and/or *liabilities* form part of the operating business or are non-operating *assets* and/or *liabilities.*

If the *valuation* includes information from publicly-traded businesses, the publicly traded stock prices usually implicitly include the *value* of non-operating *assets* and/or *liabilities*, where they exist. The *valuer should* consider adjusting information from publicly traded businesses to exclude the *value*, income and expenses associated with non-operating *assets* and/or *liabilities*.

130. Capital Structure Considerations

130.01 Businesses are often financed through a combination of debt and equity. The *valuer* could be asked to value only equity, or a specific class of equity, or some other form of ownership interest.

Equity, or a specific class of equity can occasionally be valued directly. However, it is more usual for the enterprise value of the business to be determined before allocating *value* between the various classes of debt and equity.

130.02 While there are many ownership interests in an *asset* which the *valuer* could be mandated to value, the list of such interests includes but is not limited to:

(a) bonds,

(b) convertible debt,

(c) partnership interest,

(d) non-controlling interest,

(e) common equity,

(f) preferred equity,

(g) options,

(h) warrants.

130.03 When the *valuer* is mandated to value only equity, or to determine how the business value is distributed among the various debt and equity classes, the *valuer must* determine and consider the different rights and preferences associated with each class of debt and equity.

130.04 Rights and preferences can broadly be categorised as economic rights or control rights.

Such rights and preferences include but are not limited to:

(a) dividend or preferred dividend rights,

(b) liquidation preferences,

(c) voting rights,

(d) redemption rights,

(e) conversion rights,

(f) participation rights,

(g) anti-dilution rights,

(h) registration rights, and

(i) put and/or call rights.

130.05 For simple capital structures that include only common stock and simple debt structures (such as bonds, loans and overdrafts), it may be possible to estimate the *value* of all of the common stock within the enterprise by directly estimating the *value* of debt, subtracting that *value* from the enterprise value, then allocating the residual equity value pro rata to all of the common stock.

This method is not appropriate for all companies with simple capital structures. For example it may not be appropriate for distressed or highly leveraged companies.

130.06 For complex capital structures that include a form of equity other than just common stock, the *valuer* may use any reasonable method to determine the *value* of equity or a particular class of equity.

In such cases, the enterprise value of the business is usually determined first and then that *value* is allocated between the various classes of debt and equity.

Three methods that the *valuer* may utilise in such instances are discussed in this section, including:

(a) current value method (CVM),

(b) option pricing method (OPM), and

(c) probability-*weighted* expected return method (PWERM).

130.07 While the CVM is not forward looking, both the OPM and PWERM estimate *values* assuming various future outcomes. The PWERM relies on discrete assumptions for future events and the OPM estimates the future distribution of outcomes using a lognormal distribution around the current value.

130.08 The *valuer should* consider any potential differences between a "pre-money" and "post-money" valuation, particularly for early stage companies with complex capital structures. For example, an infusion of cash (ie, "post- money valuation") for such companies may impact the overall risk profile of the business as well as the relative value allocation between share classes.

130.09 The *valuer should* consider recent transactions in the subject equity or a specific class of equity, and ensure the assumptions used in the subject *valuation* are updated as necessary to reflect changes in the investment structure and changes in market conditions.

Current Value Method (CVM)

130.10 The current value method (CVM) allocates the enterprise value to the various debt and equity securities assuming an immediate sale of the enterprise. Under the CVM, the obligations to debt holders, or debt equivalent securities, is first deducted from the enterprise value to calculate residual equity value. The *valuer should* consider if the enterprise value includes or excludes cash, and the resulting use of gross or net debt for allocation purposes. Next, *value* is allocated to the various series of preferred stock based on the series' liquidation preferences or conversion values, whichever are greater. Finally, any residual value is allocated to any common equity, options, and warrants.

130.11 A limitation of the CVM is that it is not forward looking and fails to consider the option-like payoffs of many share classes.

130.12 The CVM *should* only be used when:

(a) a liquidity event of the enterprise is imminent, or

(b) when an enterprise is at such an early stage of its development that no *significant* common equity value above the liquidation preference on any preferred equity has been created, or

(c) no material progress has been made on the company's business plan, or

(d) no reasonable basis exists for estimating the amount and timing of any such *value* above the liquidation preference that might be created in the future.

130.13 The *valuer should* not assume that the *value* of debt, or debt-like securities, and its book value are equal without a rationale for the determination.

Option Pricing Method (OPM)

130.14 The OPM values the different share classes by treating each share class as an option on the cash flows from the enterprise. The OPM is often applied to capital structures in which the payout to different share classes changes at different levels of total equity value. These share classes include but are not limited to convertible preferred shares, management incentive units, options, or other classes of shares that have certain liquidation preferences.

130.15 The OPM may be performed on the enterprise value, thereby including any debt in the OPM, or on an equity basis after separate consideration of the debt.

130.16 The OPM considers the various terms of the stockholder agreements that would affect the distributions to each class of equity upon a liquidity event, including the level of seniority among the securities, dividend policy, conversion ratios and cash allocations.

130.17 The starting point for the OPM is the *value* of total equity for the business. The OPM is then applied to allocate the total equity value among equity securities.

130.18 The OPM (or a related hybrid method) is suited to circumstances where specific future liquidity events are difficult to forecast or the business is in an early stage of development.

130.19 The OPM most frequently relies on the Black-Scholes option pricing model to determine the *value* associated with distributions above certain value thresholds. However, in more complex capital structures, alternative techniques, such as the Monte Carlo simulation, may be justified.

130.20 When applying the OPM, the list of steps the *valuer should* perform includes but is not limited to:

(a) determine the total equity value of the business,

(b) identify the liquidation preferences, preferred dividend accruals, conversion prices, and other features attached to the relevant securities that influence the cash distribution,

(c) determine the different total equity value points (breakpoints) in which the liquidation preferences and conversion prices become effective,

(d) determine the *inputs* to the Black-Scholes or other option models:

(i) determine a reasonable time horizon for the OPM,

(ii) select a risk-free rate corresponding to the time horizon,

(iii) determine the appropriate volatility factor for the equity, and

(iv) determine the expected dividend yield.

(e) calculate a *value* for the various call options and determine the *value* allocated to each interval between the breakpoints,

(f) determine the relative allocation to each class of shares in each interval between the calculated breakpoints,

(g) allocate the *value* between the breakpoints (calculated as the call options) among the share classes based on the allocation determined in step (f) and the *value* determined in step (e),

(h) consider additional adjustments to the share classes as necessary, consistent with the *basis of value*. For example, it may be appropriate to apply discounts or premiums.

130.21 When determining the appropriate volatility assumption the *valuer should* consider:

(a) the development stage of the *asset* and the relative impact to the volatility when compared with that observed by the comparable companies, and

(b) the relative financial leverage of the *asset*.

130.22 In addition to the method discussed above, the OPM can be used to back solve for the *value* of total equity value when there is a known *price* for an individual security. The *inputs* to a back solve analysis are the same as above. The *valuer* will then solve for the *price* of the known security by changing the *value* of total equity. The back solve method also provides a *value* for all other equity securities.

Probability-Weighted Expected Return Method (PWERM)

130.23 Under a PWERM, the *value* of the various equity securities are estimated based upon an analysis of future *values* for the business, assuming various future outcomes. Share value is based upon the probability-*weighted* present value of expected future investment returns, considering each of the possible future outcomes available to the *asset*, as well as the rights and preferences of the share classes.

130.24 Typically, the PWERM is used when the business is close to an exit event and does not plan to raise additional capital.

130.25 When applying the PWERM, the list of steps the *valuer should* perform includes but is not limited to:

(a) determine the possible future outcomes available to the *asset*,

(b) estimate the future value of the *asset* under each outcome,

(c) allocate the estimated future value of the *asset* to each class of debt and equity under each possible outcome,

(d) discount the expected value allocated to each class of debt and equity to present value using a risk-adjusted *discount rate*,

(e) weight *each* possible outcome by its respective probability to estimate the expected future probability-*weighted* cash flows to each class of debt and equity, and

(f) consider additional adjustments to the share classes as necessary, consistent with the *basis of value*. For example, it may be appropriate to apply discounts or premiums.

130.26 The *valuer should* reconcile the probability-*weighted* present values of the future exit values to ensure that the overall *valuation* of the business is reasonable.

130.27 The *valuer* can combine elements of the OPM with the PWERM to create a hybrid methodology by using the OPM to estimate the allocation of *value* within one or more of the probability-*weighted* scenarios.

IVS 210 Intangible Assets

IVS 200 Businesses and Business Interests | IVS 210 Intangible Assets | IVS 220 Non-Financial Liabilities | IVS 230 Inventory | IVS 300 Plant, Equipment and Infrastructure | IVS 400 Real Property Interests | IVS 410 Development Property | IVS 500 Financial Instruments

Contents	Paragraphs
Overview	10
Introduction	20
Bases of Value	30
Valuation Approaches and Methods	40
Market Approach	50
Income Approach	60
Cost Approach	70
Special Considerations for Intangible Assets	80
Discount Rates/Rates of Return for Intangible Assets	90
Intangible Asset Economic Lives	100
Tax Amortisation Benefit (TAB)	110

10. Overview

10.01 The principles contained in the General Standards apply to *valuation*s of *intangible assets* and *valuations* with an *intangible asset* component. This standard contains additional requirements that apply to *valuations* of *intangible assets*.

20. Introduction

20.01 An *intangible asset* is a non-monetary *asset* that manifests itself by its economic properties. It does not have physical substance but grants rights and/or economic benefits to its owner.

20.02 Specific *intangible assets* are defined and described by characteristics such as their ownership, function, market position, image, and legal protection. These characteristics differentiate *intangible assets* from one another.

20.03 There are many types of *intangible assets*, but they are often considered to fall into one or more of the following categories, or into goodwill:

(a) marketing-related *intangible assets* are used primarily in the marketing or promotion of products or services. Examples include trademarks, trade names, unique trade design and internet domain names,

(b) customer-related *intangible assets* include customer lists, backlog, customer contracts, and contractual and non-contractual customer relationships,

(c) artistic-related *intangible assets* arise from the right to benefits from artistic works such as plays, books, films and music, and from non-contractual copyright protection,

(d) contract-related *intangible assets* represent the *value* of rights that arise from contractual agreements. Examples include licensing and royalty agreements, service or supply contracts, lease agreements, permits, broadcast rights, servicing contracts, employment contracts and non-competition agreements and natural resource rights,

(e) technology-related *intangible assets* arise from contractual or non-contractual rights to use patented technology, unpatented technology, databases, formulae, designs, software, processes or recipes.

20.04 Although similar *intangible assets* within the same class will share some characteristics with one another, they will also have differentiating characteristics that will vary according to the type of *intangible asset*.

20.05 In addition, certain *intangible assets*, such as brands, may represent a combination of several categories listed in para 20.03.

20.06 When valuing an *intangible asset*, the *valuer must* understand specifically what needs to be valued and the *intended use* of the *valuation*. For example, customer data (names, addresses, etc) typically have very different *values* from customer contracts (those contracts in place on the *valuation date*) and from customer relationships (the *value* of the ongoing customer relationship including existing and future contracts). Which *intangible assets* need to be valued and the definition of those *intangible assets* may differ depending on the *intended use* of the *valuation.* Differences in how *intangible assets* are defined can lead to *significant* differences in *value*.

20.07 Generally, goodwill is any future economic benefit arising from a business, an interest in a business or from the use of a group of *assets* which has not been separately recognised in another *asset*. The *value* of goodwill is typically measured as the residual amount remaining after the *values* of all identifiable *tangible*, *intangible* and monetary *assets*, adjusted for actual or contingent *liabilities*, have been deducted from the *value* of a business.

For some *intended uses*, goodwill may need to be further divided into transferable goodwill (that can be transferred to third parties) and non-transferable or “personal” goodwill.

20.08 Since the amount of goodwill depends on which other *tangible* and *intangible assets* are recognised, its *value* can be different when calculated for different *intended uses*. For example, in a business combination accounted for under IFRS or US GAAP, an *intangible asset* is only recognised if it:

(a) is separable, ie, capable of being separated or divided from the entity and sold, transferred, licensed, rented or exchanged, either individually or together with a related contract, identifiable *asset* or *liability*, regardless of whether the entity intends to do so; or

(b) arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations.

20.09 While the aspects of goodwill can vary depending on the *intended use* of the *valuation*, goodwill frequently includes elements such as:

(a) specific synergies arising from a combination of two or more businesses (eg, reductions in operating costs, economies of scale or product mix dynamics),

(b) opportunities to expand the business into new and different markets,

(c) the benefit of an assembled workforce (but generally not any intellectual property developed by members of that workforce),

(d) the benefit to be derived from future *assets*, such as new customers and future technologies, and

(e) assemblage and parts of going concern value.

20.10 Determining the value of one or several individual *intangible asset(s*) can be the *intended use* of a *valuation*. However, when valuing businesses, business interests, real property, and machinery and equipment, the *valuer should* consider whether there are *intangible assets* associated with those *assets* and whether those directly or indirectly impact the *asset* being valued. For example, when using an income approach to value a hotel, the contribution to *value* of the hotel's brand may already be reflected in the profit generated by the hotel.

20.11 *Intangible asset valuations* are performed for a variety of *intended uses*. It is the *valuer's* responsibility to understand the *intended use* of a *valuation.* It is also the *valuer's* responsibility to understand whether *intangible assets should* be valued separately or grouped with other *assets*.

Circumstances requiring an *intangible asset valuation* include but are not limited to:

(a) financial reporting purposes, such as accounting for business combinations, *asset* acquisitions and sales, and impairment analysis,

(b) tax reporting purposes, such as transfer pricing analyses, estate and gift tax planning and reporting, and ad valorem taxation analyses,

(c) litigation in instances such as shareholder disputes, damage calculations and marital dissolutions (divorce),

(d) other statutory or legal events such as compulsory purchases/eminent domain proceedings,

(e) general consulting, collateral lending, transactional support engagements and insolvency.

30. Bases of Value

30.01 In accordance with IVS 102 *Bases of Value*, the *valuer must* select the appropriate *basis(es) of value* when valuing *intangible assets*.

30.02 Often, *intangible asset valuations* are performed using *bases of value* defined by entities/organisations other than the IVSC (some examples of which are mentioned in IVS 102 *Bases of Value*). The *valuer must* understand and follow the legislation, regulation, case law and other interpretive guidance related to those *bases of value* effective at the *valuation date*.

40. Valuation Approaches and Methods

40.01 The three *valuation approaches* described in IVS 103 *Valuation Approaches* may be applied to the *valuation* of *intangible assets*.

40.02 When selecting an approach and method, in addition to the requirements of this standard, the *valuer must* follow the requirements of IVS 103 *Valuation Approaches*, including para 10.04.

50. Market Approach

50.01 Under the market approach, the *value* of an *intangible asset* is determined by reference to market activity (for example, transactions involving identical or similar *assets*).

50.02 Transactions involving *intangible assets* frequently also include other *assets*, such as a business combination that includes *intangible assets*.

50.03 The *valuer must* comply with paras 20.02 and 20.03 of IVS 103 *Valuation Approaches* when determining whether to apply the market approach to the *valuation* of *intangible assets*.

In addition, the *valuer should* only apply the market approach to value *intangible assets* if both of the following criteria are met:

(a) information is available on arm’s-length transactions involving identical or similar *intangible assets* on or near the *valuation date*, and

(b) sufficient information is available to allow the *valuer* to adjust for all *significant* differences between the subject *intangible asset* and those involved in the transactions.

50.04 The heterogeneous nature of *intangible assets* and the fact that *intangible assets* are seldom transacted separately from other *assets* limit the availability of market evidence of transactions involving identical *assets*. Where market evidence is available, it usually comprises *assets* that are similar, but not identical to the subject *asset*.

50.05 Where evidence of either *prices* or valuation multiples is available, the *valuer should* adjust these to reflect differences between the subject *asset* and the *assets* involved in the transactions. These adjustments reflect the differentiating characteristics of the subject *intangible asset* and the *assets* involved in the transactions. Such adjustments may only be determinable at a qualitative, rather than quantitative, level. However, the need for *significant* qualitative adjustments may indicate that another approach would be more appropriate for the *valuation*.

50.06 Examples of *intangible assets* for which the market approach is sometimes used include:

(a) broadcast spectrum,

(b) internet domain names, and

(c) taxi licenses (“medallions”).

50.07 The guideline transactions method is generally the only market approach method that can be applied to *intangible assets*.

50.08 In rare circumstances, a security sufficiently similar to a subject *intangible asset* may be publicly traded, allowing the use of the guideline public company method. For example, contingent value rights (CVRs) are tied to the performance of a particular product or technology.

60. Income Approach

60.01 Under the income approach, the *value* of an *intangible asset* is determined by reference to the present value of income, cash flows or cost savings attributable to the *intangible asset* over its economic life.

60.02 The *valuer must* comply with paras 30.02 and 30.03 of IVS 103 *Valuation Approaches* when determining whether to apply the income approach to the *valuation* of *intangible assets*.

60.03 Income related to *intangible assets* is frequently included in the *price* paid for goods or a service. It may be challenging to separate income related to the *intangible asset* from income related to other *tangible* and *intangible assets*. Many of the methods under the income approach separate the economic benefits associated with a subject *intangible asset*.

60.04 The income approach is the most common method applied to the *valuation* of *intangible assets* and is frequently used to value *intangible assets* including the following:

(a) technology,

(b) customer-related intangibles (eg, backlog, contracts, relationships),

(c) tradenames/trademarks/brands,

(d) operating licenses (eg, franchise agreements, gaming licenses, broadcast spectrum), and

(e) non-competition agreements.

Income Approach Methods

60.05 The income approach includes several methods. The following methods are discussed in this standard in more detail:

(a) excess earnings method,

(b) relief-from-royalty method,

(c) premium profit method or with-and-without method,

(d) greenfield method,

(e) distributor method, and

(f) cost savings method.

Excess Earnings Method

60.06 The excess earnings method estimates the *value* of an *intangible asset* as the present value of the cash flows attributable to the subject *intangible asset* after excluding the proportion of the cash flows that are attributable to other *assets* required to generate the cash flows ("contributory *assets*"). It is often used for *valuation*s where there is a requirement for the acquirer to allocate the overall *price* paid for a business between *tangible assets*, identifiable *intangible assets*, and goodwill.

60.07 Contributory *assets* are *assets* that are used in conjunction with the subject *intangible asset* in the realisation of prospective cash flows associated with the subject *intangible asset*. *Assets* that do not contribute to the prospective cash flows associated with the subject *intangible asset* are not contributory *assets*.

60.08 The excess earnings method can be applied by using:

(a) several periods of forecasted cash flows ("multi-period excess earnings method" or "MPEEM"),

(b) a single period of forecasted cash flows ("single-period excess earnings method"), or

(c) by capitalising a single period of forecasted cash flows ("capitalised excess earnings method" or the "formula method").

60.09 The capitalised excess earnings method or formula method is generally only appropriate if the *intangible asset* is operating in a steady state with stable growth/decay rates, constant profit margins and consistent contributory *asset* levels/charges.

60.10 Most *intangible assets* have economic lives exceeding one period, frequently follow non-linear growth/decay patterns and may require different levels of contributory *assets* over time. Therefore, the MPEEM is the most commonly used excess earnings method as it offers the most flexibility and allows the *valuer* to explicitly forecast changes in such *inputs*.

60.11 Whether applied in a single-period, multi-period or capitalised manner, the list of steps the *valuer should* perform in applying an excess earnings method includes but is not limited to:

(a) forecast the amount and timing of future revenues driven by the subject *intangible asset* and related contributory *assets*,

(b) forecast the amount and timing of expenses that are required to generate the revenue from the subject *intangible asset* and related contributory *assets*,

(c) adjust the expenses to exclude those related to creation of new *intangible assets* that are not required to generate the forecasted revenue and expenses. Profit margins in the excess earnings method may be higher than profit margins for the overall business because the excess earnings method excludes investment in certain new *intangible assets*. For example:

(i) research and development expenditures related to development of new technology would not be required when valuing only existing technology, and

(ii) marketing expenses related to obtaining new customers would not be required when valuing existing customer-related *intangible assets*.

(d) identify and value the contributory *assets* that are needed to achieve the forecasted revenue and expenses. Contributory *assets* often include working capital, fixed *assets*, assembled workforce and identified *intangible assets* other than the subject *intangible asset*,

(e) determine the appropriate rate of return on each contributory *asset* based on an assessment of the risk associated with that *asset*. For example, low risk *assets* like working capital will typically have a relatively lower required return. Contributory *intangible assets* and highly specialised machinery and equipment often require relatively higher rates of return,

(f) in each forecast period, deduct the required returns on contributory *assets* from the forecast profit to arrive at the excess earnings attributable to only the subject *intangible asset*,

(g) determine the appropriate *discount rate* for the subject *intangible asset* and present value or capitalise the excess earnings, and

(h) if appropriate for the *intended use* of the *valuation* (see paras 110.01–110.04), calculate and add the tax amortisation benefit (TAB) for the subject *intangible asset*.

60.12 Contributory asset charges (CACs) *should* be made included for all current and future *tangible assets*, *intangible assets* and financial *assets* that contribute to the generation of the cash flow. If an *asset* for which a CAC is required is involved in more than one line of business, its CAC *should* be allocated to the different lines of business involved.

60.13 The determination of whether a CAC for elements of goodwill is appropriate *should* be based on an assessment of the relevant facts and circumstances of the situation. The *valuer should* not mechanically apply CACs or alternative adjustments for elements of goodwill if the circumstances do not warrant such a charge. Assembled workforce, as it is quantifiable, is usually the only element of goodwill for which a CAC *should* be taken. Accordingly, the *valuer must* ensure that there is a strong basis for applying CACs for any elements of goodwill other than assembled workforce.

60.14 CACs are generally computed on an after-tax basis as a fair return on the *value* of the contributory *asset*, and in some cases a return of the contributory *asset* is also deducted. The appropriate return on a contributory *asset* is the investment return a typical participant would require on the *asset*. The return of a contributory *asset* is a recovery of the initial investment in the *asset*. There *should* be no difference in *value* regardless of whether CACs are computed on a pre-tax or after-tax basis.

60.15 If the contributory *asset* is not wasting in nature, as in the case of working capital, only a fair return on the *asset* is required.

60.16 For contributory *intangible assets* that were valued under a relief-from-royalty method, the CAC *should* be equal to the royalty either on a pre-tax or after-tax basis.

60.17 The excess earnings method *should* be applied only to a single *intangible asset* for a given stream of revenue and income. The excess earnings method is generally applied to the primary or most important *intangible asset*. For example, in valuing the *intangible assets* of a business utilising both technology and a tradename in delivering a product or service (ie, the revenue associated with the technology and the tradename is the same), the excess earnings method *should* only be used to value one of the *intangible assets* and an alternative method *should* be used for the other *asset*. However, if the business has multiple product lines, each using a different technology and each generating distinct revenue and profit, the excess earnings method may be applied in the *valuation* of the multiple different technologies.

Relief-from-Royalty Method

60.18 Under the relief-from-royalty method, the *value* of an *intangible asset* is determined by the *value* of the hypothetical royalty payments that would be saved by owning the *asset* compared with licensing the *intangible asset* from a third party. Conceptually, the method may also be viewed as a discounted cash flow method applied to the cash flow that the owner of the *intangible asset* could receive through licensing the *intangible asset* to third parties.

60.19 The list of steps the *valuer should* perform in applying a relief from royalty method includes but is not limited to:

(a) develop projections associated with the *intangible asset* being valued for the life of the subject *intangible asset*. The most common metric projected is revenue, as most royalties are paid as a percentage of revenue. However, other metrics such as a per-unit royalty may be appropriate in certain *valuation*s,

(b) develop a royalty rate for the subject *intangible asset*. Two methods can be used to derive a hypothetical royalty rate,

(i) The first is based on market royalty rates for comparable or similar transactions. A prerequisite for this method is the existence of comparable *intangible assets* that are licensed at arm’s-length on a regular basis,

(ii) The second method is based on a split of profits that would hypothetically be paid in an arm’s-length transaction by a willing licensee to a willing licensor for the rights to use the subject *intangible asset*,

(c) apply the selected royalty rate to the projections to calculate the royalty payments avoided by owning the *intangible asset*,

(d) estimate any additional expenses for which a licensee of the subject *asset* would be responsible. This can include upfront payments required by some licensors. A royalty rate *should* be analysed to determine whether it assumes expenses (such as maintenance, marketing and advertising) are the responsibility of the licensor or the licensee. A royalty rate that is “gross” would consider all responsibilities and expenses associated with ownership of a licensed *asset* to reside with the licensor, while a royalty that is “net” would consider some or all responsibilities and expenses associated with the licensed *asset* to reside with the licensee. Depending on whether the royalty is “gross” or “net”, the *valuation should* include or exclude, respectively, a deduction for expenses such as maintenance, marketing or advertising expenses related to the hypothetically licensed *asset*,

(e) if the hypothetical *costs* and royalty payments are tax deductible, it may be appropriate to apply the relevant tax rate to determine the after-tax savings associated with ownership of the *intangible asset*. However, for certain *intended uses* (such as transfer pricing), the effects of taxes are generally not considered in the *valuation* and this step *should* be skipped,

(f) determine the appropriate *discount rate* for the subject *intangible asset* and present value or capitalise the savings associated with ownership of the *intangible asset*, and

(g) if appropriate for the *intended use* of the *valuation* (see section 110 of this standard), calculate and add the TAB for the subject *intangible asset*.

60.20 Whether a royalty rate is based on market transactions or a profit split method (or both), its selection *should* consider the characteristics of the subject *intangible asset* and the environment in which it is utilised. The consideration of those characteristics forms the basis for the selection of a royalty rate within a range of observed transactions and/or the range of profit available to the subject *intangible asset* in a profit split.

Factors that *should* be considered include but are not limited to the following:

(a) competitive environment: the size of the market for the *intangible asset*, the availability of realistic alternatives, the number of competitors, barriers to entry and presence (or absence) of switching costs,

(b) importance of the subject *intangible asset* to the owner: whether the subject *asset* is a key factor of differentiation from competitors, the importance it plays in the owner's marketing strategy, its relative importance compared with other *tangible* and *intangible assets*, and the amount the owner spends on creation, upkeep and improvement of the subject *asset*,

(c) life cycle of the subject *intangible*: the expected economic life of the subject *asset* and any risks of the subject *intangible* becoming obsolete.

60.21 When selecting a royalty rate, the *valuer should* also consider the following:

(a) when entering a licence arrangement, the royalty rate participants would be willing to pay depends on their profit levels and the relative contribution of the licensed *intangible asset* to that profit. For example, a manufacturer of consumer products would not license a tradename at a royalty rate that leads to the manufacturer realising a lower profit selling branded products compared with selling generic products,

(b) when considering observed royalty transactions, the *valuer should* understand the specific rights transferred to the licensee and any limitations. For example, royalty agreements may include *significant* restrictions on the use of a licensed *intangible asset.* These restrictions may include but are not limited to specific geographic areas or for certain products. The *valuer should* also understand how payments under the licensing agreement are structured. These characteristics include but are not limited to upfront payments, milestone payments, and options to acquire or to dispose of the licensed property.

With-and-Without Method

60.22 The with-and-without method indicates the *value* of an *intangible asset* by comparing two scenarios: one in which the subject *intangible asset* is deployed and one in which the subject *intangible asset* is not deployed, but where all other factors are kept constant.

60.23 The comparison of the two scenarios can be done in two ways:

(a) calculating the *value* of the business under each scenario with the difference in the business values being the *value* of the subject *intangible asset*, and

(b) calculating, for each future period, the difference between the profits in the two scenarios. The present *value* of those amounts is then used to reach the *value* of the subject *intangible asset*.

60.24 In theory, either method *should* reach a similar *value* for the *intangible asset,* provided the *valuer* considers not only the impact on the entity's profit, but also additional factors such as differences between the two scenarios in working capital needs and capital expenditures.

60.25 The with-and-without method is frequently used in the *valuation* of non-competition agreements but may be appropriate in the *valuation* of other *intangible assets* in certain circumstances.

60.26 The list of steps the *valuer should* perform in applying the with and without method includes but is not limited to:

(a) prepare projections of revenue, expenses, capital expenditures and working capital needs for the business assuming the use of the *assets* of the business including the subject *intangible asset*. These are the cash flows in the "with" scenario,

(b) use an appropriate *discount rate* to present value the future cash flows in the "with" scenario, and/or calculate the *value* of the business in the "with" scenario,

(c) prepare projections of revenue, expenses, capital expenditures and working capital needs for the business assuming the use of the *assets* of the business except the subject *intangible asset*. These are the cash flows in the "without" scenario,

(d) use an appropriate *discount rate* for the business, estimate the present value of the future cash flows and/or calculate the *value* of the business in the "without" scenario,

(e) deduct the present value of cash flows or the *value* of the business in the "without" scenario from the present value of cash flows or *value* of the business in the "with" scenario, and

(f) if appropriate for the *intended use* of the *valuation* (see paras 110.01–110.04), calculate and add the Tax Amortisation Benefit (TAB) for the subject *intangible asset*.

60.27 As an additional step, the difference between the two scenarios may need to be probability-*weighted*. For example, when valuing a non-competition agreement, the individual or business subject to the agreement may choose not to compete, even if the agreement were not in place.

60.28 The differences in *value* between the two scenarios *should* be reflected solely in the cash flow projections rather than by using different *discount rates* in the two scenarios.

Greenfield Method

60.29 Under the greenfield method, the *value* of the subject *intangible* is determined using cash flow projections that assume the only *asset* of the business at the *valuation date* is the subject *intangible asset*. All other *tangible* and *intangible assets must* be bought, built or rented.

60.30 The greenfield method is conceptually similar to the excess earnings method. However, instead of subtracting contributory *asset* charges from the cash flow to reflect the contribution of contributory *assets*, the greenfield method assumes that the owner of the subject *asset* would have to build, buy or rent the contributory *assets*. When building or buying the contributory *assets*, the *cost* of a replacement *asset* of equivalent utility is used rather than a reproduction cost.

60.31 The greenfield method is often used to estimate the *value* of ”enabling” *intangible assets* such as franchise agreements and broadcast spectrum.

60.32 The list of steps the *valuer should* perform in applying the greenfield method includes but is not limited to:

(a) prepare projections of revenue, expenses, capital expenditures and working capital needs for the business, assuming the subject *intangible asset* is the only *asset* owned by the subject business at the *valuation date*, and including the time period required to “ramp up” to stabilised levels,

(b) estimate the timing and amount of expenditures related to the acquisition, creation or rental of all other *assets* needed to operate the subject business,

(c) using an appropriate *discount rate* for the business, calculate the present value of the future cash flows to determine the *value* of the subject business with only the subject *intangible asset* in place, and

(d) if appropriate for the *intended use* of the *valuation* (see section 110 of this standard), calculate and add the TAB for the subject *intangible asset*.

Distributor Method

60.33 The distributor method, sometimes referred to as the disaggregated method, is a variation of the multi-period excess earnings method sometimes used to value customer-related *intangible assets*. The underlying theory of the distributor method is that businesses that are comprised of various functions are expected to generate profits associated with each function. Since distributors generally only perform functions related to distribution of products to customers rather than the development of intellectual property or manufacturing, information on profit margins earned by distributors is used to estimate the excess earnings attributable to customer-related *intangible assets*.

60.34 The distributor method is appropriate to value customer-related *intangible assets* when another *intangible asset* (for example, technology or a brand) is deemed to be the primary or most *significant intangible asset* and is valued under a multi-period excess earnings method.

60.35 The list of steps the *valuer should* perform in applying the distributor method includes but is not limited to:

(a) prepare projections of revenue associated with existing customer relationships. This *should* reflect expected growth in revenue from existing customers as well as the effects of customer attrition,

(b) identify comparable distributors that have customer relationships similar to the subject business and calculate the profit margins achieved by those distributors,

(c) apply the distributor profit margin to the projected revenue,

(d) identify the contributory *assets* related to performing a distribution function required to achieve the forecast revenue and expenses. Generally, distributor contributory *assets* include working capital, fixed *assets* and workforce. However, distributors seldom require other *assets* such as trademarks or technology. The level of required contributory *assets should* be consistent with participants performing only a distribution function,

(e) determine the appropriate rate of return on each contributory *asset* based on an assessment of the risk associated with that *asset*,

(f) in each forecast period, deduct the required returns on contributory *assets* from the forecast distributor profit to arrive at the excess earnings attributable to only the subject *intangible asset*,

(g) determine the appropriate *discount rate* for the subject *intangible asset* and present value the excess earnings, and

(h) if appropriate for the *intended use* of the *valuation* (see section 110 of this standard), calculate and add the TAB for the subject *intangible asset*.

70. Cost Approach

70.01 Under the cost approach, the *value* of an *intangible asset* is determined based on the replacement cost of a similar *asset* or an *asset* providing similar service potential or utility.

70.02 The *valuer must* comply with paras 40.02 and 40.03 of IVS 103 *Valuation Approaches* when determining whether to apply the cost approach to the *valuation* of *intangible assets*.

70.03 The cost approach is commonly used for *intangible assets* such as the following:

(a) acquired third-party software,

(b) internally-developed and internally-used, non-marketable software, and

(c) assembled workforce.

70.04 The cost approach *should* be used when no other approach can be applied satisfactorily. However, the *valuer should* attempt to identify an alternative method before applying the cost approach in situations where the subject *asset* does not meet the criteria in paras 40.02 and 40.03 of IVS 103 *Valuation Approaches.*

70.05 Two main methods fall under the cost approach: replacement cost and reproduction cost. However, many *intangible assets* do not have physical form that can be reproduced and *assets* such as software, which can be reproduced, generally derive *value* from their function/utility rather than their exact lines of code. As such, the replacement cost is most commonly applied to the *valuation* of *intangible assets*.

70.06 The replacement cost method assumes that a participant would pay no more for the *asset* than the *cost* that would be incurred to replace the *asset* with a substitute of comparable utility or functionality.

70.07 The *valuer should* consider the following when applying the replacement cost method:

(a) the direct and indirect costs of replacing the utility of the *asset*, including labour, materials and overheads,

(b) whether the subject *intangible asset* is subject to obsolescence. While *intangible assets* do not become physically obsolete, they can be subject to economic obsolescence,

(c) whether it is appropriate to include a profit mark-up on the included *costs*. The consideration paid for an *asset* acquired from a third party would presumably reflect their *costs* associated with creating the *asset* as well as some form of profit to provide a return on investment. As such, under *bases of value* (see IVS 102 *Bases of Value*) that assume a hypothetical transaction, it may be appropriate to include an assumed profit mark-up on *costs*. As noted in IVS 103 *Valuation Approaches*, *costs* developed based on estimates from third parties would be presumed to already reflect a profit mark-up, and

(d) opportunity costs may also be included. These reflect *costs* associated with not having the subject *intangible asset* in place for some time during its creation.

80. Special Considerations for Intangible Assets

80.01 The following sections address a non-exhaustive list of topics relevant to the *valuation* of *intangible assets*.

(a) *Discount rates*/Rates of Return for *Intangible Assets* (section 90),

(b) *Intangible Asset* Economic Lives (section 100),

(c) Tax Amortisation Benefit (section 110).

90. Discount Rates/Rates of Return for Intangible Assets

90.01 Selecting *discount rates* for *intangible assets* can be challenging, as observable market evidence of *discount rates* for *intangible assets* is rare. The selection of a *discount rate* for an *intangible asset* generally requires *significant professional judgement*.

90.02 In selecting a *discount rate* for an *intangible asset*, the *valuer should* perform an assessment of the risks associated with the subject *intangible asset* and consider observable *discount rate* benchmarks.

90.03 When assessing the risks associated with an *intangible asset*, the *valuer should* consider factors including the following:

(a) *intangible assets* often have higher risk than *tangible assets*,

(b) if an *intangible asset* is highly specialised to its current use, it may have higher risk than *assets* with multiple potential uses,

(c) single *intangible assets* may have more risk than groups of *assets* (or businesses),

(d) *intangible assets* used in risky (sometimes referred to as non-routine) functions may have higher risk than *intangible assets* used in more low-risk or routine activities. For example, *intangible assets* used in research and development activities may be higher risk than those used in delivering existing products or services,

(e) the life of the *asset*. Similar to other investments, *intangible assets* with longer lives are often considered to have higher risk, all else being equal,

(f) *intangible assets* with more readily estimable cash flow streams, such as backlog, may have lower risk than similar *intangible assets* with less estimable cash flows, such as customer relationships.

90.04 *Discount rate* benchmarks are rates that are observable based on market evidence or observed transactions. The following are some of the benchmark rates that the *valuer should* consider:

(a) risk-free rates with similar maturities to the life of the subject *intangible asset*,

(b) *cost* of debt or borrowing rates with maturities similar to the life of the subject *intangible asset*,

(c) *cost* of equity or equity rates or return for participants for the subject *intangible asset*, or of the entity owning/using the subject *intangible asset*,

(d) weighted-average-cost-of-capital (WACC) of participants for the subject *intangible asset* or of the company owning/using the subject *intangible asset*,

(e) in contexts involving a recent business acquisition including the subject *intangible asset*, the internal rate-of-return for the transaction *should* be considered, and

(f) in contexts involving a *valuation* of all *assets* of a business, the *valuer should* perform a weighted-average-return-on-assets (WARA) analysis to confirm the reasonableness of selected *discount rates*.

100. Intangible Asset Economic Lives

100.01 An important consideration in the *valuation* of an *intangible asset*, particularly under the income approach, is the economic life of the *asset*. This may be a finite period limited by legal, technological, functional, or economic factors. Other *assets* may have an indefinite life. The economic life of an *intangible asset* in the context of a *valuation* is a different concept than the remaining useful life for accounting or tax purposes.

100.02 Legal, technological, functional and economic factors *must* be considered individually and together in making an assessment of the economic life.

100.03 In estimating the economic life of an *intangible asset*, the *valuer should* also consider the pattern of use or its likely replacement. Certain *intangible assets* may be abruptly replaced when a new, better or cheaper alternative becomes available, while others may only be replaced slowly over time, .

100.04 For customer-related *intangible assets*, attrition is a key factor in estimating both economic life and attributable cash flows. Attrition applied in the *valuation* of *intangible assets* is a quantification of expectations regarding future losses of customers. While it is a forward-looking estimate, attrition is often based on historical observations of attrition.

100.05 There are several ways to measure and apply historical attrition:

(a) a constant rate of loss (as a percentage of prior year balance) over the life of the customer relationships may be assumed if customer loss does not appear to be dependent on the age of the customer relationship,

(b) a variable rate of loss may be used over the life of the customer relationships if customer loss is dependent on the age of the customer relationship,

(c) attrition may be measured based on either revenue or number of customers/customer count as appropriate, based on the characteristics of the customer group,

(d) customers may need to be segregated into different groups. Customers may be segregated based on factors including but not limited to geography, size of customer and type of product or service purchased, and

(e) the period used to measure attrition may vary depending on circumstances. The choice of period *should* reflect the characteristics of the usage of the *intangible asset*.

100.06 The computation of revenue including attrition *should* reflect the expected profile of the attrition throughout the period being measured.

100.07 Revenue-based attrition may include growth in revenue from existing customers. It is helpful, where possible, to separate growth and attrition in measurement and application.

100.08 It is helpful, where possible, for the *valuer* to input historical revenue into the model being used and check how closely it predicts actual revenue from existing customers in subsequent years. If attrition has been measured and applied appropriately, the model should be reasonably accurate. For example, if estimates of future attrition were developed based on historical attrition observed from 20X0 through 20X5, the *valuer should* input the 20X0 customer revenue into the model and check whether it accurately predicts the revenue achieved from existing customers in 20X1, 20X2, etc.

110. Tax Amortisation Benefit (TAB)

110.01 In many tax *jurisdictions*, *intangible assets* and in some cases, goodwill can be amortised for tax purposes. Depending on the *intended use* of a *valuation* and the *valuation method* used, it may be appropriate to include the *value* of the TAB in the *value* of the *intangible asset* and/or goodwill.

110.02 If the market or cost approach is used to value an *intangible asset*, the price paid to create or purchase the *asset* would already reflect the ability to amortise the *asset*. However, in the income approach, a TAB needs to be explicitly calculated and included, if appropriate.

110.03 For some *valuation intended uses*, such as financial reporting, the appropriate *basis of value* assumes a hypothetical sale of the subject *intangible asset*. Generally, for those *intended uses*, a TAB *should* be included when the income approach is used because a typical participant would be able to amortise an *intangible asset* acquired in such a hypothetical transaction regardless of whether the hypothetical transaction is taxable or non-taxable). For other *valuation intended uses*, the assumed transaction might be of a business or group of *assets*. For those *bases of value*, it may be appropriate to include a TAB if the transaction would result in a step-up in basis for the *intangible assets* and/or goodwill.

110.04 In calculating a TAB the *valuer* may use either of the following *discount rates*:

(a) a *discount rate* appropriate for a business utilising the subject *asset*, such as a weighted-average-cost-of-capital (WACC). In this view, since amortisation can be used to offset the taxes on any income produced by the business, a *discount rate* appropriate for the business as a whole *should* be used, or

(b) a *discount rate* appropriate for the subject *asset* (ie, the one used in the *valuation* of the *asset*). In this view the *valuer should* not assume that the owner of the subject *asset* has operations and income separate from the subject *asset* and that the *discount rate* used in the TAB calculation *should* be the same as that used in the *valuation* of the subject *asset*.

IVS 220 Non-Financial Liabilities

IVS 200 Businesses and Business Interests | IVS 210 Intangible Assets | IVS 220 Non-Financial Liabilities | IVS 230 Inventory | IVS 300 Plant, Equipment and Infrastructure | IVS 400 Real Property Interests | IVS 410 Development Property | IVS 500 Financial Instruments

Contents	Paragraphs
Overview	10
Introduction	20
Bases of Value	30
Valuation Approaches and Methods	40
Market Approach	50
Income Approach	60
Cost Approach	70
Special Considerations for Non-Financial Liabilities	80
Discount Rates for Non-Financial Liabilities	90
Estimating Cash Flows and Risk Margins	100
Restrictions on Transfer	110
Taxes	120

10. Overview

10.01 The principles contained in the General Standards apply to *valuation*s of non-financial *liabilities* and *valuation*s with a non-financial *liability* component. This standard contains additional requirements that apply to *valuations* of non-financial *liabilities*.

10.02 With regard to the determination of *discount rates* and risk margins, in circumstances in which IVS 103 *Valuation Approaches* (Appendix A20.29–A20.40) conflicts with IVS 220 *Non-Financial Liabilities*, the *valuer must* apply the principles in sections 90 and 100 of this standard in valuations of non-financial *liabilities.*

20. Introduction

20.01 For purposes of IVS 220 *Non-Financial Liabilities*, non-financial *liabilities* are defined as those *liabilities* requiring a non-cash performance obligation to provide goods or services.

20.02 *Liabilities* that may in part or in full require a non-cash fulfilment and be subject to IVS 220 *Non-Financial Liabilities* include but are not limited to:

(a) deferred revenue or contract liabilities,

(b) warranties,

(c) environmental liabilities,

(d) asset retirement obligations,

(e) certain contingent consideration obligations,

(f) loyalty programmes,

(g) certain litigation reserves and contingencies, and

(h) certain indemnifications and guarantees.

20.03 Although certain contingent consideration liabilities may require a non-cash performance obligation, such *liabilities* are not included in the scope of IVS 220 *Non-Financial Liabilities.*

20.04 The party assuming a non-financial *liability* typically requires a profit margin on the fulfilment effort to compensate for the effort incurred and risk borne for the delivery of goods or services.

20.05 For financial *liabilities*, cash fulfilment is typically the only performance obligation and no additional compensation is needed for the fulfilment effort. Since cash fulfilment is the only performance obligation for financial *liabilities*, asset-liability symmetry most often enables the *valuer* to assess the subject *liability* using an asset framework.

20.06 Asset-liability symmetry typically does not exist for non-financial *liabilities* due to the performance obligation to provide goods and services to satisfy the *liability* and additional compensation for such effort. As such, non-financial *liabilities* will most often be valued using a liability framework that does not require a corresponding *asset* to be recognised or valued by another party.

20.07 In instances in which a corresponding *asset* is recognised by the counterparty, the *valuer must* assess if the *values* would reflect asset-liability symmetry under circumstances consistent with the *basis of value*. Certain *bases of value* issued by entities/organisations other than the IVSC require specific consideration and reconciliation to a corresponding *asset* under certain circumstances. The *valuer must* understand and follow the legislation, regulation, case law, and other interpretive guidance related to those *bases of value* effective at the *valuation date* (see IVS 200 *Businesses and Business Interests*, para 30.02).

Instances in which the *valuer should* reconcile to a corresponding *asset* value are rare, and include but are not limited to:

(a) non-financial *liabilities* often do not have a recorded corresponding *asset* recognised by the counterparty (eg, environmental liability), or can only be transferred in conjunction with another *asset* (eg, an automobile and related warranty are only transferred together),

(b) the corresponding *asset* of a non-financial *liability* may be held by numerous parties for which it is impractical to identify and reconcile the asset values,

(c) the market for the non-financial *asset* and *liability* is often highly illiquid, thus resulting in asymmetric information, high bid-ask spreads, and asset-liability asymmetry.

20.08 Participants that most often transact in the subject non-financial *liability* may not be the comparable companies and competitors of the entity holding the subject non-financial *liability*. Examples of such participants include insurance companies, third party warranty issuers, and more. The *valuer should* consider if a market, or market participants, exist outside the immediate industry in which the entity holding the subject non-financial *liability* operates.

20.09 Non-financial liability *valuations* are performed for a variety of *intended uses*. It is the *valuer's* responsibility to understand the *intended use* of a *valuation.* It is the *valuer's* responsibility to understand whether the non-financial *liabilities should* be valued separately or grouped with other *assets*.

Circumstances that include a non-financial liability *valuation* component include but are not limited to:

(a) for financial reporting purposes, *valuations* of non-financial *liabilities* are often required in connection with accounting for business combinations, *asset* acquisitions and sales, and impairment analysis,

(b) for tax reporting purposes, non-financial *liability valuations* are often needed for transfer pricing analyses, estate and gift tax planning and reporting, and ad valorem taxation analyses,

(c) non-financial *liabilities* may be the subject of litigation, requiring valuation analysis in certain circumstances,

(d) *valuation* of non-financial *liabilities* as part of general consulting, collateral lending and transactional support engagements.

30. Bases of Value

30.01 In accordance with IVS 102 *Bases of Value*, the *valuer must* select the appropriate *basis(es) of value* when valuing non-financial *liabilities*.

30.02 Often, non-financial *liability valuations* are performed using *bases of value* defined by entities/organisations other than the IVSC (some examples of which are mentioned in IVS 102 *Bases of Value*). The *valuer must* understand and follow the legislation, regulation, case law and other interpretive guidance related to those *bases of value* effective at the *valuation date* (see IVS 200 *Businesses and Business Interests*, para 30.02).

40. Valuation Approaches and Methods

40.01 Elements of the three *valuation approaches* described in IVS 103 *Valuation Approaches* (market, income and cost approach) can all be applied to the *valuation* of non-financial *liabilities*. The methods described in sections 50-70 of this standard may exhibit elements of more than one approach. If it is necessary for the *valuer* to classify a method under one of the three approaches, the *valuer should* use judgement in making the determination and not necessarily rely on the classification below.

40.02 When selecting an approach and method, in addition to the requirements of this standard, the *valuer must* follow the requirements of IVS 103 *Valuation Approaches*, including para 10.04.

50. Market Approach

50.01 Under the market approach, the *value* of a non-financial *liability* is determined by reference to market activity (for example, transactions involving identical or similar non-financial *liabilities*).

50.02 Transactions involving non-financial *liabilities* frequently also include other *assets*, such as business combinations that include *tangible* and *intangible assets*.

50.03 While stand-alone transactions of non-financial *liabilities* are infrequent, the *valuer should* consider relevant market-based indications of *value*. Although such market-based indications may not provide sufficient information with which to apply the market approach, the use of market-based *inputs should* be maximised in the application of other approaches.

50.04 Market indications of *value* include but are not limited to:

(a) pricing from third parties to provide identical or similar products as the subject non-financial *liability* (eg, deferred revenue),

(b) pricing for warranty policies issued by third parties for identical or similar obligations,

(c) the prescribed monetary conversion amount as published by participants for certain loyalty reward obligations,

(d) the traded price for contingent value rights (CVRs) with similarities to the subject non-financial *liability* (eg, contingent consideration),

(e) observed rates of return for investment funds that invest in non-financial *liabilities* (eg, litigation finance).

50.05 The *valuer must* comply with paras 20.02 and 20.03 of IVS 103 *Valuation Approaches* when determining whether to apply the market approach to the *valuation* of non-financial *liabilities*.

50.06 The diverse nature of many non-financial *liabilities* and the fact that non-financial *liabilities* seldom transact separately from other *assets* imply that it is rarely possible to find market evidence of transactions involving similar non-financial *liabilities*.

50.07 Where evidence of market prices is available, the *valuer should* consider adjustments to these to reflect differences between the subject non-financial *liability* and those involved in the transactions. These adjustments are necessary to reflect the differentiating characteristics of the subject non-financial *liability* and those involved in the transactions.

Such adjustments may only be determinable at a qualitative, rather than quantitative, level. However, the need for *significant* qualitative adjustments could indicate that another approach would be more appropriate for the *valuation*.

50.08 In certain instances, the *valuer* may rely on market prices or evidence for an *asset* corresponding to the subject non-financial *liability*. In such instances, the *valuer should* consider an entity’s ability to transfer the subject non-financial *liability*, whether the *asset* and related price of the *asset* reflect those same restrictions, and whether adjustments to reflect the restrictions *should* be included. The *valuer should* take care to determine if the transfer restrictions are characteristics of the subject non-financial *liability* (for example, an illiquid market) or restrictions that are characteristics of the entity.

50.09 The comparable transaction method, also known as the guideline transactions method, is generally the only market approach method that can be applied to value non-financial *liabilities*.

50.10 In rare circumstances, a security sufficiently similar to a subject non-financial *liability* could be publicly traded, allowing the use of the guideline public company method. One example of such securities is contingent value rights that are tied to the performance of a particular product or technology.

Market Approach Methods

50.11 A method to value non-financial *liabilities* under the Market Approach is often referred to as the Top-Down Method.

Top-Down Method

50.12 Under the Top-Down Method, valuing non-financial *liabilities* is based on the premise that reliable market-based indications of pricing are available for the performance obligation.

50.13 A participant fulfilling the obligation to deliver the product or services associated with the non-financial *liability* could theoretically price the *liability* by deducting *costs* already incurred toward the fulfilment obligation, plus a markup on those *costs*, from the market price of services.

50.14 When market information is used to determine the *value* of the subject non-financial *liability*, discounting is typically not necessary because the effects of discounting are incorporated into observed market prices.

50.15 The list of steps the *valuer should* perform in applying the Top-Down Method includes but is not limited to:

(a) determine the market price of the non-cash fulfilment,

(b) determine the *costs* already incurred and *assets* utilised by the transferor. The nature of such *costs* will differ depending on the subject non-financial *liability*. For example, for deferred revenue the *costs* will primarily consist of sales and marketing costs that have already been incurred in generating the non-financial *liability*,

(c) determine a reasonable profit margin on the *costs* already incurred,

(d) subtract *costs* incurred and profit from the market price.

60. Income Approach

60.01 Under the income approach, the *value* of a non-financial *liability* is often determined by reference to the present value of the *costs* to fulfil the obligation plus a profit margin that would be required to assume the *liability*.

60.02 The *valuer must* comply with paras 30.02 and 30.03 of IVS 103 *Valuation Approaches* when determining whether to apply the income approach to the *valuation* of non-financial *liabilities*.

Income Approach Methods

60.03 The primary method to value non-financial *liabilities* under the Income Approach is often referred to as the Bottom-Up Method.

Bottom-Up Method

60.04 Under the Bottom-Up Method, the non-financial *liability* is measured as the *costs* required to fulfil the performance obligation, plus a reasonable mark-up on those *costs*, discounted to present value. These *costs* may or may not include certain overhead items.

60.05 The list of steps the *valuer should* perform in applying the Bottom-Up method includes but is not limited to:

(a) determine the *costs* required to fulfil the performance obligation. Such *costs* will include the direct *costs* to fulfil the performance obligation but may also include indirect *costs* such as charges for the use of contributory *assets*. Fulfilment costs represent those *costs* that are related to fulfilling the performance obligation that generates the non-financial *liability*. *Costs* incurred as part of the selling activities before the acquisition date *should* be excluded from the fulfilment effort;

(i) contributory asset charges *should* be included in the fulfilment costs when such *assets* would be required to fulfil the obligation and the related cost is not otherwise captured in the income statement,

(ii) in limited instances, in addition to direct and indirect *costs*, it may be appropriate to include opportunity costs. For example, in the licensing of symbolic intellectual property, the direct and indirect costs of fulfilment may be nominal. However, if the obligation reduces the ability to monetise the underlying *asset* (in an exclusive licensing arrangement for example), then the *valuer should* consider how participants would account for the potential opportunity costs associated with the non-financial *liability*,

(b) determine a reasonable mark-up on the fulfilment effort. In most cases it may be appropriate to include an assumed profit margin on certain *costs* which can be expressed as a target profit, derived either as a lump sum or as a percentage return on *cost* or *value*.

(i) an initial starting point may be to utilise the operating profit of the entity holding the subject non-financial *liability*,

(ii) however, this methodology assumes the profit margin would be proportional to the *costs* incurred,

(iii) in many circumstances there is rationale to assume that profit margins are not proportional to costs. In such cases the risks assumed, the *value* added, or intangibles contributed to the fulfilment effort are not the same as those contributed pre-measurement date,

(iv) when *costs* are derived from actual, quoted or estimated prices by third party suppliers or contractors, these *costs* will already include a third party's desired level of profit;

(v) In conducting this step, the *valuer should* not double count profits or mark-ups that have already been included in the computation of costs or contributory asset charges.

(c) determine timing of fulfilment and discount to present value. The *discount rate should* account for the time value of money and for non-performance risk. It is usually preferable to reflect the impact of uncertainty, such as changes in anticipated fulfilment costs and fulfilment margin, through the cash flows rather than in the *discount rate*,

(d) when fulfilment *costs* are derived through a percent of revenue, the *valuer should* consider whether the fulfilment costs already implicitly include the impact of discounting. For example, prepayment for services may include a discount when compared with paying throughout the duration of the contract. As a result, the derived *costs* have already been discounted and further discounting may not be necessary.

70. Cost Approach

70.01 The cost approach has limited application for non-financial *liabilities* as participants typically expect a return on the fulfilment effort.

70.02 The *valuer must* comply with 40.02 and 40.03 of IVS 103 *Valuation Approaches* when determining whether to apply the cost approach to the *valuation* of non-financial *liabilities*.

80. Special Considerations for Non-Financial Liabilities

80.01 The following sections address a non-exhaustive list of topics relevant to the *valuation* of non-financial *liabilities*.

(a) *Discount Rates* for Non-Financial *Liabilities* (section 90),

(b) Estimating Cash Flows and Risk Margins (section 100),

(c) Restrictions on Transfer (section 110),

(d) Taxes (section 120).

90. Discount Rates for Non-Financial Liabilities

90.01 A fundamental basis for the income approach is that investors expect to receive a return on their investments and that such a return *should* reflect the perceived level of risk in the investment.

90.02 The *discount rate should* account for the time value of money and non-performance risk. Non-performance risk is typically a function counterparty risk (ie, credit risk of the entity obligated to fulfil the *liability*) (see para 60.05 (c) of this standard).

90.03 Certain *bases of value* issued by entities/organisations other than the IVSC may require the *discount rate* to specifically account for *liability*-specific risks. The *valuer must* understand and follow the legislation, regulation, case law, and other interpretive guidance related to those *bases of value* effective at the *valuation date* (see IVS 200 *Businesses and Business Interests*, para 30.02).

90.04 The *valuer should* consider the terms of the subject non-financial *liability* when determining the appropriate *inputs* for the time value of money and non-performance risk.

90.05 In certain circumstances, the *valuer* may explicitly adjust the cash flows for non-performance risk.

90.06 The terms imposed on a party undertaking to satisfy the obligation may provide insights to help quantify the non-performance risk.

90.07 Given the long-term nature of certain non-financial *liabilities*, the *valuer should* consider if inflation has been incorporated into the estimated cash flows, and *must* ensure that the *discount rate* and cash flow estimates are prepared on a consistent basis.

100. Estimating Cash Flows and Risk Margins

100.01 The principles contained in IVS 103 *Valuation Approaches* may not apply to *valuations* of non-financial *liabilities* and *valuations* with a non-financial *liability* component 103 *Valuation Approaches*, Appendix A20.12–A20.19). The *valuer must* apply the principles in sections 90 and 100 of this standard in *valuations* of non-financial *liabilities*.

100.02 Non-financial *liability* cash flow forecasts often involve the explicit modelling of multiple scenarios of possible future cash flows to derive a probability-*weighted* expected cash flow forecast. This method is often referred to as the Scenario Based Method (SBM). The SBM includes certain simulation techniques such as Monte Carlo simulation. The SBM is commonly used when future payments are not contractually defined but rather vary depending upon future events. When the non-financial *liability* cash flows are a function of systematic risk factors, the *valuer should* consider the appropriateness of the SBM, and may need to utilise other methods based on option pricing formulas (OPM).

100.03 Considerations in estimating cash flows include developing and incorporating explicit assumptions. A list of such assumptions includes but is not limited to:

(a) the *costs* that a third party would incur in performing the tasks necessary to fulfil the obligation,

(b) other amounts that a third party would include in determining the *price* of the transfer, including, for example, inflation, overhead, equipment charges, profit margin, and advances in technology,

(c) the extent to which the amount of a third party’s *costs* or the timing of its *costs* would vary under different future scenarios and the relative probabilities of those scenarios, and

(d) the *price* that a third party would demand and could expect to receive for bearing the uncertainties and unforeseeable circumstances inherent in the obligation.

100.04 While expected cash flows (ie, the probability-*weighted* average of possible future cash flows) incorporate the variable expected outcomes of the *asset's* cash flows, they do not account for the compensation that participants demand for bearing the uncertainty of the cash flows. For non-financial *liabilities*, forecast risk may include uncertainty such as changes in anticipated fulfilment costs and fulfilment margin. The compensation for bearing such risk *should* be incorporated into the expected payoff through a cash flow risk margin or the *discount rate*.

100.05 Given the inverse relationship between the *discount rate* and *value*, the *discount rate should* be decreased to reflect the impact of forecast risk. The compensation for bearing risk *should* be commensurate with the uncertainty about the amount and the timing of cash flows.

100.06 It is possible to account for forecast risk by varying the *discount rate*. However, given the limited practical application of doing so, the *valuer must* either:

(a) explain the rationale for reducing the *discount rate* rather than incorporating a risk margin, or

(b) specifically note the legislation, regulation, case law, or other interpretive guidance that requires the accounting for forecast risk of non-financial *liabilities* through the *discount rate* rather than a risk margin (see IVS 200 *Businesses and Business Interests*, para 30.02).

100.07 In developing a risk margin, the *valuer must*:

(a) document the method used for developing the risk margin, including support for its use, and

(b) provide evidence for the computation of the risk margin, including the identification of the *significant inputs* and support for their derivation or source.

100.08 In developing a cash flow risk margin, the *valuer must* consider:

(a) the life/term and/or maturity of the non-financial *liability* and the consistency of *inputs,*

(b) the geographic location of the non-financial *liability* and/or the location of the markets in which it would trade,

(c) the currency denomination of the projected cash flows, and

(d) the type of cash flow contained in the forecast. For example, a cash flow forecast may represent expected cash flows (eg, probability-*weighted* scenarios) or the most likely cash flows or contractual cash flows, etc.

100.09 In developing a cash flow risk margin, the *valuer should* consider:

(a) the less certainty there is in the anticipated fulfilment costs and fulfilment margin, the higher the risk margin *should* be,

(b) given the finite term of most non-financial *liabilities*, as opposed to indefinite for many business and asset *valuations*, to the extent that emerging experience reduces uncertainty, risk margins *should* decrease, and vice versa,

(c) the expected distribution of outcomes, and the potential for certain non-financial *liabilities* to have high ‘tail risk’ or severity. Non-financial *liabilities* with wide distributions and high severity *should* have higher risk margins,

(d) the respective rights and preferences of the non-financial *liability*, and/or of any related *asset* in the event of a liquidation.

100.10 The cash flow risk margin *should* be the compensation that would be required for a party to be indifferent between fulfilling a *liability* that has a range of possible outcomes, and one that will generate fixed cash outflows.

100.11 In estimating cash flows and risk margins, the *valuer should* consider all the information that is reasonably available.

110. Restrictions on Transfer

Non-financial *liabilities* often include restrictions on the ability to transfer. Such restrictions are either contractual in nature, or a function of an illiquid market for the subject non-financial *liability*.

When relying on market evidence, the *valuer should* consider an entity’s ability to transfer such non-financial *liabilities* and whether adjustments to reflect the restrictions *should* be included. The *valuer* may need to determine if the transfer restrictions are characteristics of the non- financial *liability* or restrictions that are characteristics of an entity, as certain *basis of value* may specify one or the other be considered (see IVS 220 *Non-Financial Liabilities*, para 50.09).

When relying on an income approach in which the non-financial *liability value* is estimated through a fulfilment approach, the *valuer should* determine if a party willing to take on the *liability* would require an additional risk margin to account for the limitations on transfer.

120. Taxes

The *valuer should* use pre-tax cash flows and a pre-tax *discount rate* for the *valuation* of non-financial *liabilities*.

In certain circumstances, it may be appropriate to perform the analysis with after tax cash flows and after tax *discount rates*. In such instances, the *valuer must* explain the rationale for use of after-tax inputs, or specifically note the legislation, regulation, case law, or other interpretive guidance that requires the use of after-tax inputs (see IVS 200 *Businesses and Business Interests*, para 30.02).

If after-tax inputs are used, it may be appropriate to include the tax benefit created by the projected cash outflow associated with the non-financial *liability.*

IVS 230 Inventory

IVS 200 Businesses and Business Interests | IVS 210 Intangible Assets | IVS 220 Non-Financial Liabilities | IVS 230 Inventory | IVS 300 Plant, Equipment and Infrastructure | IVS 400 Real Property Interests | IVS 410 Development Property | IVS 500 Financial Instruments

Contents **Paragraphs**

Overview 10
Introduction 20
Bases of Value 30
Valuation Approaches and Methods 40
Market Approach 50
Income Approach 60
Cost Approach 70
Special Considerations for Inventory 80
Identification of Value-Added Processes and Returns on Intangible Assets 90
Relationship to Other Acquired Assets 100
Obsolete Inventory Reserves 110
Unit of Account 120

10. Overview

10.01 The principles contained in the General Standards apply to *valuations* of inventory and *valuations* with an inventory component. This standard contains additional requirements for *valuations* of inventory.

20. Introduction

20.01 Inventory broadly includes goods which will be used in future production processes (ie, raw materials, parts, supplies), goods used in the production process (ie, work-in-process), and goods awaiting sale (ie, finished goods).

20.02 This standard focuses on *valuation* of inventory of physical goods that are not real property.

20.03 While the book value of inventory only includes historical *costs*, the profits earned in the production process, which reflect returns on the *assets* utilised in manufacturing (including working capital, property, plant, and equipment, and *intangible assets*), are not capitalised into book value. As a result, the *market value* of inventory typically differs from, and is usually higher than, the book value of inventory.

20.04 As inventory is seldom transacted at an interim stage (eg, work-in-process) or may not be frequently sold to a third party to conduct the selling effort (eg, finished goods sold via distributor networks), the *valuation* techniques and considerations for inventory frequently vary from those of other.

20.05 *Valuations* of inventory are performed for a variety of *intended uses*. It is the *valuer's* responsibility to understand the *intended use* of a *valuation.* It is also the *valuer's* responsibility to understand whether the inventory *should* be valued separately or grouped with other *assets*.

20.06 Circumstances requiring the *valuation* of inventory includes but is not limited to:

(a) financial reporting purposes, such as accounting for business combinations, asset acquisitions and sales, and impairment analysis,

(b) tax reporting purposes, such as transfer pricing analyses, estate and gift tax planning and reporting, and *ad valorem* taxation analyses,

(c) litigation, in instances such as shareholder disputes, damage calculations and marital dissolutions (divorce),

(d) general consulting, collateral lending, transactional support engagements and insolvency.

30. Bases of Value

30.01 In accordance with IVS 102 *Bases of Value*, the *valuer must* select the appropriate *basis(es) of value* when valuing inventory.

30.02 Often, *valuations* of inventory are performed using *bases of value* defined by entities/organisations other than the IVSC (some examples of which are mentioned in IVS 102 *Bases of Value*) and the *valuer must* understand and follow the legislation, regulation, case law, and other interpretive guidance related to those *bases of value* effective at the *valuation date*.

40. Valuation Approaches and Methods

40.01 The three *valuation approaches* described in IVS 103 *Valuation Approaches* can be applied to the *valuation* of inventory. The methods described in this standard simultaneously include elements of the cost approach, market approach, and income approach. If required to classify a method under one of the three approaches, the *valuer should* use judgement in making the determination and not necessarily rely on the classification in the following sections 50–70.

40.02 When selecting an approach and method, in addition to the requirements of this standard, the *valuer must* follow the requirements of IVS 103 *Valuation Approaches*, including para 10.04.

50. Market Approach

50.01 The market approach, ie, reference to market activity involving identical or similar goods, has only narrow direct application for the valuation of inventory. Such applications typically include:

(a) inventory of commoditised products, or

(b) inventory in which a market exists for the inventory at an interim stage in the production process. For non-commodity traded products or products that a market exists at an interim production stage, such selling prices *must* be adjusted to account for the disposal effort and related profit.

50.02 While the market approach is not directly applicable in most instances, the *valuer should* consider market-based indications to determine the selling price as an *input* for other methods.

50.03 Other observable markets may provide insights on the returns attributable to the manufacturing and disposition of *assets* that can also be leveraged for *inputs* into other methods. Such returns are typically considered to exclude returns attributable to intellectual property. For example:

(a) distributor profit margins represent a meaningful market proxy for returns on the disposition process, if an appropriate base of comparable companies is identified,

(b) contract manufacturers, to the extent available, may provide a proxy for margins earned through the manufacturing process.

50.04 The *valuer must* comply with paras 20.02 and 20.03 of IVS 103 *Valuation Approaches* when determining whether to apply the market approach to the *valuation* of inventory. In addition, the *valuer should* only apply the market approach to value inventory if both of the following criteria are met:

(a) information is available on arm's-length transactions involving identical or similar inventory on or near the *valuation date*, and

(b) sufficient information is available to allow the *valuer* to adjust for all *significant* differences between the subject inventory and those involved in the transactions.

50.05 Where evidence of market prices is available, the *valuer should* adjust for differences between the subject inventory and those involved in the transactions. Such adjustments may be determinable at a qualitative, rather than quantitative, level. However, the need for *significant* qualitative adjustments may indicate that another approach would be more appropriate for the *valuation* (see IVS 103 *Valuation Approaches*, section 10).

60. Income Approach

60.01 The *valuation* of inventory using the income approach requires the allocation of profit (value) contributed before the *valuation date* versus the profit (value) expected to be contributed after the *valuation date*.

60.02 The *valuer must* comply with paras 30.02 and 30.03 of IVS 103 *Valuation Approaches* when determining whether to apply the income approach to the *valuation* of inventory.

Top-Down Method

60.03 The top-down method is a residual method that begins with the estimated selling price and deducts remaining *costs* and estimated profit.

60.04 The top-down method attempts to bifurcate the efforts, and related *value*, that were completed before the measurement date versus those efforts that are to be completed after the measurement date.

60.05 The list of steps the *valuer should* perform in applying the top-down method for the *valuation* of inventory includes but is not limited to:

(a) estimate the selling price:

(i) The *valuer should* rely on direct observations of selling prices when the information is available.

(ii) However, such data is often not available and the selling price is often estimated by applying an appropriate gross profit margin to the net book value of finished goods at the product level or the aggregate level.

(iii) Typically, the projected gross profit margin in the period the inventory will be sold is used;

(b) estimate the *costs* to complete (for work-in-process only):

(i) Completion costs should include all the expenditures directly or indirectly remaining to be incurred after the *valuation date* in bringing the work in progress inventory to its finished condition.

(ii) *Costs* to complete *should* be adjusted to remove expenses benefitting future periods;

(c) subtract the *costs* of disposal:

(i) *Costs* of disposal represent *costs* that would be incurred after the *valuation date* to deliver the finished goods to the end customer.

(ii) *Costs* of disposal *should* be adjusted to remove expenses benefitting future periods.

(iii) Costs of disposal generally include selling and marketing expenses, whereas procurement and manufacturing expenses have typically already been incurred for finished goods inventory.

(iv) To accurately determine *costs* of disposal, each expense in the inventory cycle (including indirect overheads) *should* be categorised either as having been incurred and, therefore, have contributed to the *value* of the finished goods inventory, or as remaining to be incurred during the disposal process.

(d) subtract the profit allowance on the completion effort (for work-in-process only) and the disposal process:

(i) An initial starting point may be to utilise the operating profit of the business.

(ii) However, this methodology assumes the profit margin on the inventory is proportional to the *costs* incurred.

(iii) In most circumstances, there is rationale to assume profit margins which are not proportional to *costs* (see section 90);

(e) consider any necessary holding costs:

(i) Holding costs may need to be estimated to account for the opportunity cost associated with the time required to sell the inventory.

(ii) Additionally, the *valuer should* consider the risk borne during the holding period when determining the required rate of return.

(iii) Risks may be a function of the length of inventory life cycle and the contractual arrangements with end customers (eg, the manufacturer bears the risk of fluctuation in *costs* of completion and disposal).

(iv) Holding costs may be immaterial if the inventory turnover is high and/or the borrowing rate is low.

60.06 When determining the *cost* to complete, *costs* of disposal and profit allowance, the *valuer should* identify and exclude any expenses that are intended to provide future economic benefit and are not necessary to generate the current period revenue.

Examples of future-benefit expenses may include research and development (R&D) related to new product development, marketing for a new product, recruiting to increase the size of the workforce, expansion into a new territory, depreciation of an R&D facility dedicated to future research, or restructuring costs.

60.07 Internally developed *intangible assets should* either be modelled either as:

(a) a *cost* as if they were hypothetically licensed, and therefore included in either the *cost* of production or disposal, or

(b) considered as part of a functional apportionment when determining the appropriate profit allowance.

60.08 When utilising the top-down method, the *valuer should* consider whether sufficient *data* are available to appropriately apply the necessary steps. If sufficient *data* are not available, it may be appropriate to apply other methods or techniques.

60.09 The application of the top-down and of the bottom-up method should yield the same result for the *valuation* of inventory. The *valuer* may use the bottom-up method (see para 60.10 of this standard) to corroborate the *value* derived from the top-down method.

Bottom-Up Method

60.10 The list of steps the *valuer should* perform in applying the Bottom-up method for the *valuation* of inventory includes but is not limited to:

(a) determine the book value of the subject inventory. The book value may need to be adjusted for multiple considerations (see para 70.04 and section 110 of this standard),

(b) add any *cost* of buying and holding already incurred,

(c) add any *cost* toward completion already incurred. Such *costs* typically include procurement and manufacturing expenses,

(d) add profit on total *costs* already incurred.

(i) An initial starting point may be to use the operating profit of the business as an *input*. However, this methodology assumes the profit margin on the inventory is proportional to the *costs* incurred.

(ii) In most circumstances, there is rationale to assume profit margins which are not proportional to *costs* (see section 90).

60.11 When determining the *costs* already incurred, the *valuer should* consider internally developed *intangible assets* that have contributed toward the completion effort.

70. Cost Approach

70.01 The replacement *cost* method is the primary method for the *valuation* of raw materials inventory.

70.02 The *valuer must* comply with paras 40.02 and 40.03 of IVS 103 *Valuation Approaches* when determining whether to apply the *cost* approach to the *valuation* of inventory.

Current Replacement Cost Method (CRCM)

70.03 The current replacement cost method (CRCM) may provide a good indication of *market value* if inventory is readily replaceable in a wholesale or retail business (eg, raw materials inventory).

70.04 The *market value* of raw materials and other inventory may be similar to the net book value at the *valuation date.* The adjustments that *should* be considered include but are not limited to:

(a) the book value may need to be adjusted to FIFO basis,

(b) if raw material *prices* fluctuate and/or the inventory turnover is slow, the book value may need to be adjusted for changes in market prices,

(c) the book value of raw materials may also be decreased to account for obsolete and defective goods,

(d) the book value may also need to be decreased for shrinkage, which is the difference between inventory listed in the accounting records and the actual inventory due to theft, damage, miscounting, incorrect units of measure, evaporation, etc,

(e) the book value may need to be increased for any *costs* incurred in connection with raw material preparation (eg, purchasing, storage and handling).

80. Special Considerations for Inventory

80.01 The following sections address a non-exhaustive list of topics relevant to the *valuation* of inventory.

(a) identification of value-added processes and returns on *intangible assets* (section 90),

(b) relationship to other acquired *assets* (section 100),

(c) obsolete inventory reserves (section 110),

(d) unit of account (section 120).

90. Identification of Value-Added Processes and Returns on Intangible Assets

90.01 The *valuation* of inventory involves an allocation of profit between the profit earned pre-measurement date and the profit earned post-measurement date. In practice, profit earned may not be proportional to expenses. In most cases the risks assumed, value added, or intangibles contributed to the inventory pre-measurement date are not the same as those contributed post-measurement date.

90.02 The *valuer should* not simply allocate profit in proportion to disposition and manufacturing costs. This assumption can misallocate profit, as it presupposes that a business' production process earns profit on a *pro-rata* basis based on *costs* incurred.

(a) For manufacturers, this method is inappropriate if the *costs* of materials represent an initial outflow without *significant* efforts.

(b) Such an assumption also fails to recognise the contribution of internally-generated *intangible assets* with minimal associated costs.

90.03 The *valuer should* distinguish between value-added costs and those that are not value-added. The materials portion of Cost-of-Goods-Sold (COGS) may not be a value-added cost because it does not contribute any of the profit to the inventory.

90.04 For a business that owns internally developed *intangible assets* contributing to an increase in the level of profitability, both the return on and the return of those *intangible assets* would be included in the total profit margin of the business. However, whether *intangible assets* are owned or licensed, the *market value* of the inventory *should* be the same.

90.05 The *valuer should* determine the extent to which the technology, trademarks and customer relationships support the manufacturing and distribution processes and whether the returns are applicable to the entire base of revenue. If the *intangible asset* has been utilised to create the inventory (eg, a manufacturing process intangible), then the *value* of the inventory would be increased. Conversely, if the *intangible asset* is expected to be utilised in the future, at the time of disposal, the *value* of the inventory would be decreased.

90.06 For marketing-related *intangible assets*, the determination of whether the *intangible asset* is an attribute of the inventory may be difficult. To assist in that determination, the *valuer* may consider how the inventory would be marketed by a market participant to its customers in a push vs a pull model.

(a) A push model requires *significant* disposal efforts for inventory and is less reliant on marketing intangibles, while

(b) A pull model depends on strong brand development and recognition to pull customers to the product.

90.07 A non-exhaustive list of other considerations for evaluating when *intangible assets* are contributed may include the amount of marketing spend, whether products are sold through a distributor, the level of attrition for customer relationships and any legal rights associated with the *intangible assets*.

90.08 In some cases, the *intangible asset* may consist of several elements that contribute to various aspects of the value creation, such as a pharmaceutical product *intangible asset* that is comprised of technology and tradename. This requires an assessment of how the overall profit related to each element of the *intangible asset should* be apportioned to manufacturing the inventory versus in the disposal effort.

90.09 Similarly, although a single *intangible asset* may only contribute to either the manufacturing or disposal effort, it is also possible for a portion of the *intangible asset* to be contributed before the-measurement date and a portion to be contributed after the measurement date.

90.10 For example, when assessing the contribution of symbolic Intellectual Property (IP) for finished goods, and although the product bears the respective branding associated with the symbolic IP, the related right to sell the branded product may not be conveyed with the transfer of inventory. As such, it may be appropriate to consider such rights in the *costs* of disposal.

100. Relationship to Other Acquired Assets

100.01 The *valuer should* maintain appropriate consistency between the assumptions used in the *valuation* of inventory and the assumptions used in the *valuation* of other *assets* and/or *liabilities*.

110. Obsolete Inventory Reserves

The *valuer should* account for obsolete inventory reserve balances. The inventory reserve balances *should* be applied to the inventory in which the reserve applies, rather than netted against the entire inventory balance.

Typically, the obsolete inventory adjusted for the inventory reserve would not be valued since it has been adjusted to its net realisable value. However, the *valuer* may need to consider further write-downs if the *market value* of the inventory is lower than net realisable value.

120. Unit of Account

For the purposes of inventory valuation, it is often appropriate to assume that inventory is one homogenous set of *assets*. However, it is possible for the profit margins, risk, and *intangible asset* contributions to vary by product or product group.

If the profit margins, risk and *intangible asset* contributions vary by product or product group, and the relative mix of inventory being valued does not match the assumed sales mix used to develop the assumptions for the *valuation*, the *valuer should* assess the different groups of inventory separately.

IVS 300 Plant, Equipment and Infrastructure

IVS 200 Businesses and Business Interests | IVS 210 Intangible Assets | IVS 220 Non-Financial Liabilities | IVS 230 Inventory | **IVS 300 Plant, Equipment and Infrastructure** | IVS 400 Real Property Interests | IVS 410 Development Property | IVS 500 Financial Instruments

Contents	**Paragraphs**
Overview	10
Introduction	20
Valuation Framework	30
Scope of Work	40
Bases of Value	50
Valuation Approaches	60
Market Approach	70
Income Approach	80
Cost Approach	90
Data and Inputs	100
Valuation Models	110
Documentation and Reporting	120
Special Considerations for Plant and Equipment	130

10. Overview

10.01 The principles contained in the General Standards apply to *valuations* of plant, equipment and infrastructure (PEI). This standard includes modifications, additional requirements or specific examples of how the General Standards apply to *valuations* to which this standard applies. *Valuations* of PEI must also follow the applicable standards for that type of *asset* and/or *liability* (see IVS 400 *Real Property Interests* and IVS 410 *Development Property*, where applicable).

20. Introduction

20.01 Items of PEI (which may sometimes be categorised as a type of personal property) are *tangible assets* that are usually held by an entity for use in the manufacturing/production or supply of goods or services, for rental by others or for administrative purposes and that are expected to be used over a period of time. PEI may also include infrastructure assets, which are typically part of a specialised system, network or group of complementary *assets*. Where applicable, *valuations* relating to infrastructure *should* also have consideration to IVS 400 *Real Property Interests* and IVS 410 *Development Property*.

20.02 The right to use an item of machinery and equipment (such as a right arising from a lease) would also follow the guidance of this standard. It *must* also be noted that the “right to use” an *asset* could have a different life span than the service life (that takes into consideration both preventive and predictive maintenance) of the underlying *asset* itself and, in such circumstances, the difference *must* be stated.

20.03 Consistent with the highest and best use premise, a group of *assets* may have greater value individually than when considered as part of group of assets, or vice versa. PEI for which the highest and best use is “in use” as part of a group of *assets must* be valued using consistent assumptions.

20.04 *Intangible assets* typically fall outside the classification of PEI *assets*. However, an *intangible asset* may have an impact on the value of PEI assets. Operating software, technical data, production records and patents are examples of *intangible assets* that can have an impact on the *value* of PEI *assets*. If the *valuation* of discrete or embedded *intangible assets* is necessary to value PEI assets, they *should* be included in the *valuation*.

20.05 A *valuation* of PEI will normally require consideration of a range of factors relating to the *asset* itself, its environment and physical, functional and economic potential. Examples of factors that may need to be considered under each of these headings include the following:

(a) *asset*-related factors:

(i) the *asset’s* technical specification,

(ii) the remaining useful, economic or effective life, considering both preventive and predictive maintenance,

(iii) the *asset’s* condition, including maintenance history and historical capital expenditure,

(iv) any functional, physical and technological obsolescence,

(v) if the *asset* is not valued in its current location, the *costs* of decommissioning and removal, and any costs associated with the *asset’s* existing in-place location, such as installation and re-commissioning of *assets* to its optimum status,

(vi) for an *asset* that is used in a leasing context, the lease renewal options and other end-of-lease possibilities (often referred to as terminal value),

(vii) any potential loss of a complementary *asset*, eg, the operational life of an *asset* may be curtailed by the length of lease on the building in which it is located,

(viii) additional *costs* associated with additional equipment, transport, installation and commissioning, etc, and

(ix) in cases where the historical costs are not available for the *asset* that may reside within a plant during a construction, the *valuer* may take references from the engineering, procurement, and/or construction contract(s) (if available).

(b) environmental or external related factors:

(i) the location in relation to the source of raw material and market for the products produced by the *asset* or group of *assets*. The suitability of a location may also have a limited life, eg, where raw materials are finite or where demand is transitory,

(ii) the impact of any legislation or external related factors that either restricts utilisation or imposes additional operating or decommissioning costs on the PEI or reduces demand for a product produced by the *asset* or group of *assets*,

(iii) toxic wastes which may be chemical in the form of a solid, liquid or gaseous state *must* be professionally stored or disposed of. This is critical for all industrial manufacturing, and

(iv) licences to operate certain *assets* in certain *jurisdictions* may be restricted, or may have a limited life,

(c) economic-related factors:

(i) the actual or potential profitability of the *asset*, which might be based on comparison of operating costs with earnings or potential earnings of the business within which the *asset* operates (see IVS 200 *Businesses and Business Interests*),

(ii) the demand for the product manufactured by the *asset* with regard to both macro- and micro-economic factors could impact on demand, and

(iii) the potential for the *asset* to be put to a more valuable use than the current use (ie, highest and best use).

20.06 *Valuations* of plant and equipment *should* reflect the impact of all forms of obsolescence on *value*.

30. Valuation Framework

30.01 In accordance with IVS 100 *Valuation Framework*, the *valuer must* comply with the *valuer* principles (see IVS 100 *Valuation Framework*, section 10).

40. Scope of Work

40.01 To comply with the requirement to identify the *asset* and/or *liability* to be valued in IVS 101 *Scope of Work*, section 20, to the extent it impacts on *value*, consideration *must* be given to the degree to which the *asset* is attached to, or integrated with, other *assets*. For example:

(a) *assets* may be permanently attached to the land and could not be removed without substantial demolition of either the *asset* or any surrounding structure or building,

(b) an individual machine may be part of an integrated production line where its functionality is dependent upon other *assets*,

(c) an *asset* may be considered to be classified as a component of the real property (eg, a Heating, Ventilation and Air Conditioning System (HVAC)).

In such cases, it will be necessary to clearly define what is to be included or excluded from the *valuation*. Any special assumptions relating to the availability of any complementary *assets must* also be stated.

40.02 PEI connected with the supply or provision of services to a building are often integrated within the building and, once installed, are often difficult to separate from it. These items will normally form part of the real property interest and therefore the requirements contained within IVS 400 *Real Property Interests* and IVS 410 *Development Property must* also be considered, where appropriate. Examples include *assets* with the primary function of supplying electricity, gas, heating, cooling or ventilation to a building and equipment such as elevators. If the purpose of the *valuation* requires these items to be valued separately, the scope of work *must* include a statement to the effect that the *value* of these items would normally be included in the real property interest and may not be separately realisable.

40.03 Because of the diverse nature and transportability of many items of PEI, additional assumptions will normally be required to describe the situation and circumstances in which the *assets* are valued. In order to comply with IVS 101 *Scope of Work*, para 20.01 (k) these *must* be considered and included in the scope of work. Examples of assumptions that may be appropriate in different circumstances include:

(a) that the *assets* are valued as a group, in place and as part of an operating business,

(b) that the *assets* are valued as a group, in place but on the assumption that the business is not yet in production,

(c) that the *assets* are valued as a group, in place but on the assumption that the business is closed,

(d) that the *assets* are valued as a group, in place but on the assumption that it is a forced sale (see IVS 102 *Bases of Value*, Appendix A120),

(e) that the *assets* are valued as individual items for removal from their current location.

40.04 In some circumstances, it may be appropriate to report on more than one set of assumptions, eg, in order to illustrate the effect of business closure or cessation of operations on the *value* of *assets*.

40.05 In addition to the requirements contained within IVS 101 *Scope of Work*, sections 20 and 30, investigations made during the course of a valuation engagement *must* be appropriate for the *intended use* of the valuation engagement and the *basis(es) of value*.

40.06 Sufficient investigations and evidence *must* be assembled by means such as inspection, inquiry, research, computation or analysis to ensure that the *valuation* is properly supported. When determining the extent of investigations and evidence necessary, *professional judgement* is required to ensure it is fit for the purpose of the *valuation*.

40.07 When a valuation engagement involves reliance on information supplied by a party other than the *valuer*, consideration *should* be given as to whether the information is credible or that the information may otherwise be relied upon without adversely affecting the credibility of the *valuation*. *Significant inputs* provided to the *valuer* (eg, by management/owners) *should* be considered, investigated and/or corroborated. In cases where credibility or reliability of information supplied cannot be supported, consideration *should* be given as to whether or how such information is used (see IVS 101 *Scope of Work*, para 20.01 (j)).

40.08 In considering the credibility and reliability of information provided, the *valuer should* consider matters such as:

(a) the *intended use* of the *valuation*,

(b) the significance of the information to the valuation conclusion,

(c) the expertise of the source in relation to the subject matter, and

(d) whether the source is independent of either the subject *asset* and/ or the *intended user* of the *valuation* (see IVS 101 *Scope of Work*, para 20.01 (a)).

40.09 The *intended use* of the *valuation*, the *basis of value*, the extent and limits on the investigations and any sources of information that may be relied upon are part of the valuation engagement's scope of work that *must* be communicated to all parties to the valuation engagement (see IVS 101 *Scope of Work*).

40.10 If, during the course of a valuation assignment, it becomes clear that the investigations or limitations included in the scope of work will not result in a credible *valuation*, or information to be provided by third parties is either unavailable or inadequate, or limitations on investigations such as inspection are so substantial that it will not result in a valuation outcome that is adequate for the purpose of the *valuation*, the *valuation must* explicitly state that the *valuation* is not in compliance with IVS (see IVS 100 *Valuation Framework*, section 40 and IVS 101 *Scope of Work*, para 20.03).

50. Bases of Value

50.01 In accordance with IVS 102 *Bases of Value*, the *valuer must* select the appropriate *basis(es) of value* when valuing PEI.

50.02 Using the appropriate *basis(es) of value* and associated premise of value (see IVS 102 *Bases of Value*, Appendix A90–A120) is particularly crucial in the *valuation* of PEI because differences in *value* can be *significant*, depending on whether an item of plant and equipment is valued under an “in use” premise, orderly liquidation or forced liquidation (see IVS 102 *Bases of Value*, Appendix A60). The *value* of most PEI is particularly sensitive to different premises of value.

Liquidation value

50.03 In determining any premise of *liquidation value*, it *should* be made clear as to whether the premise is required to be on an in-place (in-situ) or removed (ex-situ) basis. The characteristics associated with the *asset's* or group of *assets'* location, and underlying land tenure or lease term, will often impact on the in-place or removed consideration.

50.04 Regardless of whether the *asset* or group of *assets* is being considered on an in-place (in-situ) or removed (ex-situ) basis, typically the premise *should* consider a scenario that would maximise the gross amount that would be realised having consideration to the premise of value under consideration. This may be achieved by selling the *assets* on a piecemeal basis, or alternatively may be achieved by selling the *assets* as a group, depending upon the market.

50.05 It *should* be noted that for plant and equipment, selling an *asset* on a removed (ex-situ) or piecemeal basis may be quite common. For infrastructure, selling an *asset* on a removed (ex-situ) or piecemeal basis may or may not be possible and will vary depending upon the characteristics of the *asset*.

50.06 The proposition of a removed (ex-situ) basis raises the possibility that there will be certain *asset* components (or originally incurred indirect *costs*) that are not recoverable once the *asset* is removed (either physically or economically). Such items might include (but not be limited to) foundations, electrical and process piping, transportation costs, installation and commissioning costs, fixed buildings, safety and protection equipment, etc.

50.07 In the event that a scope of work specifically requires the determination of a net amount (as opposed to gross amount) that would be realised from a liquidation sale, the nature and quantum of the *costs* that will likely be incurred by the seller to get from the gross to the net amount *should* be made clear.

60. Valuation Approaches

60.01 The three principal *valuation approaches* described in IVS 103 *Valuation Approaches* may all be applied to the *valuation* of PEI *assets* and/or *liabilities* depending on the nature of the *assets*, the information available, and the facts and circumstances surrounding the *valuation*.

70. Market Approach

70.01 For classes of plant and equipment that are homogenous, eg, cranes, construction equipment, motor vehicles (light and heavy) and earthmoving equipment, the market approach is commonly used as there may be sufficient *data* of recent sales of similar *assets*. However, many types of plant and equipment are specialised and in these instances care *must* be exercised in offering *valuation* using a market approach when available market data is poor or non-existent. In such circumstances it may be appropriate to adopt either the income approach or the cost approach to the *valuation* (see IVS 103 *Valuation Approaches*, para 20.03).

70.02 When using the market approach, types of evidence will include (see section 100, para 100.02 of this standard):

(a) actual sales of identical *assets*,

(b) actual sales of similar *assets,*

(c) asking prices for identical *assets*,

(d) asking prices for similar *assets*.

70.03 Depending upon the *asset(s)* being valued, market evidence may be considered in a variety of ways including:

(a) piecemeal (ie, individual *asset* basis),

(b) production line (ie, a group of *assets* together forming an operating unit),

(c) whole of plant/facility (ie, a production facility producing X units per day),

(d) portfolio (ie, a group of *assets* operating across a region).

70.04 Highest and best use considerations *should* always be a primary consideration for the *valuer* when considering the above types of evidence. Specifically, a portfolio of *assets* may have greater *value* if considered individually as opposed to as part of a portfolio, and vice versa. Where this is the case, the *valuer must* explicitly state that this is the case and provide reasoning as to the difference in forming their conclusion.

70.05 Actual sales *must* take preference over asking prices and evidence available just prior to *the valuation date should* be preferred to that further from the *valuation date*.

70.06 The reliability of the evidence *should* be *weighted* according to its source. Depending upon the *asset* class considered as part of the *valuation*, evidence may be considered at a local, national or international level.

70.07 The market approach for actual sales of identical *assets* includes all forms of depreciation and obsolescence relating to an *asset* and no adjustment will be required (although such evidence is rare).

70.08 When considering actual sales or asking prices of similar *assets* (and asking prices for identical *assets*), various adjustments may need to be considered to bring the evidence in line with the subject *asset*, and may include but not limited to adjustments for:

(a) technical factors (size, capacity, rating, units of production, specification, etc),

(b) deterioration and obsolescence factors (condition, intensity of use, age, maintenance, overhaul status, operating costs),

(c) market-related factors (location, currency, quantities, asking price versus actual sales, environmental/licensing/compliance status, etc),

(d) time or *basis of value* factors (date of sale versus *valuation date*, market sale versus liquidation sale, installed as-is/where-is versus removed, etc).

70.09 In making adjustments to bring the evidence in line with the subject *asset*, the *valuer* may use various methods including:

(a) direct adjustment (ie, a currency or amount adjustment),

(b) indirect adjustment (ie, to adjust the evidence by a percentage).

70.10 Evidence in an active and transparent market *should* always be preferred to an inactive and opaque market. Similarly, evidence will be more comparable when fewer adjustments are required to bring it in line with the subject *asset*. In all instances, *professional judgement must* be used to ensure that the evidence being considered is appropriate having consideration to the nature of the *valuation* being performed.

80. Income Approach

80.01 The income approach to the *valuation* of PEI can be used where specific cash flows can be identified for the *asset* or a group of complementary *assets*, eg, where a group of *assets* forming a process plant is operating to produce a marketable product/service or generating income from a lease.

80.02 When PEI is valued on an income approach, elements of *value* that may be attributable to *intangible assets* and other contributory *assets should* typically be excluded (see section 20.04 of this standard, IVS 101 *Scope of Work* and IVS 210 *Intangible Assets*).

80.03 The income approach can also be utilised, in conjunction with other approaches, in assessing the existence and quantum of economic obsolescence and/or goodwill for an *asset* or group of complementary *assets*. Care *should* be taken when using the income approach because it may be challenging to apportion aggregated cash flows relating to a group of complementary *assets* down into individual *assets* (where necessary).

80.04 When an income approach is used to value PEI, the *valuation must* consider the cash flows expected to be generated over the explicit forecast period of the *asset(s)* as well as the *value* of the *asset(s)* at the end of the explicit forecast period, often referred to as terminal value (see IVS 103 *Valuation Approaches*, Appendix A20.02–A20.22).

80.05 In accordance with IVS 103 *Valuation Approaches*, the income approach for an *asset* or group of complementary *assets* may be used where the main driver of *value* is largely driven by its income producing ability and afforded *significant weight* under the following circumstances such as:

(a) the *asset* or group of complementary *assets* have a high barrier to entry for market participants,

(b) there is *significant* time involved to create an *asset* or group of complementary *assets* of equal utility, whether by purchase or construction,

(c) there are potential legal or regulatory hurdles to create an *asset* or group of complementary *assets* of equal utility,

(d) a purchaser would be willing to pay a *significant* premium for the ability to use the *asset* or group of complementary *assets* immediately, due to favourable market economics and/or more immediate cashflow certainty,

(e) there is undue inconvenience, risk or other factors involved in obtaining an *asset* or group of complementary *assets* of equal utility, whether by purchase or construction.

80.06 In addition, the income approach *should* also be afforded *significant weight* for an *asset* or group of complementary *assets* under the following circumstances:

(a) the use of the market approach is either not practicable or inconclusive to value the *asset* or group of complementary *assets*,

(b) the *valuation* only needs to consider the *asset* or group of complementary *assets* as a whole, and not the *value* of individual component *assets*,

(c) the income-producing ability of the *asset* or group of complementary *assets* is set by market rates, or via contracts that are frequently marked-to-market,

(d) the cash flow generated for an *asset* or group of complementary *assets* is discrete and clearly distinguishable from other parts of the business,

(e) the *value* of other contributory *assets* that are inherently included within the income generated can be readily valued in isolation from the *asset* or group of complementary *assets* using other valuation methodologies.

90. Cost Approach

90.01 The cost approach is commonly adopted for PEI, particularly in the case of individual *assets* that are specialised or special-use facilities. The first step is to estimate the *cost* to a market participant of replacing the subject *asset* by reference to the lower of either reproduction or replacement cost. The replacement cost is the *cost* of obtaining an alternative *asset* of equivalent utility; this can either be a modern equivalent providing the same functionality or the *cost* of reproducing an exact replica of the subject *asset*. After concluding on a replacement cost, the *value should* be adjusted to reflect the impact on *value* of physical, functional, technological and economic obsolescence on *value*. In any event, adjustments made to any particular replacement cost *should* be designed to produce the same *cost* as the modern equivalent *asset* from an output and utility point of view.

90.02 An entity's actual *costs* incurred in the acquisition or construction of an *asset* may be appropriate for use as the replacement cost of an *asset* under certain circumstances. However, prior to using such historical cost information, the *valuer should* consider the following:

(a) timing of the historical expenditures: an entity's actual *costs* may not be relevant, or may need to be adjusted for inflation/indexation to an equivalent as of the *valuation date*, if they were not incurred recently due to changes in market prices, inflation/deflation or other factors,

(b) the *basis of value*: care *must* be taken when adopting a particular market participant's own costings or profit margins, as they may not represent what typical market participants might have paid. The *valuer must* also consider the possibility that the entity's *costs* incurred may not be historical in nature due to prior purchase accounting or the purchase of used PEI *assets*. In any case, historical *costs must* be trended using appropriate indices,

(c) specific *costs* included: the *valuer must* consider all *significant costs* that have been included and whether those *costs* contribute to the *value* of the *asset* and for some *bases of value*, some amount of profit margin on *costs* incurred may be appropriate,

(d) non-market components: any *costs*, discounts or rebates that would not be incurred by, or available to, typical market participants *should* be excluded.

90.03 Having established the replacement cost, deductions *must* be made to reflect the physical, functional, technological and economic obsolescence as applicable (see IVS 103 *Valuation Approaches*, Appendix A30.15–A30.22).

Cost-to-Capacity Method

90.04 Under the cost-to-capacity method, the replacement cost of an *asset* with an actual or required capacity can be determined by reference to the *cost* of a similar *asset* with a different capacity.

90.05 The cost-to-capacity method is generally used in one of two ways:

(a) to estimate the replacement cost for an *asset* or *assets* with one capacity where the replacement costs of an *asset* or *assets* with a different capacity are known (such as when the capacity of two subject *assets* could be replaced by a single *asset* with a known *cost*, or

(b) to estimate the replacement cost for a modern equivalent *asset* with capacity that matches foreseeable demand where the subject *asset* has excess capacity (as a means of measuring the penalty for the lack of utility to be applied as part of an economic obsolescence adjustment).

90.06 This method could be used as a primary method for determining replacement cost on a top-down basis, or could be used as a check method to the replacement cost determined on a bottom-up basis. However, the existence of an exact comparison plant with the same designed capacity that resides within the same geographical area would always take preference over a cost-to-capacity method.

90.07 It is noted that the relationship between *cost* and capacity is often not linear, so some form of exponential adjustment may also be required. However, the *valuer should* exercise caution in performing this adjustment when large differences in capacity are being used as evidence relative to the subject *asset* as this may not lead to credible outcomes.

Trending Method

90.08 Trending is a method of estimating an asset’s reproduction cost by applying an index (trend factor) to the *asset’s* historical cost which reflects the price inflation/deflation of the *asset* over time.

90.09 Historical *cost* comprises the expenditure that was involved in acquiring the *asset* when it was first placed into service by its first owner. This is to be distinguished from original *cost*, which is the actual *cost* of a property when acquired by its present owner, who may not be the first owner and who may have purchased the *asset* at a *price* greater or less than the historical *cost*.

90.10 Indices may be obtained from statistical offices or similar government agencies, institutions or research organisations. Selection of the most appropriate indices is crucial when using the trending method.

90.11 Whilst the application of a trending method (often termed an indirect method which involves the application of indexing) can be an appropriate way to determine replacement cost when using the cost approach, care *should* be taken in relation to the following:

(a) trending *should* not be applied to anything other than a previously determined direct replacement cost or the historical *cost* (the *cost* of an *asset* when it was first placed into service by its first owner),

(b) historical *costs* represent a range of direct and indirect *costs* (ie, equipment, labour, delivery, electrical, foundations, buildings, IT, etc) that might not correlate to a certain index,

(c) trending long-dated historical *costs* can create erroneous and anomalous outcomes because of the various factors that impact indices over time,

(d) using an index/trend that is derived in different *jurisdictions* to the subject *asset* can create erroneous and anomalous outcomes because of the various factors that impact indices in differing *jurisdictions*,

(e) trending historical *costs* using a local index/trend for *assets* that were sourced in a foreign *jurisdiction* where there have been exchange rate movements over time.

90.12 In all instances, *professional judgement* is required to ensure the trending method to determine replacement cost as part of a cost approach is appropriate having consideration to the nature of the *valuation* being performed. If it is likely to lead to erroneous or anomalous *valuation* outcomes, the application of alternate approaches to determine replacement cost *must* be utilised (ie, a direct approach to estimating replacement cost).

100. Data and Inputs

100.01 In accordance with IVS 104 *Data and Inputs*, the *valuer must* maximise the characteristics of relevant and *observable data* to the degree that it is possible.

100.02 In addition to the requirements contained within IVS 104 *Data and Inputs* there is the following hierarchy of comparable evidence, which *should* be followed for PEI valuations:

(a) direct comparable evidence,

(b) indirect comparable evidence,

(c) general market data,

(d) other sources.

100.03 When applying the hierarchy of comparable evidence, the *valuer must* ensure that the characteristics of suitable *data* and *inputs* contained within IVS 104 *Data and Inputs* are fully applied.

100.04 The *inputs* selected *must* be consistent with the models being used to value the *asset* (see IVS 104 *Data and Inputs*, para 40.01).

100.05 The selection, source and use of the *inputs must* be explained, justified, and documented.

100.06 *Significant ESG* factors associated with the *value* of an *asset should* be considered as part of the *data* and *input* selection process.

110. Valuation Models

In accordance with IVS 105 *Valuation Models*, the *valuer must* maximise as many of the characteristics of suitable *valuation models*, as possible.

Valuation models must be suitable for the *intended use* of the *valuation* and consistent with suitable *inputs*.

120. Documentation and Reporting

In addition to the requirements in IVS 106 *Documentation and Reporting*, a valuation report *must* be issued for a *valuation* and *must* include appropriate references to all matters addressed in the agreed scope of work (see IVS 101 *Scope of Work*). The report *must* also include comment on the effect on the reported *value* of any associated *tangible* or *intangible assets* excluded from the actual or assumed transaction scenario.

Moreover, in addition to the requirements contained within IVS 106 *Documentation and Reporting*, paras 40.01-40.03 a valuation review report *must* be issued for a *valuation review* and the valuation review report *must* state whether the review is a *valuation process review* or a *value review*.

130. Special Considerations for Plant and Equipment

The following section addresses a non-exhaustive list of topics relevant to the *valuation* of PEI.

Allocation of value

Further to IVS 102 *Bases of Value*, section 70 and this standard, where a group of *assets* have been valued as part of a portfolio, but allocated on an individual basis, the *valuer must* explicitly state that this is the case and provide rationale as to their allocation methodology.

IVS 400 Real Property Interests

IVS 200 Businesses and Business Interests	IVS 210 Intangible Assets	IVS 220 Non-Financial Liabilities	IVS 230 Inventory	IVS 300 Plant, Equipment and Infrastructure	IVS 400 Real Property Interests	IVS 410 Development Property	IVS 500 Financial Instruments

Contents **Paragraphs**

Overview	10
Introduction	20
Valuation Framework	30
Scope of Work	40
Bases of Value	50
Valuation Approaches	60
Market Approach	70
Income Approach	80
Cost Approach	90
Data and Inputs	100
Valuation Models	110
Documentation and Reporting	120
Special Considerations for Real Property Interests	130
Hierarchy of Interests	140
Rent	150

10. Overview

10.01 The principles contained in the General Standards apply to *valuations* of real property interests. This standard includes modifications, additional requirements or specific examples of how the General Standards apply to *valuations* to which this standard applies. *Valuations* of real property interests *must* also follow the applicable standard for that type of *asset* and/or *liability* (see IVS 300 *Plant, Equipment and Infrastructure* and IVS 410 *Development Property*, where applicable).

20. Introduction

20.01 Property interests are normally defined by state or the law of individual *jurisdictions* and are often regulated by national or local legislation. In some instances, legitimate individual, communal/community and/or collective rights over land and buildings are held in an informal, traditional, undocumented and unregistered manner. Before undertaking a *valuation* of a real property interest, the *valuer must* understand the relevant legal framework that affects the interest being valued.

20.02 A real property interest is a right of ownership, control, use or occupation of land and buildings. A real property interest includes informal tenure rights for communal/community and/or collective or tribal land and urban/rural informal settlements or transition economies, which can take the form of possession, occupation and rights to use.

20.03 There are three main types of interest:

(a) the superior interest in any defined area of land. The owner of this interest has an absolute right of possession and control of the land and any buildings upon it in perpetuity, subject only to any subordinate interests and any statutory or other legally enforceable constraints,

(b) a subordinate interest that normally gives the holder rights of exclusive possession and control of a defined area of land or buildings for a defined period, eg, under the terms of a lease contract, and/or

(c) a right to use land or buildings but without a right of exclusive possession or control, eg, a right to pass over land or to use it only for a specified activity.

20.04 *Intangible assets* fall outside the classification of real property *assets* and/or *liabilities*. However, an *intangible asset* may be associated with, and have a material impact on, the cash flows associated with real property *assets*. It is therefore essential to be clear in the scope of work precisely what the *intended use* of the *valuation* is to include or exclude. When there is an *intangible asset* component, the *valuer should* also follow IVS 210 *Intangible Assets*.

20.05 Although different words and terms are used to describe these types of real property interest in different *jurisdictions*, the concepts of an unlimited absolute right of ownership, an exclusive interest for a limited period or a non-exclusive right for a specified *intended use* are common to most. The immovability of land and buildings means that it is the right that a party holds that is transferred in an exchange, not the physical land and buildings. The *value*, therefore, attaches to the legal interest rather than to the physical land and buildings.

20.06 *Valuations* of real property interests are often required for different *intended uses* including secured lending, sales and purchases, taxation, litigation, compensation, insolvency proceedings and financial reporting.

30. Valuation Framework

30.01 In accordance with IVS 100 *Valuation Framework*, the *valuer must* comply with the valuer principles (see IVS 100 *Valuation Framework*, section 10).

40. Scope of Work

40.01 To comply with the requirement to identify the *asset* and/or *liability* to be valued in IVS 101 *Scope of Work*, para 20.03 (a) the following matters *must* be included:

(a) a description of the real property interest to be valued, and

(b) identification of any superior or subordinate interests or right to use that affect the interest to be valued.

40.02 In accordance with requirements contained within IVS 101 *Scope of Work*, sections 20 and 30, investigations made during the course of a valuation engagement *must* be appropriate for the *intended use* of the valuation engagement and the *basis(es) of value*. In the case of a *valuation review* the scope of work *must* state whether the review is a *valuation process review* or a *value review*.

40.03 Sufficient investigations and evidence *must* be assembled by means such as inspection, inquiry, research, computation or analysis to ensure that the *valuation* is properly supported. When determining the extent of investigations and evidence necessary, *professional judgement* is required to ensure it is fit for the purpose of the *valuation*.

40.04 When a valuation engagement involves reliance on information supplied by a party other than the *valuer*, consideration *should* be given as to whether the information is credible or that the information may otherwise be relied upon without adversely affecting the credibility of the valuation. *Significant inputs* provided to the *valuer* (eg, by management/owners) *should* be considered, investigated and/or corroborated. In cases where credibility or reliability of information supplied cannot be supported, consideration *should* be given as to whether or how such information is used (see IVS 101 *Scope of Work*, para 20.01 (j)).

40.05 In considering the credibility and reliability of information provided, the *valuer should* consider matters such as:

(a) the *intended use* of the *valuation*,

(b) the significance of the information to the valuation conclusion,

(c) the expertise of the source in relation to the subject matter, and

(d) whether the source is independent of either the subject *asset* and/or the recipient of the *valuation* (see IVS 101 *Scope of Work*, para 20.01 (a)).

40.06 The *intended use* of the *valuation*, the *basis of value*, the extent and limits on the investigations and any sources of information that may be relied upon, are part of the valuation engagement's scope of work that *must* be communicated to all parties to the valuation engagement (see IVS 101 *Scope of Work*).

40.07 If, during the course of an engagement, it becomes clear that the investigations or limitations included in the scope of work will not result in a credible *valuation*, or information to be provided by third parties is either unavailable or inadequate, or limitations on investigations such as inspections are so substantial that, it will not result in a valuation outcome that is adequate for the purpose of the *valuation*, the *valuation must* explicitly state that the *valuation* is not in compliance with IVS (see IVS 100 *Valuation Framework*, section 40 and IVS 101 *Scope of Work*, para 20.03).

40.08 In addition to the requirements to state the extent of the investigation and the nature and source of the information to be relied upon in IVS 101 *Scope of Work*, the following matters *should* be considered:

(a) the evidence, if available, required to verify the real property interest and any relevant related interests,

(b) the extent of any inspection,

(c) responsibility for information on the site area, site characteristics (eg, ground condition), building characteristics or building floor areas,

(d) responsibility for information on the area, characteristics (eg, soil conditions) and productivity generating attributes of land (eg, fertility of the soil, plantation area),

(e) responsibility for confirming the specification and condition of any building,

(f) responsibility for confirming the specification and condition of the plantation, vegetation, forest or crop,

(g) responsibility for confirming the quantity and quality of reserves and any extraction and remedial measures post extraction,

(h) the extent of investigation into the nature, specification and adequacy of services and facilities,

(g) responsibility for the identification of actual or potential environmental factors, and

(h) legal permissions or restrictions on the use of the property and any buildings, as well as any expected or potential changes to legal permissions and restrictions.

40.09 Typical examples of special assumptions that need to be agreed and confirmed in order to comply with IVS 101 *Scope of Work*, para 20.03 (k) and IVS 102 *Bases of Value*, para 50.04 include but are not limited to:

(a) that a defined physical change had occurred, eg, a proposed building is valued as if complete at the *valuation date*,

(b) that there had been a change in the status of the property, eg, a vacant building had been leased or a leased building had become vacant at the *valuation date*,

(c) that the interest is being valued without taking into account other existing interests,

(d) that the property is free from contamination or other environmental risks,

(e) that the economic activity will continue into perpetuity, and

(f) that planning permission will be granted for the proposed change of use.

50. Bases of Value

50.01 In accordance with IVS 102 *Bases of Value*, the *valuer must* select the appropriate *basis(es) of value* for the *intended use* when valuing real property interests.

50.02 Under most *bases of value*, the *valuer must* consider the highest and best use of the real property, which may differ from its current use (see IVS 102 *Bases of Value*, Appendix A90–A120). This assessment is particularly important to real property interests which can be changed from one use to another or that have development potential.

50.03 In addition to the requirements contained within IVS 102 *Bases of Value*, section 70, on allocation of *value*, if the sum-of-the-value of the individual allocated components differs from the *value* of the *assets* and/or *liabilities* on an aggregate basis, then the *valuer should* expressly state the primary reason(s) for the difference.

60. Valuation Approaches

60.01 The three *valuation approaches* described in IVS 103 *Valuation Approaches* can all be applicable for the *valuation* of a real property interest.

60.02 When selecting an approach and method, in addition to the requirements of this standard, the *valuer must* follow the requirements of IVS 103 *Valuation Approaches,* including paras 10.03 and 10.04.

70. Market Approach

70.01 Property interests are generally heterogeneous (ie, with different characteristics). Even if the land and buildings have identical physical characteristics to others being exchanged in the market, the location will be different. Notwithstanding these dissimilarities, the market approach is commonly applied for the *valuation* of real property interests.

70.02 In order to compare the subject of the *valuation* with the *price* of other real property interests, the *valuer should* adopt generally accepted and appropriate units of comparison that are considered by participants, dependent upon the type of *asset* and/or *liability* being valued. Units of comparison that are commonly used might include:

(a) price per square metre (or per square foot) of a building or per hectare (or per acre) for land,

(b) price per room, and

(c) price per unit of output (eg, megawatt, crop yields).

70.03 A unit of comparison is only useful when it is consistently selected and applied to the subject property and the comparable properties in each analysis. To the extent possible, any unit of comparison used *should* be one commonly used by participants in the appropriate market.

70.04 The reliance that can be applied to any comparable price *data* in the *valuation* is determined by comparing various characteristics of the property and transaction from which the *data* was derived with the property being valued. Differences between the following *should* be considered in accordance with IVS 103 *Valuation Approaches,* Appendix A10.01-10.08. Specific differences that *should* be considered in valuing real property interests include, but are not limited to:

(a) the type of interest providing the price evidence and the type of interest being valued,

(b) the respective locations,

(c) the respective quality of the land,

(d) the age and specification of the improvements,

(e) the permitted use or zoning at each property,

(f) the circumstances under which the *price* was determined and the *basis of value* required,

(g) the effective date of the price evidence and the *valuation date*, and

(h) market conditions at the time of the relevant transactions and how they differ from conditions at the *valuation date*.

80. Income Approach

80.01 Various methods are used to indicate *value* under the general heading of the income approach, all of which share the common characteristic that the *value* is based upon an actual or estimated income that either is, or could be, generated by an owner of the interest. In the case of an investment property, that income could be in the form of rent (see IVS 104 *Data and Inputs* and IVS 105 *Valuation Models*); in an owner-occupied building, it could be an assumed rent (or rent saved) based on what it would cost the owner to lease equivalent space.

80.02 For some real property interests, the income-generating ability of the property is closely tied to a particular use or business/trading activity (for example, cinemas, retirement or care homes, clinics, hotels, etc). Where a building is suitable for only a particular type of trading activity, the income is often related to the actual or potential cash flows that would accrue to the owner of that building from the trading activity. The use of a property's trading potential to indicate its *value* is often referred to as the "profits method" (see following para 80.03).

80.03 When the potential income used in the income approach represents cash flow from a business/trading activity (rather than cash flow related to rent, maintenance and other real property-specific *costs*), and includes *intangible assets* then this is no longer solely a real property interest *valuation* and the *valuer should* also comply as appropriate with the requirements of IVS 200 *Businesses and Business Interests* and, where applicable, IVS 210 *Intangible Assets*.

80.04 For real property interests, various forms of discounted cash flow models may be used. These vary in detail but share the basic characteristic that the cash flow for a defined future period is adjusted to a present value using a *discount rate*. The sum of the present day values for the individual periods represents an estimate of the capital value. The *discount rate* in a discounted cash flow model will be based on the time cost of money and the risks and rewards of the income stream in question.

80.05 Further information on the derivation of *discount rates* is included in IVS 103 *Valuation Approaches,* Appendix A20.29-A20.40. The development of a yield or *discount rate should* be influenced by the objective of the *valuation*. For example:

(a) if the objective of the *valuation* is to establish the *market value*, the *discount rate* may be derived from observation of the returns implicit in the *price* paid for real property interests traded in the market between participants or from hypothetical participants' required rate of return. When a *discount rate* is based on an analysis of market transactions, the *valuer should* also follow the guidance contained in IVS 103 *Valuation Approaches*, Appendix A10.07 and A10.08, and

(b) if the objective of the *valuation* is to establish the *market value* to a particular owner or potential owner based on their own investment criteria, the rate used may reflect their required rate of return or their weighted-average-cost-of-capital.

80.06 An appropriate *discount rate* may also be built up from a typical "risk-free" return adjusted for the additional risks and opportunities specific to the particular real property interest.

90. Cost Approach

90.01 In applying the cost approach, the *valuer must* follow the guidance contained in IVS 103 *Valuation Approaches,* Appendix A30.

90.02 This approach is generally applied to the *valuation* of real property interests through the depreciated replacement cost method (see IVS 103 *Valuation Approaches*, Appendix A30).

90.03 It may be used as the primary approach when there is either no evidence of transaction *prices* for similar property or no identifiable actual or notional income stream that would accrue to the owner of the relevant interest.

90.04 In some cases, even when evidence of market transaction *prices* or an identifiable income stream is available, the cost approach may be used as a secondary or corroborating approach.

90.05 The first step requires a replacement cost to be calculated. This is normally the *cost* of replacing the property with a modern equivalent at the relevant *valuation date*. An exception is where an equivalent property would need to be a replica of the subject property in order to provide a participant with the same utility, in which case the replacement cost would be that of reproducing or replicating the subject building rather than replacing it with a modern equivalent. The replacement cost *must* reflect all incidental costs, as appropriate, such as the *value* of the land, infrastructure, design fees, finance costs and developer profit that would be incurred by a participant in creating an equivalent *asset*.

90.06 The *cost* of the modern equivalent *must* then, as appropriate, be subject to adjustment for physical, functional, technological and economic obsolescence (see IVS 103 *Valuation Approaches* Appendix A30). The objective of an adjustment for obsolescence is to estimate how much less valuable the subject property might, or would be, to a potential buyer than the modern equivalent. Obsolescence considers the physical condition, functionality and economic utility of the subject property compared with the modern equivalent.

100. Data and Inputs

100.01 In accordance with IVS 104 *Data and Inputs*, the *valuer must* maximise the use of relevant and *observable data* to the degree that it is possible.

100.02 In addition to the requirements contained within IVS 104 *Data and Inputs* there is the following hierarchy of comparable evidence, which *should* be followed for real property interest *valuations*:

(a) direct comparable evidence,

(b) indirect comparable evidence,

(c) general market data,

(d) other sources.

100.03 When applying the hierarchy of comparable evidence, the *valuer must* ensure that the characteristics of suitable *data* and *inputs* contained within IVS 104 *Data and Inputs* are fully applied.

100.04 The *inputs* selected *must* be consistent with the models being used to value the *asset* and/or *liability* (see IVS 104 *Data and Inputs*, section 40).

100.05 The selection, source and use of the *inputs must* be explained, justified, and documented.

100.06 *Significant ESG* factors associated with the *value* of an *asset should* be considered as part of the *data* and *input* selection process.

110. Valuation Models

In accordance with IVS 105 *Valuation Models*, the *valuer must* maximise as many of the characteristics of suitable *valuation models*, as possible.

Valuation models must be suitable for the *intended use* of the *valuation* and consistent with suitable *inputs*.

120. Documentation and Reporting

In addition to the requirements contained within IVS 106 *Documentation and Reporting*, section 30, a valuation report *must* be issued for a *valuation* and *must* include appropriate references to all matters addressed in the agreed scope of work (see IVS 101 *Scope of Work*). The report *must* also include comment on the effect on the reported *value* of any associated *tangible* or *intangible assets* excluded from the actual or assumed transaction scenario.

Moreover, in addition to the requirements contained within IVS 106 *Documentation and Reporting*, section 40, a *valuation review* report *must* be issued for a *valuation review* and the *valuation review* report *must* state whether the review is a *valuation process review* or a *value review*.

130. Special Considerations for Real Property Interests

130.01 The following sections address a non-exhaustive list of topics relevant to the *valuation* of real property interests.

(a) Hierarchy of Interests (section 140),

(b) Rent (section 150).

140. Hierarchy of Interests

140.01 The different types of real property interests are not mutually exclusive. For example, a superior interest may be subject to one or more subordinate interests. The owner of the absolute interest may grant a lease interest in respect of part or all of his interest. Lease interests granted directly by the owner of the absolute interest are “head lease” interests. Unless prohibited by the terms of the lease contract, the holder of a head lease interest can grant a lease of part or all of that interest to a third party, which is known as a sub-lease interest. A sub-lease interest will always be shorter than, or coterminous with, the head lease out of which it is created.

140.02 These property interests will have their own characteristics, as illustrated in the following examples:

(a) Although an absolute interest provides outright ownership in perpetuity, it may be subject to the effect of subordinate interests. These subordinate interests could include leases, restrictions imposed by a previous owner or restrictions imposed by statute.

(b) A lease interest will be for a defined period, at the end of which the property reverts to the holder of the superior interest out of which it was created. The lease contract will normally impose obligations on the lessee, eg, the payment of rent and other expenses. It may also impose conditions or restrictions, such as in the way the property may be used or on any transfer of the interest to a third party.

(c) A right of use may be held in perpetuity or may be for a defined period. The right may be dependent on the holder making payments or complying with certain other conditions.

140.03 When valuing a real property interest it is therefore necessary to identify the nature of the rights accruing to the holder of that interest and reflect any constraints or encumbrances imposed by the existence of other interests in the same property. The sum of the individual *values* of various different interests in the same property will frequently differ from the *value* of the unencumbered superior interest.

150. Rent

Market rent is addressed as a *basis of value* in IVS 102 *Bases of Value*.

When valuing either a superior interest that is subject to a lease or an interest created by a lease, the *valuer must* consider the contract rent and, in cases where it is different, the market rent.

The contract rent is the rent payable under the terms of an actual lease. It may be fixed for the duration of the lease or variable. The frequency and basis of calculating variations in the rent will be set out in the lease and *must* be identified and understood in order to establish the total benefits accruing to the lessor and the *liability* of the lessee.

IVS 410 Development Property

Contents	Paragraphs
Overview	10
Introduction	20
Valuation Framework	30
Scope of Work	40
Bases of Value	50
Valuation Approaches and Methods	60
Market Approach	70
Income Approach	80
Cost Approach	90
Residual Method	100
Existing Assets	110
Data and Inputs	120
Valuation Models	130
Documentation and Reporting	140
Special Considerations for Secured Lending	150

10. Overview

10.01 The principles contained in the General Standards apply to *valuations* of development property. This standard includes modifications, additional requirements or specific examples of how the General Standards apply to *valuations* to which this standard applies. *Valuation*s of development property *must* also follow the applicable standard for that type of *asset* and/or *liability* (see IVS 400 *Real Property Interests* and IVS 300 *Plant, Equipment, and Infrastructure,* where applicable.)

20. Introduction

20.01 In the context of this standard, development properties are defined as interests where development is required to achieve the highest and best use, or where improvements are either being contemplated or are in progress at the *valuation date* and include:

(a) the construction of buildings,

(b) previously undeveloped land which is being provided with infrastructure (see IVS 300 *Plant, Equipment and Infrastructure*),

(c) the redevelopment of previously developed land,

(d) the improvement or alteration of existing buildings or structures,

(e) land allocated for development in a statutory plan or by the permission of the relevant authorities, and

(f) land allocated for higher *value* uses or higher density in a statutory plan or by the permission of the relevant authorities.

20.02 *Valuations* of development property may be required for different *intended uses*. It is the *valuer's* responsibility to understand the *intended use*. A non-exhaustive list of examples of circumstances that *should* require a development valuation includes but is not limited to:

(a) when establishing whether proposed projects are financially feasible,

(b) as part of general consulting and transactional support engagements for acquisition and loan security,

(c) for tax reporting *purposes*, development valuations are frequently needed for ad valorem taxation analyses,

(d) for litigation requiring valuation analysis in circumstances such as shareholder disputes and damage calculations,

(e) for financial reporting *purposes*, *valuation* of a development property is often required in connection with accounting for business combinations, *asset* acquisitions and sales, and impairment analysis, and

(f) for other statutory or legal events that may require the *valuation* of development property such as compulsory purchases.

20.03 When valuing development property, the *valuer must* follow the applicable standard for that type of *asset* and/or *liability* (see IVS 400 *Real Property Interests* and IVS 300 *Plant, Equipment and Infrastructure*).

20.04 The residual value or land value of a development property can be very sensitive to changes in assumptions or projections concerning the income or revenue to be derived from the completed project or any of the development costs that will be incurred. This remains the case regardless of the method or methods used or however diligently the various *inputs* are researched in relation to the *valuation date* (see IVS 104 *Data and Inputs*).

20.05 This sensitivity also applies to the impact of *significant* changes in either the *costs* of the project or the *value* on completion. If the *valuation* is required for an *intended use* where *significant* changes in *value* over the duration of a construction project may be of concern to the user (eg, where the *valuation* is for loan security or to establish a project's viability), the *valuer must* highlight the potentially disproportionate effect of possible changes in either the construction costs or end value on the profitability of the project and the *value* of the partially completed property. A sensitivity analysis may be useful for this *intended use* provided it is accompanied by a suitable explanation.

30. Valuation Framework

30.01 In accordance with IVS 100 *Valuation Framework*, the *valuer must* comply with the valuer principles.

40. Scope of Work

40.01 In addition to the requirements contained within IVS 101 *Scope of Work*, sections 20 and 30, investigations made during the course of a valuation *must* be appropriate for the *intended use* of the *valuation* and the *basis(es) of value*. In the case of a *valuation review* the scope of work *must* state whether the review is a *valuation process review* or a *value review*.

40.02 Sufficient investigations and evidence *must* be assembled by means such as inspection, inquiry, research, computation or analysis to ensure that the *valuation* is properly supported. When determining the extent of investigations and evidence necessary, *professional judgement* is required to ensure it is fit for the purpose of the *valuation*.

40.03 When a valuation engagement involves reliance on information supplied by a party other than the *valuer*, consideration *should* be given as to whether the information is credible or that the information may otherwise be relied upon without adversely affecting the credibility of the valuation. *Significant inputs* provided to the *valuer* (eg, by management/owners) *should* be considered, investigated and/or corroborated. In cases where credibility or reliability of information supplied cannot be supported, consideration *should* be given as to whether or how such information is used (see IVS 101 *Scope of Work*, para 20.01 (j)).

40.04 In considering the credibility and reliability of information provided, the *valuer should* consider matters such as:

(a) the *intended use* of the *valuation*,

(b) the *significance* of the information to the valuation conclusion,

(c) the expertise of the source in relation to the subject matter, and

(d) whether the source is independent of either the subject *asset* and/or subject *liability* and/or the recipient of the *valuation* (see IVS 101 *Scope of Work*, para 20.01 (a)).

40.05 The *intended use* of the *valuation*, the *basis of value*, the extent and limits on the investigations and any sources of information that may be relied upon are part of the *valuation's* scope of work that *must* be communicated to all parties to the *valuation* (see IVS 101 *Scope of Work*).

40.06 If, during the course of a valuation, it becomes clear that the investigations included in the scope of work will not result in a credible *valuation*, or information to be provided by third parties is either unavailable or inadequate, or limitations on investigations are so substantial that the *valuer* cannot sufficiently evaluate the *inputs* and assumptions, the *valuation* will not comply with IVS (see IVS 101 *Scope of Work*, para 20.01).

50. Bases of Value

50.01 In accordance with IVS 102 *Bases of Value*, the *valuer must* select the appropriate *basis(es) of value* for the *intended use* when valuing development property.

50.02 However, in considering the *value* of a development property, regard *should* be given to the probability that any contracts in place, eg, for construction or for the sale or leasing of the completed project, may become void or voidable in the event of one of the parties being the subject of formal insolvency proceedings. Further regard *should* be given to any contractual obligations that may have a material impact on *market value*. Therefore, it may be appropriate to highlight the risk to a lender caused by a prospective buyer of the property not having the benefit of existing building contracts and/or pre-leases, and pre-sales and any associated warrantees and guarantees in the event of a default by the borrower.

50.03 The *valuation* of development property often includes a *significant* number of assumptions and special assumptions regarding the condition or status of the project when complete. For example, special assumptions may be made that the development has been completed or that the property is fully leased. As required by IVS 101 *Scope of Work*, *significant* assumptions and special assumptions used in a *valuation must* be communicated to all parties to the *valuation* and *must* be agreed and confirmed in the scope of work. Particular care may also be required where reliance may be placed by third parties on the valuation outcome.

50.04 Frequently it will be either impracticable or impossible to verify every feature of a development property which could have an impact on potential future development, such as where ground conditions have yet to be investigated. When this is the case, it may be appropriate to make assumptions (eg, that there are no abnormal ground conditions that would result in *significantly* increased *costs*). If this was an assumption that a participant would not make, it would need to be presented as a special assumption.

50.05 In situations where there has been a change in the market since a project was originally conceived, a project under construction may no longer represent the highest and best use of the land. In such cases, the *costs* to complete the project originally proposed may be irrelevant as a buyer in the market would either demolish any partially completed structures or adapt them for an alternative project. The *value* of the development property under construction would need to reflect the current *value* of the alternative project and the *costs* and risks associated with completing that project.

50.06 For some development properties, the property is closely tied to a particular use or business/trading activity or a special assumption is made that the completed property will trade at specified and sustainable levels. In such cases, the *valuer must*, as appropriate, also comply with the requirements of IVS 200 *Businesses and Business Interests* and, where applicable, IVS 210 *Intangible Assets*.

50.07 Special assumptions used for *valuation* of a development property *must* follow IVS 102 *Bases of Value*, section 60.

60. Valuation Approaches and Methods

60.01 There are three main *valuation approaches* and one main *valuation method* in relation to the *valuation* of development property. These are:

(a) the market approach (see section 70),

(b) the income approach (see section 80),

(c) the cost approach (see section 90), and

(d) the residual method, which is a hybrid of the market approach, the income approach and the cost approach (see section 100).

60.02 When selecting a *valuation approach* and *valuation method*, in addition to the requirements of this standard, the *valuer must* follow the requirements of IVS (see 103 *Valuation Approaches* including para 10.04).

60.03 The *valuation approach* to be used will depend on the required *basis of value* as well as specific facts and circumstances, eg, the level of recent transactions, the stage of development of the project and movements in property markets since the project started, and *should* always be that which is most appropriate to those circumstances. Therefore, the exercise of judgement in the selection of the most suitable approach is critical.

70. Market Approach

70.01 Some types of development property can be sufficiently homogenous and frequently exchanged in a market for there to be sufficient *data* from recent sales to use as a direct comparison where a *valuation* is required (see para 100.09-100.16 of this standard).

70.02 In most markets, the market approach may have limitations for larger or more complex development property, or smaller properties where the proposed improvements are heterogeneous. This is because the number and extent of the variables between different properties make direct comparisons of all variables inapplicable, although correctly adjusted market evidence (see IVS 103 *Valuation Approaches,* section 20) may be used as the basis for a number of variables within the *valuation*.

70.03 For development property where work on the improvements has commenced but is incomplete, the application of the market approach is even more problematic. Such properties are rarely transferred between participants in their partially-completed state, except as either part of a transfer of the owning entity or where the seller is either insolvent or facing insolvency and therefore unable to complete the project. Even in the unlikely event of there being evidence of a transfer of another partially-completed development property close to the *valuation date*, the degree to which work has been completed would almost certainly differ, even if the properties were otherwise similar.

70.04 The market approach may also be appropriate for establishing the *value* of a completed property as one of the *inputs* required under the residual method, which is explained more fully in the section on the residual method (section 100 of this standard).

80. Income Approach

80.01 Establishing the residual value of a development property may involve the use of a cash flow model in some markets (see paras 100.09-100.16 of this standard).

80.02 The income approach may also be appropriate for establishing the *value* of a completed property as one of the *inputs* required under the residual method, which is explained more fully in the section on the residual method (see section 100 of this standard).

90. Cost Approach

90.01 Establishing development costs is a key component of the residual approach (see section 100 of this standard).

90.02 The cost approach may also exclusively be used as a means of indicating the *value* of development property such as a proposed development of a building or other structure and infrastructure for which there is no active market on completion.

90.03 The cost approach is based on the economic principle that a buyer will pay no more for an *asset* than the amount to create an *asset* of equal utility. To apply this principle to development property, the *valuer must* consider the *cost* that a prospective buyer would incur in acquiring a similar *asset* with the potential to earn a similar profit from development as could be obtained from development of the subject property. However, unless there are unusual circumstances affecting the subject development property, the process of analysing a proposed development and determining the anticipated costs for a hypothetical alternative would effectively replicate either the market approach or the residual method as described above, which can be applied directly to the subject property.

90.04 Another difficulty in applying the cost approach to development property is in determining the profit level, which is its “utility” to a prospective buyer. Although a developer may have a target profit at the commencement of a project, the actual profit is normally determined by the *value* of the property at completion. Moreover, as the property approaches completion, some of the risks associated with development are likely to reduce, which may impact on the required return of a buyer. Unless a fixed *price* has been agreed, profit is not determined by the *costs* incurred in acquiring the land and undertaking the improvements.

100. Residual Method

100.01 The residual method is normally a combination of market approach, income approach and cost approach.

100.02 The market approach and/or the income approach may be appropriate for estimating the gross development value of a property as one of the *inputs* required under the residual method.

100.03 The residual method is so called because it indicates the residual amount after deducting all known or anticipated *costs* required to complete the development from the anticipated *value* of the project when completed after consideration of the risks associated with completion of the project. This is known as the residual value.

100.04 The residual value can be highly sensitive to relatively small changes in the forecast cash flows and the practitioner *should* provide separate sensitivity analyses for each *significant* factor.

100.05 Caution is required in the use of this method because of the sensitivity of the result to changes in many of the *inputs*, which may not be precisely known on the *valuation date*, and therefore have to be estimated with the use of assumptions.

100.06 The models used to apply the residual method vary considerably in complexity and sophistication, with the more complex models allowing for greater granularity of *inputs*, multiple development phases and sophisticated analytical tools. The most suitable model will depend on the size, duration and complexity of the proposed development.

100.07 In applying the residual method, the *valuer should* consider and evaluate the reasonableness and reliability of the following:

(a) the source of information on any proposed building or structure, eg, any plans and specification that are to be relied on in the *valuation*,

(b) any source of information on the construction and other *costs* that will be incurred in completing the project and which will be used in the *valuation*, and

(c) any source of information on the estimation of yield/*discount rate* that will be used in the *valuation*.

100.08 The following basic elements *should* be considered in the application of the residual method (see IVS 104 *Data and Inputs*):

(a) completed property *value*,

(b) construction costs,

(c) consultants' fees,

(d) statutory fees,

(e) marketing costs,

(f) timetable,

(g) finance costs,

(h) development profit (on both land and building),

(i) contingency,

(j) *discount rate*.

Value of Completed Property

100.09 The first step requires an estimate of the *value* of the relevant interest in the real property following notional completion of the development project, which *should* be developed in accordance with IVS 103 *Valuation Approaches*.

100.10 Regardless of the methods adopted under either the market or income approach, the *valuer must* adopt one of the two basic underlying assumptions:

(a) the estimated *value* on completion is based on *values* that are current on the *valuation date* on the special assumption the project had already been completed in accordance with the defined plans and specification, or

(b) the estimated value on completion is based on the special assumption that the project will be completed in accordance with the defined plans as of the *valuation date* and specification on the anticipated date of completion.

100.11 Market practice and availability of relevant *data* and *inputs should* determine which of these assumptions is more appropriate. However, it is important that there is clarity as to whether current or projected values are being used.

100.12 If estimated gross development value is used, it *should* be made clear that these are based on special assumptions that a participant would make based on information available on the *valuation date*.

100.13 It is also important that care is taken to ensure that consistent assumptions are used throughout the residual value calculation, ie, if current *values* are used then the *costs should* also be current and *discount rates* derived from analysis of current *prices*.

100.14 If there is a pre-sale or pre-lease agreement in place that is conditional on the project, or a relevant part, being completed, this will be reflected in the *valuation* of the completed property. Care *should* be taken to establish whether the *price* in a pre-sale agreement or the rent and other terms in a pre-lease agreement reflect those that would be agreed between participants on the *valuation date*.

100.15 If the terms are not reflective of the market, adjustments may need to be made to the *valuation*.

100.16 It would also be appropriate to establish if these agreements would be assignable to a purchaser of the relevant interest in the development property prior to the completion of the project.

Construction Costs

100.17 The *costs* of all work required at the *valuation date* to complete the project to the defined specification need to be identified. Where no work has started, this will include any preparatory work required prior to the main building contract, such as the *costs* of obtaining statutory permissions, demolition or off-site enabling work.

100.18 Where work has commenced, or is about to commence, there will normally be a contract or contracts in place that can provide the independent confirmation of *cost*. However, if there are no contracts in place, or if the actual contract costs are not typical of those that would be agreed in the market on the *valuation date*, then it may be necessary to estimate these *costs* reflecting the reasonable expectation of participants on the *valuation date* of the probable *costs*.

100.19 The benefit of any work carried out prior to the *valuation date* will be reflected in the *value* but will not determine that *value*. Similarly, previous payments under the actual building contract for work completed prior to the *valuation date* are not relevant to current *value*.

100.20 In contrast, if payments under a building contract are geared to the work completed, the sums remaining to be paid for work not yet undertaken at the *valuation date* may be the best evidence of the construction costs required to complete the work.

100.21 However, contractual costs may include special requirements of a specific end user and therefore may not reflect the general requirements of participants.

100.22 Moreover, if there is a material risk that the contract may not be fulfilled (eg, due to a dispute or insolvency of one of the parties), it may be more appropriate to reflect the *cost* of engaging a new contractor to complete the outstanding work.

100.23 When valuing a partly completed development property, it is not appropriate to rely solely on projected costs and income contained in any project plan or feasibility study produced at the commencement of the project.

100.24 Once the project has commenced, this is not a reliable tool for measuring *value* as the *inputs* will be historic. Likewise, an approach based on estimating the percentage of the project that has been completed prior to the *valuation date* is unlikely to be relevant in determining the current *market value*.

Consultants' Fees

100.25 These include legal and professional costs that would be reasonably incurred by a participant at various stages through the completion of the project.

Statutory fees

100.26 These are the fees associated with getting necessary permissions and approvals, which include but are not limited to building approvals, environmental clearance and fire safety.

Marketing Costs

100.27 If there is no identified buyer or lessee for the completed project, it will normally be appropriate to allow for the *costs* associated with appropriate marketing, and for any leasing commissions and consultants' fees incurred for marketing not included under para 100.25 of this standard.

Timetable

100.28 The duration of the project from the *valuation date* to the expected date of completion of the project needs to be considered, together with the phasing of all cash outflows for construction costs, consultants' fees, etc.

100.29 If there is no sale agreement in place for the relevant interest in the development property following practical completion, an estimate *should* be made of the marketing period that might typically be required following completion of construction until a sale is achieved.

100.30 If the property is to be held for investment after completion and if there are no pre-leasing agreements, the time required to reach stabilised occupancy needs to be considered (ie, the period required to reach a realistic long-term occupancy level). For a project where there will be individual letting units, the stabilised occupancy levels may be less than 100 percent if market experience indicates that a number of units may be expected to always be vacant, and allowance *should* be considered for *costs* incurred by the owner during this period such as additional marketing costs, incentives, maintenance and/or unrecoverable service charges.

Finance Costs

100.31 These represent the *cost* of finance for the project from the *valuation date* through to the completion of the project, including any period required after physical completion to either sell the interest or achieve stabilised occupancy. As a lender may perceive the risks during construction to differ substantially from the risks following completion of construction, the finance cost during each period may also need to be considered separately. Even if an entity is intending to self-fund the project, an allowance *should* be made for interest at a rate which would be obtainable by a participant for borrowing to fund the completion of the project on the *valuation date*.

Development Profit

100.32 Allowance *should* be made for development profit, or the return that would be required by a buyer of the development property in the market place for taking on the risks associated with completion of the project on the *valuation date*. This will include the risks involved in achieving the anticipated income or capital value following physical completion of the project. Development profit *should* be considered for both land as well as building(s).

100.33 This target profit can be expressed as a lump sum, a percentage return on the *costs* incurred on purchase of land as well as construction of the building/structure or a percentage of the anticipated value of the project on completion or a rate of return. Market practice for the type of property in question will normally indicate the most appropriate option. The amount of profit that would be required will reflect the level of risk that would be perceived by a prospective buyer on the *valuation date* and will vary according to factors such as:

(a) the stage which the project has reached on the *valuation date*. A project which is nearing completion will normally be viewed as being less risky than one at an early stage, with the exception of situations where a party to the development is insolvent,

(b) whether a buyer or lessee has been secured for the completed project, and

(c) the size and anticipated remaining duration of the project. The longer the project, the greater the risk caused by exposure to fluctuations in future *costs* and receipts and changing economic conditions generally.

100.34 The following are examples of factors that *should* typically need to be considered in an assessment of the relative risks associated with the completion of a development project:

(a) unforeseen complications that increase construction costs,

(b) potential for contract delays caused by adverse weather or other matters outside of the developer's control,

(c) delays in obtaining statutory approvals,

(d) supplier failures,

(e) entitlement risk and changes in entitlements over the development period,

(f) changes in *environmental, social and governance* requirements in relation to the proposed development,

(g) regulatory changes,

(h) delays in finding a buyer or lessee

(i) delays in obtaining funding for the project, and

(j) discovery of irregularities in documentation such as deed or land titling during or post project commencement.

100.35 Whilst all of the above factors will impact the perceived risk of a project and the profit that a buyer or the development property would require, care *must* be taken to avoid double counting, either where contingencies are already reflected in the residual *valuation model* or risks in the *discount rate* used to bring future cash flows to present value.

100.36 The risk of the estimated value of the completed development project changing due to changed market conditions over the duration of the project will normally be reflected in the *discount rate* or capitalisation rate used to value the completed project.

100.37 The profit anticipated by the owner of an interest in development property at the commencement of a development project will vary according to the *valuation* of its interest in the project once construction has commenced. The *valuation should* reflect those risks remaining at the *valuation date* and the discount or return that a buyer of the partially completed project would require for bringing it to a successful conclusion.

Discount Rate

100.38 In order to arrive at an indication of the *value* of the development property on the *valuation date*, the residual method requires the application of a *discount rate* to all future cash flows in order to arrive at a net present value. This *discount rate* may be derived using a variety of methods (see IVS 103 *Valuation Approaches,* Appendix A20.29–A20.40).

100.39 If the cash flows are based on *values* and *costs* that are current on the *valuation date*, the risk of these changing between the *valuation date* and the anticipated completion date *should* be considered and reflected in the *discount rate* used to determine the present value. If the cash flows are based on prospective values and *costs*, the risk of those projections proving to be inaccurate *should* be considered and reflected in the *discount rate*.

110. Existing Asset

110.01 In the *valuation* of development property, it is necessary to establish the suitability of the real property in question for the proposed development. Some matters may be within the *valuer's* knowledge and experience but some may require information or reports from other *specialists*. Matters that typically need to be considered for specific investigation when undertaking a *valuation* of a development property before a project commences include:

(a) whether or not there is a market for the proposed development,

(b) whether the proposed development of the highest and best use of the property in the current market,

(c) whether there are other non-financial obligations that need to be considered (political, environmental or social criteria),

(d) legal permissions or zoning, including any conditions or constraints on permitted development,

(e) limitations, encumbrances or conditions imposed on the relevant interest by private contract,

(f) rights of access to public roads or other public areas,

(g) geotechnical conditions, including potential for contamination or other environmental risks,

(h) the availability of, and requirements to, provide or improve necessary services, eg, water, drainage, sewerage and power,

(i) the need for any off-site infrastructure improvements and the rights required to undertake this work,

(j) any archaeological constraints or the need for archaeological investigations,

(k) sustainability and any *client* requirements in relation to green buildings,

(l) economic conditions and trends and their potential impact on *costs* and receipts during the development period,

(m) current and projected supply and demand for the proposed future uses,

(n) the availability and *cost* of funding,

(o) the expected time required to deal with preparatory matters prior to starting work, for the completion of the work and, if appropriate, to rent or sell the completed property, and

(p) any other risks associated with the proposed development.

110.02 Where a project is in progress, additional enquires or investigations will typically be needed into the contracts in place for the design of the project, for its construction and for supervision of the construction.

120. Data and Inputs

120.01 In accordance with IVS 104 *Data and Inputs*, the *valuer must* maximise the characteristics of relevant and observable *data* to the degree that it is possible.

120.02 In addition to the requirements contained within IVS 104 *Data and Inputs*, the following hierarchy of comparable evidence *should* be followed for development property valuations:

(a) direct comparable evidence,

(b) indirect comparable evidence,

(c) general market data,

(d) other sources.

120.03 When applying the hierarchy of comparable evidence the *valuer must* ensure that the characteristics of suitable *data* and *inputs* contained within IVS 104 *Data and Inputs* are fully applied.

120.04 The *inputs* selected *must* be consistent with the *valuation models* being used to value the *asset* and/or *liability (*see IVS 104 *Data and Inputs*).

120.05 The selection, source and use of the *inputs must* be explained, justified, and documented.

120.06 *Significant ESG* factors associated with the *value* of an *asset should* be considered as part of the *data* and *input* selection process.

130. Valuation Models

In accordance with IVS 105 *Valuation Models*, the *valuer must* maximise as many of the characteristics of suitable *valuation models*, as possible.

Valuation models must be suitable for the *intended use* of the *valuation* and consistent with suitable *inputs*.

140. Documentation and Reporting

In addition to the minimum requirements in IVS 106 *Documentation and Reporting,* section 30, a valuation report on development property *must* include appropriate references to all matters addressed in the agreed scope of work (see IVS 101 *Scope of Work*). The report *must* also include comment on the effect on the reported *value* of any associated *tangible* or *intangible assets* excluded from the actual or assumed transaction scenario.

Moreover, in addition to the requirements contained within IVS 106 *Documentation and Reporting*, section 40, a valuation review report *must* be issued for a *valuation review* and the valuation review report *must* state whether the review is a *valuation process review* or a *value review.*

150. Special Considerations for Secured Lending

The appropriate *basis of value* for secured lending is normally *market value*. However, in considering the *value* of a development property, regard *should* be given to the probability that any contracts in place, eg, for construction or for the sale or leasing of the completed project may become void or voidable in the event of one of the parties being the subject of formal insolvency proceedings. Further regard *should* be given to any contractual obligations that may have a material impact on *market value*. Therefore, it may be appropriate to highlight the risk to a lender caused by a prospective buyer of the property not having the benefit of existing building contracts and/or pre-leases, and pre-sales and any associated warrantees and guarantees in the event of a default by the borrower.

To demonstrate an appreciation of the risks involved in valuing development property for secured lending or other *intended uses*, the *valuer should* apply a minimum of two appropriate and recognised methods to valuing development property for each valuation project, as this is an area where there is often “insufficient factual or observable *inputs* for a single method to produce a reliable conclusion” (see IVS 103 *Valuation Approaches* para 10.05).

The *valuer must* be able to justify the selection of the *valuation approach(es)* reported and *should* provide an “as is” (existing stage of development) and an “as proposed” (completed development) *value* (see IVS 400 *Real Property Interests*) for the development property and record the process undertaken and a rationale for the reported *value* (see IVS 106 *Documentation and Reporting*, section 30).

IVS 500 Financial Instruments

Contents	Paragraphs
Objective	10
Scope	20
Valuations of Financial Instruments	30
Data and Inputs Overview	40
Characteristics of Data and Inputs for Financial Instruments	50
Selecting Inputs	60
Using Data and Inputs	70
Documentation for Data and Inputs	80
Valuation Models Overview	90
Characteristics of Appropriate Valuation Model	100
Valuation Model Selection	110
Testing a Valuation Model	120
Documentation for Valuation Models	130
Quality Control Overview	140
Characteristics of Appropriate Quality Control	150
Application of Quality Control	160
Review and Challenge	170
Valuation Control Framework	180
Valuation Model Use	190
Documentation	200

10. Objective

10.01 The principles contained in the General Standards apply to *valuations* of financial instruments. This standard contains additional requirements or specific examples of how the General Standards may apply for *valuations* of financial instruments in the areas of *data* and *inputs*, *valuation methods* and *valuation models*, and quality control.

20. Scope

20.01 This asset standard *must* be applied in all *valuations* of financial instruments used for, but not limited to, financial, tax, or regulatory reporting.

30. Valuation of Financial Instruments

30.01 There are a number of approaches to valuing financial instruments. In certain cases, *values* for financial instruments are observable and readily available based on published trades in the exact security. In other cases, *values* are developed using industry-standard models based on *inputs* and adjustments with varying degrees of observability. For more complex or less liquid products, *values* may require bespoke models or be developed using internally-developed *inputs* or assumptions. In determining *values*, *professional judgements* may be required in the areas of *data* and *inputs*, *valuation models*, and quality controls. Depending on the nature of the financial instrument being valued, as well as the frequency and the complexity of the *valuation*, the *valuer* may implement a range of processes which are highly automated using systematic mappings and *data* feeds, to others that are highly manual and subjective.

30.02 The *valuer must* use *professional judgement* to determine the nature and extent of effort that is performed to develop a *value* that is consistent with the scope of work and *intended use*. The *valuer must* design, implement, and execute processes in the *valuation*, including quality controls, that appropriately address features of the financial instrument being valued, *data*, *valuation models* and other infrastructure required to value the financial instrument. In applying this, the *valuer must* understand the contractual, structural, and performance features of the financial instrument to be valued, as well as its liquidity and other information in the market and economic environment as of the *valuation date*, such as legal or regulatory factors, potentially impacting the *value*.

30.03 *Valuation risk* exists in the *valuation* of financial instruments. As such, throughout the *valuation*, procedures and controls *must* be put in place that enable *valuation risk* to be assessed and managed to help ensure that the *value* is appropriate for its *intended use*. Any *significant valuation risk* identified during the design, implementation, or execution of the *valuation must* have quality controls to address that risk and *should* have an appropriate level of review and challenge.

30.04 If the *valuer* does not possess the necessary technical skills, experience, *data*, models, or knowledge to perform all aspects of a *valuation*, the *valuer should* seek the assistance of a *specialist* or a *service organisation* providing this is agreed by the client and disclosed.

30.05 The *valuer* may consider delegating aspects of a *valuation* to *specialists* or *service organisations* either within or outside of the *valuer's* organisation. To perform a *valuation* in these circumstances, the *valuer must* inform these parties of the nature of the work to be performed. In order to assert compliance with IVS on the *value*, the *valuer must* determine that these parties have performed their specific procedures in a manner that is consistent with IVS or perform incremental procedures to comply with IVS.

30.06 As part of a *valuation*, quality controls *must* be in place. Quality controls *should* include a degree of review and challenge. Review and challenge *should* assess the process implemented and judgements made during the *valuation* and in determining the *value*, including review of work performed by *specialist* or *service organisations*. In those circumstances in which review and challenge is performed, the processes *should* be performed by an individual or function that has appropriate skills and experience in valuing financial instruments.

40. Data and Inputs Overview

40.01 This section supplements IVS 104 *Data and Inputs*, adding greater detail as it relates to financial instruments.

40.02 A broad range of *data*, assumptions, and adjustments are used in developing *inputs* used in *valuations* for financial instruments. *Inputs* are derived from *data*, along with assumptions and adjustments, to develop a *value.*

40.03 *Data*, assumptions, and adjustments *should* be based on factual information, when available. *Valuations should* use observable *data*, such as published *prices* and yields, but may also require the use of assumptions and adjustments.

40.04 The characteristics of the *data*, assumptions, and adjustments used in developing *inputs must* be understood by the *valuer*.

40.05 The *valuer* is responsible for assessing and selecting relevant *data*, assumptions, and adjustments to be used as *inputs* in the *valuation* based upon *professional judgement* and *professional scepticism.* The *valuer must* determine the *data* that is relevant, which for the purposes of IVS 500 *Financial Instruments* means “fit for use” in terms of the *asset* and/or *liability* being valued, the scope of work, the *valuation method*, and the *intended use*.

40.06 In circumstances where directly relevant *data* is not available and therefore proxy data is used, the *valuer must* assess that the various instruments to be used as proxies are sufficiently comparable to the *asset* and/or *liability* being valued based on *professional judgement*.

40.07 A *specialist* or a *service organisation* may be used to obtain either *data*, assumptions, or adjustments to develop *inputs*. The *valuer*, however, remains ultimately responsible for selecting *inputs* appropriate for the *valuation*.

40.08 Processes and controls *must* be implemented to ensure that the selection of *data*, assumptions, and adjustments in the *valuation*, along with the *inputs* ultimately used, is relevant to value the *assets* and/or *liabilities* in accordance with the scope of work*,* the *valuation method* and the *intended use*. Such processes and controls *should* be documented.

40.09 Individuals with the appropriate experience *must* be responsible for identifying and ensuring that appropriate *data,* assumptions and adjustments are incorporated in the design, implementation and execution of the *valuation*.

40.10 For a *valuation* to produce a *value* consistent with the *intended use*, a *valuation must* use *inputs* that are relevant for the *valuation approach* for the financial instrument.

40.11 The use of *data*, assumptions, adjustments and *inputs* inherently presents *valuation risk*. *Valuation risk* may arise due to:

(a) the use of inappropriate *data*, assumption, adjustments or *inputs*, or

(b) the misapplication of *data*, assumptions, and adjustments or *inputs*.

There are two types of *valuation risk* for *data*, assumptions, adjustments and *inputs*. Those that are transparent and operational, and those that are generally related to assumptions made by the *valuer*. In developing *inputs*, any *significant valuation risk should* be mitigated.

50. Characteristics of Data and Inputs for Financial Instruments

50.01 The identification and selection of relevant *data* and *inputs* and applying them appropriately is an important part of the *valuation* to produce *values* consistent with the scope of work and *intended use*.

50.02 The *valuer must* apply *professional judgement* to balance the characteristics of relevant *data* listed below in order to choose the *inputs* used in the *valuation*. The characteristics of relevant *data* are shown below.

(a) accurate: *data* are free from error and bias and reflect the characteristics that they are designed to measure,

(b) complete: the set of *data* is sufficient to address the attributes of the *assets* and/or *liabilities*,

(c) timely: *data* reflect the market conditions as of the *valuation date*,

(d) transparent: the source of the *data* can be traced from their origin.

50.03 In certain cases, the *data* may not incorporate all of these characteristics. Therefore, the *valuer must* assess *data* and conclude, based on *professional judgement*, that the *data,* including any assumptions or adjustments, is relevant to value the *asset* and/or *liability* in accordance with the scope of work, *valuation method, valuation model* and *intended use.*

60. Selecting Inputs

60.01 It is the *valuer* who is responsible for evaluating the *data*, assumptions, and adjustments used to develop *inputs* used to execute the *valuation* and to develop the resulting *value*. The v*aluer must* be aware of market conventions to be able to determine the appropriateness of *data*, assumptions and adjustments that are used to develop *inputs* as of a *valuation date*. Conventions, such as quoted prices, spread or yield, ticks or basis points, and cash flow assumptions, *must* be understood and appropriately incorporated into the *valuation*.

60.02 The *valuer must* identify and assess the source of *data*, assumptions, and adjustments to develop *inputs* to determine any limitations or bias. This includes *data* and *inputs* that are internally sourced and acquired externally from *service organisations* and *specialists*.

60.03 *Inputs must* be selected from relevant *data,* assumptions, and adjustments in the context of the *asset* and/or *liability* being valued, the scope of work, the *valuation method*, the *valuation model* and *intended use*.

60.04 *Inputs must* be sufficient for the *valuation models* being used to value the *asset* and/or *liability* based on the *valuer* using *professional judgement*.

60.05 The *valuer must* consider whether *data*, assumptions, adjustments or *inputs* are *significant* to the *valuation* and the resulting *value* when determining the efforts to obtain such information, including the relevancy of any proxy data used.

60.06 To the extent the *valuer* is unable to develop *significant inputs* that are "fit for use", the *valuer should* pursue other methodologies to perform the *valuation* or consider its ability to perform the *valuation* appropriate for the *intended use*.

60.07 When valuing portfolios or groups of similar *assets* and/or *liabilities*, the *valuer should* assess whether the *inputs* are appropriately consistent across those portfolios or group.

60.08 If a *valuation* is recurring over time and certain *data*, assumptions, adjustments and *inputs* may be collected and used over time, they *must* be reassessed as of any *valuation date* to determine if they continue to be suitable.

60.09 If *significant inputs* are inadequate or cannot be sufficiently justified, the *valuation* would not comply with IVS.

70. Using Data and Inputs

70.01 The *valuer must* determine that *data,* assumptions, adjustments, and *inputs* are appropriate for the *intended use* as of the *valuation date*. As such, the *valuer must* perform quality control procedures over the *data* assumptions, adjustments, and *inputs* used for the *valuation*. Such procedures *must* address any *significant valuation risks* associated with the *data* and controls. A set of procedures may include but not be limited to quantitative testing by comparing with authoritative sources, qualitative or quantitative testing of sources of *data* or *inputs*, gaps, identifying outliers or performing factor attribution which correlates changes in *data* with changes in valuation results.

70.02 The *valuer must* consider whether *data*, assumptions, adjustments, or *inputs* are *significant* to the *valuation* and the *resulting value* when determining the efforts to perform quality controls.

70.03 The *valuer must* ensure that quality controls over *data*, assumptions, adjustments, and *inputs* exist throughout the *valuation*. This includes *data,* assumptions, adjustments and *inputs* that are internally sourced and acquired externally from *service organisations* and *specialists*.

70.04 The *valuer should* use *data* and *inputs* that are as contemporaneous as possible to the *valuation date*. As such, the *valuer must* design and implement quality controls to assess the timeliness of *data* and eliminate stale data:

(a) In the absence of timely *data*, the *valuer should* consider *data* that can be reasonably believed to approximate the *data* that would have been timely. For example, the *valuer's judgement* determines which is the best proxy of the *valuation date.*

(b) If *data,* assumptions, adjustments, or *inputs* are not as of the *valuation date*, the *valuer must* assess if these are suitable, as well as the need for the additional quality controls. For example, historical *data* may be appropriate to develop *inputs* for a specific financial instrument*. The valuer should* assess that such *data* is relevant for the *intended use*.

(c) For recurring *valuations*, the *valuer must* reassess *data*, assumptions, adjustments, or *inputs* as of any *valuation date* to determine if they continue to be suitable. There is no consistent timeframe at which *data*, assumptions, adjustments or *inputs* might not be suitable since it will depend on the *data* being used and the market conditions at the time of their derivation and their use in the *valuation*. For proxies, whether the degree of similarity remains valid *should* be assessed.

70.05 Since *data*, assumptions, adjustments and *inputs* can be provided or used by various parties across a valuation process, individuals with the appropriate experience *must* be responsible for identifying and ensuring that these *data* elements are reflected appropriately in the *valuation*. Once *data*, assumptions, adjustments and *inputs* have been determined to be appropriate, they *should* not be altered or amended unless they go through a rigorous quality control process. If the *valuer* uses a *data* set that is altered, the original *data*, assumptions, adjustments and *inputs* set *should* remain available for comparison.

80. Documentation for Data and Inputs

80.01 The *valuer must* document the basis for conclusion on the overall quality of the *significant data*, assumptions, adjustments and *inputs* used in the *valuation*. Such documentation *must* include sources, steps and why the *valuer* decided to use such *data*, assumptions, adjustments and *inputs.* In addition, the documentation *should* include a description of any quality controls implemented.

80.02 The documentation *must* be adequate to allow another *valuer*, applying *professional judgement*, to understand the scope of the *valuation*, the work performed, and the conclusions reached.

80.03 The procedures of the review and challenge function *should* be documented to allow another *valuer* to assess the degree of work performed and the basis for conclusions drawn.

80.04 For recurring *valuations*, the *valuer must* explain and document the basis for the *significant data*, assumptions, adjustments and *inputs* used, including *significant* changes that occurred and why they were appropriate.

90. Valuation Models Overview

90.01 This section supplements IVS 105 *Valuation Models*, adding greater detail as it relates to financial instruments.

90.02 The objective of this section of this standard is to set out the requirements pertaining to the appropriate selection and use of models in a *valuation*.

90.03 A *valuation model* is a quantitative implementation of a method in whole or in part that converts *inputs* into outputs used in the development of a *value*.

90.04 A *valuation model* may rely on other *valuation models* to derive its *inputs* or adjust its outputs.

90.05 A *valuation model* may be developed internally or sourced externally from a *specialist* or a *service organisation*.

90.06 Individuals with the appropriate experience *must* be responsible for developing implementing, testing and using *valuation models*.

100. Characteristics of Appropriate Valuation Models

100.01 For a *valuation* to produce *values* consistent with the *intended use*, a *valuation must* use *valuation models* that are suitable for the *valuation approach* for the financial instrument.

100.02 The *valuer must* determine that the *valuation model* is appropriate, which for the purposes of IVS 500 *Financial Instruments* means “fit for use” in terms of *assets* and/or *liabilities* being valued, the scope of work, and the *valuation method.*

100.03 The *valuer must* apply *professional judgement* to balance the characteristics of a *valuation model* shown below:

(a) accuracy: the *valuation model* is free from error and functions in a manner consistent with the objectives of the *valuation*,

(b) completeness: the *valuation model* addresses all the features of the *asset* and/or *liability* to determine *value*,

(c) timeliness: the *valuation model* reflects the market conditions as of the *valuation date*,

(d) transparency: all persons preparing and relying on the *valuation model must* understand how the *valuation model* works and its inherent limitations.

100.04 In certain cases, the *valuation model* may not incorporate all of these characteristics. Therefore, the *valuer must* assess and conclude whether the *valuation model* is appropriate to value the *assets* and/or *liabilities* in accordance with the scope of work, the *valuation method* and *intended use*.

110. Valuation Model Selection

110.01 The process of selecting a *valuation model* that is for the *intended use* involves *professional judgement*. The potential for error in *valuation models* necessitates the importance of sound and comprehensive processes around *valuation model* development (see IVS 105 *Valuation Models,* section 40):

(a) the selection of an appropriate *valuation model should* include the following processes:

(i) design, develop, and implement: determining the appropriate *valuation approaches* and techniques,

(ii) test and calibrate to the market (ie, recent transactions or quotes): ensure that the implementation is consistent with the *intended use*,

(iii) document: documenting the policies and procedures undertaken around the entire model development process and consistent with the *valuation*'s *intended use* and any limitations or adjustments.

(b) processes *should* be in place when relying on *valuation models* developed by a *specialist* or a *service organisation* to assess such models to a similar level as an internally developed model.

120. Testing a Valuation Model

120.01 *Valuation models must* be tested prior to use. Testing a *valuation model* is integral in determining whether the various components and its overall function are performing as intended, and *must* include:

(a) appropriateness for its *intended use*,

(b) the suitability of the *inputs* used by the *valuation model*,

(c) mathematical accuracy,

(d) operational accuracy (ie, *data* links, etc),

(e) robustness (ie, the model outputs respond appropriately over a range of *inputs* and if there are any limitations).

120.02 The nature of testing and analysis will depend on the type of *valuation model* and underlying *financial instrument* being valued. A variety of tests will likely be required to develop an appropriate *valuation model*. If *valuation model* testing reveals the *valuation model* is not suitable for its *intended use*, the *valuation model must* be remediated or rejected.

120.03 The *valuer must* understand a *valuation model*'s capabilities and limitations given its simplifications and assumptions. Limitations come in part from weaknesses in the *valuation model* due to its shortcomings, approximations, and uncertainties. Limitations are also a consequence of assumptions underlying a *valuation model* that may restrict the scope to a limited set of specific circumstances and situations.

120.04 Testing *should* be conducted to assess the potential limitations of a *valuation model* and to evaluate its behaviour over a range of *inputs*. Testing *must* also assess the impact of assumptions and identify situations where a *valuation model* is not fit for its *intended use* or becomes unreliable. Testing *must* be applied under a variety of market conditions, including scenarios that are outside the range of ordinary expectations. Extreme scenarios *must* be evaluated to identify any boundaries of *valuation model* effectiveness.

120.05 An appropriate *valuation model must* have documented evidence supporting *significant* modelling choices, including the *valuation methodology*, *valuation modelling* assumptions, *inputs*, and specific mathematical calculations. As part of this process, *significant inputs* to the *valuation model should* be subjected to analysis by both evaluating the quality and extent of the *valuation model* and conducting additional analysis and testing as necessary. The following are core validation processes around evaluating conceptual soundness:

(a) assessing whether the *valuation model* is consistent with the scope of work and *intended use*,

(b) comparison of *valuation methodologies* adopted to alternative theories and approaches,

(c) modelling assumptions *must* be assessed, with analysis of their impact on *valuation model* outputs and limitations,

(d) the relevance and reliability of *data*, assumptions, adjustments and *inputs* used by the *valuation model must* be evaluated.

120.06 If testing indicates that a *valuation model* may be inaccurate or unstable, there *must* be policies in place that call for the *valuation model* to be either modified, have limitations placed on its use, replaced, or abandoned.

120.07 Qualitative information and *professional judgement* used in a *valuation model must* be evaluated, including the logic, modelling assumptions, and types of *inputs* used, to establish the conceptual soundness of the *valuation model* and set appropriate conditions for its use. The validation process *must* ensure that qualitative and *professional judgement* assessments are conducted in an appropriate and systematic manner, are supported, and are documented.

120.08 Maintaining a suitable *valuation model* requires a monitoring process that involves periodic reviews, undertaken by qualified and objective reviewers, to an extent that is appropriate for the level of *valuation risk* associated with the continued use of the *valuation model*.

120.09 There *should* be procedures for responding to any deficiencies that are discovered during the monitoring process.

120.10 For *valuation models* that are relied upon on an ongoing basis or in the case of multi-use models, regular monitoring *must* be performed to evaluate whether they continue to be fit for their *intended use*.

120.11 Ongoing monitoring *must* be performed periodically, with a frequency appropriate to the nature of the model usage, the availability of new *data* or modelling approaches, changes in the market environment, and the magnitude of the *valuation risk* involved.

120.12 A process *must* be in place to monitor the maintenance of an appropriate *valuation model's* core characteristics, including:

(a) ongoing review of appropriateness,

(b) ongoing review of accuracy,

(c) ongoing review of transparency.

120.13 Any ongoing monitoring *should* include many of the tests employed as part of the initial *valuation model* development process:

(a) operational accuracy: there *must* be process verification checks that all *valuation model* components are functioning as designed and continue to be operationally accurate. Tests *must* also be conducted to assess ongoing model robustness and stability,

(b) *input* verification: there *must* be a process to verify that all *valuation model inputs* remain complete, reasonable, and accurate, and continue to represent the highest quality available,

(c) model control: *valuation models must* be subject to change control procedures to ensure that the model logic is correct. Change control procedures *should* address approval requirements, documenting changes and subsequent validation. Model overrides (impacting *valuation model inputs* or outputs) *should* be monitored and assessed to determine whether they are valid and have been appropriately documented. Model overrides need to be tracked and analysed to assess their impact on model performance. Some model overrides may indicate that a *valuation model* is not performing as intended or has limitations.

120.14 An ongoing monitoring process evaluates the impact of change relative to the original *valuation model* development parameters and environment. *Valuation models must* be evaluated to determine whether changes in the financial instrument itself, *intended use* of the *valuation*, or market conditions necessitate adjustment, redevelopment, or replacement of the *valuation model.*

120.15 An ongoing monitoring process *should* also consider new information as it becomes available, particularly if it was not available during the original *valuation model* development process. New empirical evidence or theoretical research may suggest the need to modify or even replace original methods.

120.16 Any *valuation model* limitations and sensitivities identified in the development process *must* be regularly assessed as part of the ongoing monitoring. If *valuation models* are known to only work for certain ranges of *input values*, market conditions, or other factors, they *must* be monitored to identify situations where these constraints are approached or exceeded. As part of the ongoing monitoring process, depending on the availability of benchmarking information, it may be appropriate to compare a given *valuation model's* outputs relative to estimates from alternative internal or external models. Discrepancies between the outputs from a *valuation model* to benchmarks *should* trigger investigation into the sources and degree of the differences, and examination of whether they are within an expected or appropriate reasonable range given the nature of the comparison. The results of a benchmark analysis may suggest revisions to a *valuation model*; however, differences do not necessarily indicate that a *valuation model* is in error. A benchmark itself is an alternative prediction, and the differences may be due to differences in the *data* or method used. Rather, if a *valuation model* and benchmark match well, that is evidence in favour of the *valuation model*.

120.17 If *significant* deficiencies are identified in the *valuation model* as part of quality control processes, including review and challenge, the resulting *value* is not IVS compliant.

130. Documentation for Valuation Models

130.01 Documentation *should* be sufficient to provide a record of the *valuation* and include sufficient information to describe the valuation conclusion reached, such that the *valuer* applying *professional judgement* is able to understand and review the *valuation* (see IVS 105 *Valuation Models,* section 50).

130.02 There *should* be documentation of *significant inputs* to the *valuation model* including details of model design, development, implementation, and testing.

130.03 The *valuer must* document all relevant *valuation* information based upon the *intended use*, including accounting, legal, and regulatory requirements, recognising that there is *professional judgement* as to the evidence that *should* be included.

130.04 Documentation *should* be sufficiently detailed so that parties unfamiliar with a *valuation model*, such as *valuation model* users, can understand how the *valuation model* operates, its limitations, and its key assumptions.

130.05 An appropriate *valuation model must* have documentation that includes the following information:

(a) valuation methodology selection process, including theoretical approach and supporting research and alternatives assessed,

(b) *valuation model* design and formulae,

(c) limiting assumptions and conditions inherent in the *valuation model*,

(d) *input* selection process,

(e) nature and rational for judgmental assumptions,

(f) *valuation model* testing procedures and results,

(g) validation procedures and results (if applicable) and when it *should* be re-validated,

(h) *valuation model* limitations and mitigation of limitations, if they exist,

(i) conclusion and any qualifications if applicable.

140. Quality Control Overview

This quality control section supplements IVS 100 *Valuation Framework*, section 30, adding greater detail as it relates to financial instruments.

Quality controls are procedures that ensure the *valuation* is performed consistent with IVS. The nature and extent of the quality control process depends on the *intended use*, *intended user*, the characteristics of the *asset* and/or *liability* being valued and the complexity of the *valuation*.

Quality controls may be automated and/or manual and may include but are not limited to *data* reviews, *valuation model* validations, independent recalculation, back testing, and fact checking.

Quality controls *must* be appropriately designed and executed in a manner that affirms the completeness and integrity of the *valuation* process and the appropriateness for the *intended use* of the conclusion of *value*.

Quality controls *must* be appropriately documented. Documentation *must* be adequate to allow the *valuer* applying *professional judgement* to understand the scope of the quality control, the work performed, and the conclusions reached.

For recurring *valuations*, quality controls *must* be periodically assessed to ensure that integrity and completeness of the control environment is appropriate as of the *valuation date*. The review process *must* be documented.

The *valuer* may delegate the performance of the quality control process (eg, engage a *service organisation* or a *specialist*) but cannot discharge their own accountability for the *valuation* and the *value*.

Quality controls *should* include a degree of review and challenge.

150. Characteristics of Appropriate Quality Control

150.01 In selecting and implementing quality controls, such controls *must* address the following:

(a) complete: *valuations* produce *values* that are sufficient to address attributes of the *assets* and/or *liabilities*,

(b) effective: successful in producing an IVS-compliant *value*,

(c) transparent: provide a record of the *valuation* and include sufficient information to describe the valuation conclusion reached, such that the *valuer* applying *professional judgement* is able to understand and review the *valuation.*

160. Application of Quality Control

160.01 Quality controls *must* be designed and implemented to help ensure that *valuations* are performed in compliance with IVS.

160.02 To achieve this, quality controls *should* confirm as of the *valuation date* that quality control processes have ensured the following:

(a) completeness of the population of instruments to be valued,

(b) accuracy of the financial instruments to be valued with sufficient descriptive details to perform the *valuation*,

(c) Quality control processes have been executed over:

(i) *data*, assumptions, adjustments and *inputs*,

(ii) the selection of models to determine *value*,

(iii) manual or other interventions over the established process,

(iv) communication and documentation of the *valuation* process and the resultant *value*.

160.03 For *valuation*s that include the delegation to other *specialists* or *service organisations*, the *valuer must* understand and assess the roles and responsibilities, the work performed, and the results reached.

160.04 Quality controls *should* be reassessed as of any *valuation date* since financial instruments and the environment in which they are valued can change over time.

170. Review and Challenge

Review and challenge is an assessment of the *valuation* or the *value* independent of the *valuer*. In performing a *valuation*, review and challenge *should* be performed to assess the reasonableness of the decisions made by the *valuer* throughout the *valuation* and compliance with IVS.

With respect to models, an independent validation *should* be performed to assess the appropriateness of the selected *valuation model* in line with design objectives and *intended use*, to determine if it is performing as designed, and whether *valuation model* limitations have been identified and the impact of limitations on *value* are understood.

A validation process *should* be performed by one or more individuals with sufficient knowledge, skills, and expertise relative to the financial instrument being valued. In addition, they *should* have the authority to effectively challenge the *valuation model*.

The extent and rigor of validation procedures *should* be commensurate with the *intended use* of the *valuation model*. The specific tests performed and their frequency are matters that depend on the circumstances and *must* be defined and appropriately set as part of the overall *valuation.*

For *valuation models* that are intended to be used on an ongoing basis, the validation process *should* continue periodically while the *valuation model* remains in use.

Validation procedures and the results of the validation *must* be documented and transparent to the *valuer* and users of the model in a timely manner.

Validation procedures and the results of the validation of third-party *valuation models must* be documented and transparent to the *valuer* and users of the *valuation model* in a timely manner.

180. Valuation Control Framework

180.01 For *valuations* with more complexity or involving multiple individuals or processes, the assignment of responsibilities *must* be documented to ensure that accountability for the execution of all components is clear by developing a valuation control framework.

180.02 The valuation control framework *should* address:

(a) clear definition of the roles and responsibilities of each party in the *valuation*,

(b) identification of responsible parties, including quality control and review and challenge, and confirmation that responsible parties have correct and sufficient capabilities and resources to fulfil their responsibilities,

(c) valuation assessment, escalation, and remediation procedures,

(d) the types and extent of *valuation risk* associated with the *valuation*,

(e) for each instrument type either directly identify or define attributes for each of the following:

   (i) *data* and *inputs,*

   (ii) *valuation models*,

   (iii) requirements for documentation across the *valuation*,

   (iv) timeline and frequency of *valuations*.

180.03 The *valuer* may delegate the performance of the process (eg, engage a *service organisation* or a *specialist*). The impact of such *should* be considered in the valuation control framework.

180.04 For recurring valuations, the valuation control framework should be reviewed and updated to help ensure the valuation control framework continues to be relevant.

190. Valuation Execution

There *must* be a process in place to ensure the proper usage of *inputs* and *valuation models* to develop a *value* in accordance with the *intended use*. Proper usage *should* include an understanding of process to develop and use *inputs* and *valuation models*, along with any limitations, uncertainties, or inaccuracies.

There *must* be a process in place to assess the *valuation* for compliance with the scope of work and the *value* for its *intended use*.

Limitations, uncertainties, or inaccuracies *must* be assessed to determine whether the *value* has been developed appropriately for the *intended use*.

Calibration *must* be performed during a *valuation*. Calibration is a comparison of outputs from a *valuation model* with actual observed and or expected outcomes. Actual outcomes could include *prices* observed in secondary market trading or *prices* observed in originations. Expected outcomes may consist of established expected reasonable ranges of *values* as compared with implied valuation metrics or *values* from alternative *valuation models*. Expected outcomes may also consist of *professional judgement* to confirm whether the resultant *values* make sense.

A variety of quantitative and qualitative testing and analytical techniques *should* be used in the assessment of the calibration analysis. Tests *should* be based on a *valuation model's* methodology, its complexity, data availability, and the *valuation risk* relating to the *valuation*. Tests *should* be designed for each situation, as not all tests will be effective or feasible in every circumstance.

If the analysis produces evidence of inappropriate *inputs* or *valuation model* performance, action *must* be taken to address the nature of the issue and understand the causes and remediation of the variance.

200. Documentation

Documentation *must* be sufficient to describe the quality controls implemented, including review and challenge (if any). The documentation *must* contain sufficient detail to be considered reasonable by the *valuer* applying *professional judgement*.

To the extent there are issues identified during the quality control process, including review and challenge, the issue(s) identified, along with the bias for decisions made and the resulting actions, *should* be documented.

For recurring *valuations*, documentation *must* be reviewed and updated at regular intervals to help ensure they continue to meet their objectives. In addition, a review *must* be conducted in the event of *significant* changes to the financial instruments or their environment.

International Valuation Standards

International Valuation Standards Council,
20 St Dunstan’s Hill, London EC3R 8HL,
United Kingdom

Email contact@ivsc.org
Web www.ivsc.org

IVSC

INTERNATIONAL VALUATION
STANDARDS COUNCIL

Delivering confidence

We are RICS. As a member-led chartered professional body working in the public interest, we uphold the highest technical and ethical standards.

We inspire professionalism, advance knowledge and support our members across global markets to make an effective contribution for the benefit of society. We independently regulate our members in the management of land, real estate, construction and infrastructure. Our work with others supports their professional practice and pioneers a natural and built environment that is sustainable, resilient and inclusive for all.

General enquiries
contactrics@rics.org

Candidate support
candidatesupport@rics.org

RICS®

rics.org