INTERNATIONAL VALUATION STANDARDS COUNCIL

IPS 103: Initial Professional Development – Technical Knowledge

EXPOSURE DRAFT

Publication date: 31 March 2016

Comments on this Exposure Draft are invited before 30 June 2016. All replies may be put on public record unless confidentiality is requested by the respondent. Comments may be sent as email attachments to:

commentletters@ivsc.org

Or by post to: IVSC, 1 King Street, LONDON EC2V 8AU, UK

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Notes for Respondents

The intent of this Exposure Draft is to seek views from interested parties. The IVSC Professional Board seeks comment on the proposed *IPS 103: Initial Professional Development – Technical Knowledge* and would like respondents to express a clear overall opinion of the Exposure Draft. Responses to the specific questions are also invited.

Questions for Respondents

In addition to any specific comments, responses are invited to the following questions. Not all questions need be answered. Please indicate the question to which any answer relates.

IPS 103: Initial Professional Development – Technical Knowledge

1. Do you agree with the competence areas listed in IPS 103? Are there other competence areas that should be included? (Note that the competence areas included are not meant to be exhaustive.)

2. Do you agree with the level of detail noted in the learning outcomes of IPS 103? If so, why, and if not, why not? To assist in your assessment, the learning outcomes for the Plant, Machinery and Equipment, and Personal Property asset classes are not as detailed as the remaining asset classes.

3. In some learning outcomes, examples are provided. Do you find these examples helpful in providing further explanation and clarification?

4. In addition to the current focus on asset classes, should the competence areas in IPS 103 also address industry (sector) speciality areas, and different valuation purposes? For example, with respect to valuation purposes, a sample of competence areas and learning outcomes to be included in IPS 103 could include the following:

    a) Transactions, eg, purchase, expansion or sale of a business:
        i. Assesses the value of a target entity for an acquirer taking into account relevant factors including consideration of strategic benefits and appropriate discounts and premiums,
        ii. Describes the circumstances in which subject matter experts may be required and the process of reliance thereon.
    b) Valuation for financial reporting:
        iii. Explains the requirements of the relevant financial reporting standards, including guidance related to purchase price allocations for business combinations, impairment testing of assets, and other areas,
        iv. Explains the differences between fair value for financial reporting and other bases of value.
    c) Valuation for litigation support:
        i. Describes the special considerations in providing litigation support services, eg, shareholder disputes, marital dissolutions and commercial damages, in the context of the role of the valuer, rules of procedure, expert testimony and/or consultant.

5. IPS 103 has focused on the key Real Estate; Plant, Machinery and Equipment, and Personal Property; Business and Business Interests; and Intangible Assets competence areas and learning outcomes.

Do they contain an appropriate depth of knowledge to be achieved in the learning outcomes? Should there be a similar extension of the depth of knowledge for other key areas, eg, debt and preferred shares? Should learning outcomes related to liabilities also be addressed, including contingent consideration liabilities, unfavorable contracts, and other non-financial liabilities? Are there other competence areas and learning outcomes that should be included?

6. Do you agree that all professional valuers, no matter what their speciality, need to undertake some form of accounting/finance/economics education? If not, why not? If so, why so

Notes for respondents:

In order for us to analyse and give due weight to your comments, please observe the following:

1. Responses should be made in letter format, where appropriate on the organisation's letter heading.

2. Comments should not be submitted on an edited version of the Exposure Draft.

3. Unless anonymity is requested, all comments received may be displayed on the IVSC website.

4. Comment letters should be sent as an email attachment in either MS Word or an unlocked PDF format and no larger than 1mb. All documents will be converted to secured PDF files before being placed on the website.

5. The email should be sent to commentletters@ivsc.org.

Contents

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Standard

Scope of this Standard

1. The International Professional Standards (IPSs) are professional standards for Valuation Professional Organisations (VPOs) to incorporate into the education and development of their members. This IPS prescribes the competencies and the learning outcomes for technical knowledge that professional valuer candidates (Candidates) are required to demonstrate by the end of Initial Professional Development (IPD).

2. This IPS is addressed to International Valuation Standards Council (IVSC) member bodies that provide professional valuer accreditation for the education and development of their members (VPOs that are members of the IVSC). In addition, this IPS may be helpful to those who commission or rely on valuations, educational organisations, those who design, deliver, assess or support education programmes for professional valuers, employers of professional valuers, government authorities, regulators with responsibility for the oversight of the work of professional valuers, and professional valuers and prospective valuers who undertake their own learning and development.

3. Definitions and explanations of key terms are set out in paragraph 14.

4. The commentary, as set out in paragraphs A1 to A17, provides additional explanation relevant to the requirements of this IPS. The commentary is intended to explain more fully what a requirement means and may include examples of how to meet the requirements. The commentary does not in and of itself impose any additional requirements; its purpose is to assist in their application.

5. Technical knowledge is the familiarity and understanding of valuation theory, standards and process required to prepare a credible valuation. Technical knowledge is acquired through study and practical experience.

6. The appropriate level of technical knowledge is dependent upon the type of asset or liability class, the purpose of the valuation and the sector in which the asset or liability class subject to the valuation is classified. This IPS prescribes the competence areas and the learning outcomes for technical knowledge relating to the following:

   - Tangible assets
     - real estate,
     - plant, machinery and equipment, and personal property
   - Business and business interests
   - Intangible assets.

7. This IPS prescribes the technical knowledge required of Candidates by the end of IPD. This IPS identifies the breadth and the depth of the technical knowledge requirements that are common to the foregoing asset classes and the additional requirements specific to each asset class. Together, the appropriate level of technical knowledge integrates with the professional skills and ethics in IPS 102: Initial Professional Development - Professional Skills and Ethics to demonstrate the professional competence of Candidates by the end of IPD.

Effective Date

8. This IPS is effective from Date, 2016, although earlier adoption is encouraged.

Objective

9. The objective of this IPS is to establish the technical knowledge that Candidates need to develop and demonstrate by the end of IPD in order to perform a role as a professional valuer.

Requirements

10. VPOs that are members of the IVSC shall provide through professional valuation accreditation programmes, either administered by the VPO or outsourced to an educational institution, a framework of technical knowledge to be acquired by Candidates by the end of IPD in order to perform a role as a professional valuer.

11. The framework shall include the following threshold level of competencies and learning outcomes:

Common Competencies	
Competence Area	**Learning Outcomes**
Economic theory, principles and concepts	Describes the fundamental principles of microeconomics and macroeconomics and how they may relate to the value of the subject matter.
	Explains the different types of market structures, including pure competition, oligopoly and monopoly.
	Describes the role of the geo-political and cross-border considerations in a valuation assignment.
	Identifies the impact of government policies on the economy, ie, monetary policy, fiscal policy, wages policy and macro-economic reform.
Accounting theory	Explains the basic accounting theory of recording and reporting financial information, eg, debits and credits, general ledger and components of financial statements.
Finance theory	Explains how finance theory integrates with valuation theory, eg, time value of money, risk-return trade-off, cost of capital components, and capital budgeting.
Financial markets	Compares the various sources of capital available to an entity
	Explains the financial system and the operation of financial and securities markets, ie, foreign exchange market, short-term money market, long-term debt market, share market and derivatives market.
	Describes the main linkages within the economy, the role of economic indicators, political developments and market sentiments in driving markets, eg, increase in interest rates and/or taxes will influence the exchange rate, share prices and, more generally, the value of various financial assets.

Common Competencies	
Competence Area	**Learning Outcomes**
Legal and tax framework	Explains the various forms of ownership of an asset
	Identifies the laws and regulations that govern the different forms of legal entities and the sources of obtaining information.
	Explains the court system and alternative dispute resolution mechanisms that apply to the subject matter of the valuation.
	Identifies the tax system applicable to the subject matter of the valuation.
	Explains the effect of regulatory requirements on valuation in assessing general industry conditions
	Identifies the tax and legal considerations when evaluating a transaction or when performing a notional valuation.
	Explains the laws and regulations applicable to the environment in which professional valuers operate.
	Explains the concept of professional liability.
Technical standards/guidelines	Applies the relevant valuation related standards and guidelines consistent with the subject matter and the purpose of the valuation, eg, financial reporting standards, accounting standards, private equity and venture capital guidelines, tax-related standards, and standards and guidelines in accordance with established requirements.
Subject asset/liability characteristics	Describes the characteristics of the subject matter through which value is created.
Purpose of the valuation	Identifies the purpose of the valuation, eg, transaction, financial reporting, litigation, lending, statutory and other.
Valuation theory, principles and concepts	Describes the basic valuation concepts .
	Demonstrates knowledge of valuation theory
	Applies valuation principles consistent with the purpose of the valuation.
Valuation definitions	Identifies the various sources of valuation definitions, eg, The International Valuation Standards, International Glossary of Business Valuation Terms and/or other authoritative sources in accordance with established requirements.
	Applies the appropriate valuation definitions consistent with the purpose of the valuation.

Common Competencies	
Competence Area	**Learning Outcomes**
Valuation process	Describes the valuation process in the conduct of a valuation assignment.
	Determines the scope of work in accordance with the International Valuation Standards and others standards in accordance with established requirements.
	Defines the qualitative and quantitative information requirements.
	Assesses, objectively, the qualitative and quantitative information, consistent with the purpose of the valuation.
	Utilises information provided by client while keeping an objective and impartial perspective.
	Describes the purpose of engagement and representation letters
Premise of value	Describes the premise of value, eg, going concern, liquidation, value in continued use or exchange
	Differentiates between the various premises of value and the implications on the valuation inputs and valuation conclusions.
	Applies the appropriate premise of value consistent with the purpose of the valuation.
	Describes the relationships between the basis of value and the premise of value
Basis of value	Describes the various bases of value, eg, investment value and market value
	Differentiates between the various bases of value and the implications on the valuation inputs and valuation conclusions.
	Applies the appropriate basis of value consistent with the purpose of the valuation.

Common Competencies	
Competence Area	**Learning Outcomes**
Valuation approaches	Describes the principal valuation approaches: • market • income • cost
	Explains the applicability of alternative valuation approaches based on the nature of the subject matter, the premise of value and the purpose of the valuation.
	Applies different valuation approaches to analyse and determine the value of the subject matter, consistent with the basis of value, premise of value and purpose of the valuation.
Valuation methods	Explains the valuation methods that can apply in the valuation of the subject matter.
	Describes the advantages and disadvantages of each valuation method.
	Differentiates between the various valuation methods that fall under each of the three valuation approaches.
	Applies different valuation methods to analyse, rationalise, reconcile and conclude the value of the subject matter, consistent with the basis of value, premise of value and purpose of the valuation.
Information Technology	Applies information technology skills in data analysis, valuation modelling, report writing and presentation of results.
Financial modelling	Describes the ability to analyse and model the financial aspect of the subject matter of the valuation.
	Applies spreadsheet or bespoke programs that are flexible to accommodate modification of major assumptions, as required.
Valuations for speciality areas or speciality purposes	Recognises general circumstances in which a specialist or a subject matter expert should be involved.
	Identifies speciality areas (eg, valuation of real estate holding company, resource company, derivatives) and speciality areas (eg, financial reporting, solvency opinions).
	Describes the nuances around the availability, transparency and reliability of data and information to perform valuations in emerging and frontier markets.
Reporting of valuation	Applies report writing and/or other communication skills to convey the valuation conclusion.

<table>
<tr><th colspan="2">Real Estate</th></tr>
<tr><th>Competence Area</th><th>Learning Outcomes</th></tr>
<tr><td rowspan="3">Purpose of the valuation, type of property and geography</td><td>Identifies the purpose of the valuation, which may include:
likely sale (sale price)
likely purchase (purchase price)
valuation for bank lending
financial reporting
statutory valuations including taxation and compensation
insurance
portfolio valuation/asset valuation
lease or rental determination</td></tr>
<tr><td>Identifies the property type being valued, which may include:
commercial property (including retail, offices, industrial and logistics)
residential property (including student housing and retirement homes)
leisure property
rural property
specialised property (including medical, libraries, refineries)</td></tr>
<tr><td>Identifies the geography, which may include:
metropolitan
rural
international</td></tr>
</table>

<table>
<tr><th colspan="2">Real Estate</th></tr>
<tr><th>Competence Area</th><th>Learning Outcomes</th></tr>
<tr><td>Valuation approaches & methods</td><td>Compares and contrasts the various valuation methods under the principal valuation approaches, as follows:
1. Market approach – comparative method:
a. Identifies suitable comparable property sales by reference to:
• property type
• location
• occupation/covenant
• size and specification
• date of sale
b. Identifies the appropriate unit of comparison
• square foot or square metre
• per property, eg, 3 bedroom residential
c. Analyses comparable sales ensuring:
• consistency of analysis
• application of international code of measurement
d. Applies valuation method to the subject property by reference to comparable evidence to evaluate the value.</td></tr>
<tr><td>Valuation approaches & methods</td><td>2. Cost approach – depreciated replacement cost method
a. Identifies suitable comparable evidence for valuation
• cost of construction (of existing or modern equivalent)
• cost of land
• depreciation requirement
b. Applies valuation method to the subject property to evaluate the value to contractor's/construction model, ie, cost of construction + land – depreciation)</td></tr>
<tr><td>Valuation approaches & methods</td><td>3. Income Approach – investment method
a. Identifies suitable comparable evidence for valuation based on property sales and other market evidence by reference to
• property type
• location
• occupation/covenant
• size and specification
• date of sale/letting
b. Assesses appropriate unit of comparison
• rental per unit of measurement
• initial yield of comparable sales (capitalisation rate)
c. Assesses the following:
• target rate of investors in market
• growth expectation in rental and/or capital value
d. Analyses comparable sales/lettings
• Identifies consistency of analysis
• Applies international code of measurement
e. Identifies existing lease terms for duration of rental payments and level of current rent
f. Applies valuation method to the subject property by reference to comparable evidence by an appropriate valuation technique.</td></tr>
</table>

Real Estate	
Competence Area	**Learning Outcomes**
Income Approach - Investment Method (Implicit Model - capitalisation)	g. Assesses value by reference to comparable market rent, capitalisation rate and duration (above) • Applies capitalisation rate to all rentals • Applies capital value - derived by addition of the value of the component parts • Assesses market value - derived by capital value minus market costs of purchase
Income Approach - Investment Method (Explicit Model - DCF)	h. Assesses value by reference to comparable market rent, target rate, cash flow, timing of receipt of incomes and explicit growth expectation in rental and exit yield (above) • Analyses cash flow in periods as appropriate • Applies growth (where appropriate) explicitly based on market expectation of rental change and exit value • Applies present value - expected cash flow including exit at market target rate • Applies capital value (gross present value) - derived by addition of the value of the component parts • Assesses market value – derived by capital value minus market costs of purchase
Income Approach - Residual Method	i. Assesses sale value of completed development (Gross Development Value – GDV) by reference to comparable market rent and capitalisation rate or capital value today • for income producing property - applies capitalisation rate to rental of completed development • for property to be sold and not let, assesses market value by capital comparison j. Assesses cost of development/refurbishment by reference to comparable cost per unit of construction including all fees, profit and finance costs k. Assesses market value of land or building in current state by reference to GDV minus costs of construction
Income Approach - Profits Method	l. Assesses the rental value of subject property by reference to the income and expenditure of running the business. Assesses the capital value by capitalising the derived rent by an appropriate market capitalisation rate. • Assesses the potential income of the business by reference to accounts based on an reasonable expectation for that type of business • Assesses expenditure of the business (including entrepreneurial remuneration) by reference to accounts based on an reasonable expectation for that type of business • Applies capital value of subject property – derived by capitalisation of the derived rental (income minus expenditure) • Assesses market value - derived by capital value minus market costs of purchase

Real Estate	
Competence Area	**Learning Outcome**
Legal Interest	Evaluates the real property interest and any relevant related interests.
	Identifies legal permissions or restrictions on the use of the property and any buildings.
Research	Identifies information requirements and available sources.
	Identifies sources to obtain required information.
	Evaluates authenticity of collected information, including resolution of apparent conflicts of ambiguities in collected information.
	Summarises observations and other information obtained through inspection.
Plans and drawings	Describes the extraction of information from the plans and drawings
	Evaluates nature, specification and adequacy of services
Inspection	Assesses actual or potential environmental risks
	Analyses market trends and other factors and applies to subject property
	Describes the physical inspection of the subject property
Market Evidence	Evaluates the inspection of the subject property including the construction and any shortcoming therewith
	Describes the collection, analysis and decanting of comparable evidence of similar property assets as appropriate for capital or rental evidence
	Identifies the suitable form of analysis
Special Assumptions	Identifies the site area and any building floor areas
	Describes the specification and condition of the subject property
	Describes the ground and foundation conditions
	Summarises the special assumptions implicit in the value of the subject property

Plant, Machinery and Equipment, and Personal Property[1]	
Competence Area	**Learning Outcome**
Purpose of the valuation	Identifies the purpose of the valuation, which may include: • likely sale (sale price) • likely purchase (purchase price) • valuation for bank lending • financial reporting • insurance • lease or rental determination
Legal interest	Evaluates the legal ownership and any relevant related interests
	Identifies legal permissions (statutory or personal) or restrictions on the use of the plant
Engineering	Describes a range of manufacturing processes and techniques
	Describes a range of building construction materials and techniques
	Explains the impact of technological advances on value
	Describes the extraction of information from process flow diagrams
	Describes the extraction of information from plans and drawings
	Assesses the impact on value of condition on assets
	Applies different cost estimating techniques as part of the cost approach
Inspection	Identifies the age and condition of assets
	Identifies site conditions, eg, remote location, access, that may have an impact on value
	Summarises information that accurately identifies the assets
	Identifies data sources that provide information that is relevant to the valuation analysis

[1] Note that the learning outcomes in *Plant, Machinery and Equipment, and Personal Property* asset classes are not as detailed as those for the *Real Estate* and *Business & Business Interests Valuation* asset classes. Please refer to the Questions to Respondents in this regard.

Plant, Machinery and Equipment, and Personal Property	
Competence Area	**Learning Outcome**
Research	Identifies information requirements and available sources
	Identifies sources to obtain required information
	Evaluates authenticity of collected information, including resolution of apparent conflicts of ambiguities in collected information
	Summarises observations and other information obtained through inspection
Valuation analysis	Analyses market data using appropriate techniques to determine value
	Assesses the physical deterioration on value using age/life, units of production and other relevant techniques
	Evaluates the impact of excess capital costs on value
	Evaluates the impact of excess operating costs on value
	Evaluates the impact of economic (external) obsolescence on value
	Assesses the cash flow generating potential of assets
	Applies mass appraisal techniques including sampling, indexation, etc. to large populations of assets and evaluates any limitations associated with those techniques
	Evaluates any limitations associated with those techniques

Business, Business Interests and Intangible Assets	
Competence Area	**Learning Outcome**
Business and organisational environment	Describes the environment in which an entity operates, including the main economic, legal, political, social, technical, international and cultural forces
	Analyses aspects of the global environment and their impact on the profitability, risk and/or growth of the entity
	Identifies the features of globalisation, including the role of multinationals, e-commerce and emerging markets, in the context of the profitability, risk and/or growth of the entity
	Analyses the internal and external strategy that can influence an entity's business strategy
	Identifies and describes the key risks external to the industry in question
	Identifies and describes the key source of risks within the industry in question
	Identifies and describes the key risks and opportunities specific to the business
	Explains how the features of the business interact with industry risks
	Explains shareholder rights and the implication of those rights in a valuation
Financial theory, principles and concepts	Applies finance theory and concepts relevant to business valuation, eg, risk-return trade-off, time value of money, capital structure and cost of capital determination
	Analyses the entity's financial state and applies financial analysis, including ratio analysis, industry benchmarking, trend analysis and cash flow analysis
	Evaluates the entity's financial condition as a standalone entity, eg, compares with historical results, industry benchmarks and company peers/guideline companies, and considers industry structure and life-cycle analysis
Premise of value	Explains the basic premise of business valuation, eg, going concern or liquidation premise
	Identifies the appropriate premise consistent with the purpose of the valuation and the performance of the business in the context of the industry
	Applies the appropriate premise of value consistent with the purpose of the valuation

Business, Business Interests and Intangible Assets	
Competence Area	**Learning Outcome**
	Explains the effect of asset obsolescence (physical, functional and/or economic, as applicable) and its effect on the premise of value used for the business valuation
	Explains the need for general consistency between the premise of value used in valuing the assets of the business and the overall business operation.

Business, Business Interests and Intangible Assets	
Competence Area	**Learning Outcome**
Valuation approaches & methods	Compares and contrasts the various valuation methods under the principal valuation approaches, as follows: 1. Income approach a. Main value drivers i. Benefit streams and profitability • relationship between value and profitability • cash flow measures vs accounting measures • invested capital measures vs equity measures ii. Risk • relationship between value and risk • external sources of risk • internal sources of risk iii. Growth • relationship between value and growth • economic, competitive, capacity, capital and management limitations • near-term growth • long-term stabilised growth b. Subject entity analysis i. Qualitative • strengths, weaknesses, opportunities and threats ii. Quantitative • financial statement adjustments • financial ratio analysis trending and benchmark/peer group comparisons

Business, Business Interests and Intangible Assets	
Competence Area	**Learning Outcome**
Valuation approaches & methods	c. Income-based methods: i. Capitalisation of earnings or cash flow, including: • normalisation adjustments o accounting convention consistency o non-recurring/extraordinary income and expenses o control/owner's discretion o non-operating assets/liabilities and associated income and expense • determination of sustainable earnings/cash flow • multiple/capitalisation rate determination: o business life cycle o relationship between risk and return o cost of equity adjusted for risk: build-up method vs capital asset pricing model, risk-free rate, equity/market risk premium, country risk, industry risk premium/beta, size risk and unsystematic risk o cost of debt adjusted for risk o weighted average cost of capital (WACC), cost of debt and equity adjusted for risk, and capital structure considerations o WACC (invested capital) vs cost of equity (equity) o matching of WACC or equity to the adjusted benefit stream o growth considerations o WACC vs capitalisation rate o comparable transactions o other methods • redundant net assets: non-operating assets and liabilities • tax calculations, including tax shield and non-operating assets and liabilities not accounted for in benefit stream ii. Discounted cash flow, including: • various items discussed above under "capitalisation of earnings or cash flow" • forecasting methods: discrete time period until stabilisation • assessment of management forecasts • methods of calculating terminal value

Business, Business Interests and Intangible Assets	
Competence Area	**Learning Outcome**
Valuation approaches & methods	2. Market approach a. previous transactions of subject company shares i. assessment of arm's length indicators ii. difference in size of block iii. difference in economy, industry and competitive environment iv. difference in company specific factors: qualitative and financial b. guideline publicly traded company method i. selecting guideline companies ii. comparative analyses between guideline companies and subject entity: profitability, risk and growth iii. selection of valuation multiples: invested capital vs. equity multiples, and cash flow vs. accounting benefits multiples iv. adjustment of valuation multiples for differences in: profitability, risk, growth and other factors c. guideline precedent transaction method i. selecting guideline companies ii. comparative analyses between guideline companies and subject entity: profitability, risk, growth and other factors iii. selection of valuation multiples: invested capital vs. equity multiples, and cash flow vs. accounting benefits multiples iv. adjustment of valuation multiples for differences in profitability, risk, growth and other factors d. reconciliation of value indications among different multiples
Valuation approaches & methods	3. Asset-based valuation methods, both as a primary valuation method and a risk assessment tool, as follows: a. adjusted book value or net asset value i. premise of value: in exchange or use ii. valuation of the assets and liabilities, including methods for valuing intangible assets (recorded or not) iii. tax implications and adjustments: tax shield, taxes on disposition and distribution, refundable taxes and relevance thereof b. liquidation value i. orderly vs. forced ii. liquidation costs and expenses iii. tax implications and adjustments: taxes on disposition and distribution, refundable taxes and relevance thereof iv. time value of money
Valuation approaches & methods	4. Other methods: a. capitalisation of earnings before interest and taxes b. dual capitalisation c. other
Valuation approaches & methods	Applies different valuation methods to calculate, analyse and corroborate a plausible range of values
	Evaluates the reasonableness of the valuation conclusion and documents the rationale.

Business, Business Interests and Intangible Assets	
Competence Area	**Learning Outcome**
Financial statement analysis	Explains the differences in financial statements and tax reporting for various entities, eg, partnership, sole proprietorship, private or public company, and joint venture
	Evaluates completeness of financial statements in the context of setting the proper scope for the valuation, ie, the extent of the investigation and the normalisation adjustments required
	Explains the differences in how differing accounting conventions, eg, cash vs accrual, and treatment of expenditures, eg, capitalise vs expense, impact financial statements
	Evaluates the effect of accounting policies used to prepare financial statements, eg, impact on free cash flow determination and off-balance sheet items
	Describes the use of financial statements for the purpose of business valuation, eg, historical results vs. prospective results, level of tangible assets and capital structure
Financial forecasting	Identifies information inputs and supporting information from internal and external sources and identifies gaps and anomalies
	Evaluates information inputs and supporting information for reliability
	Applies forecasting methods for the subject matter based on rational and reasonable assumptions
	Describes assumptions, data, inputs and results in a manner to be understood by third parties not involved in the forecast model design
Valuation of equity interests	Explains the relevance of bylaws, articles of incorporation, shareholder agreements, partnership agreements and voting trusts in the valuation of equity interests
	Identifies the considerations in the valuation of debt and equity interests
	Determines the valuation issues in allocating value between the classes of shares, eg, voting, non-voting, preferred and restricted
	Identifies the issues relating to the valuation of securities of public companies
	Determines the level of value, ie, control, non-controlling, marketable, non-marketable, liquid, illiquid from the application of the valuation approaches and methods

Business, Business Interests and Intangible Assets	
Competence Area	**Learning Outcome**
Discounts and premiums in the valuation of equity interests	Considers the factors in valuing minority interests, including rights and limitations of minority shareholders, factors affecting value, discounts for lack of control, discounts for lack of marketability, and legal remedies available
	Explains the concept of blockage discounts
	Explains the considerations in valuing controlling interests, including conceptual issues relating to terms such as "premium for control"
	Explains the considerations of buyers and sellers in the marketplace and the impact on the value of the business
	Applies the appropriate magnitude of discount or premium consistent with the level of value

Intangible Assets	
Competence Area	**Learning Outcomes**
Asset attributes	Describes the concept of intangible assets
	Identifies the asset by reference to its type /category and describes its attributes: • Marketing-related • Technology related • Customer- or supplier-related • Artistic-related
	Describes the legal right or interest in the asset
	Explains how the asset arises (eg, contractual right), if the asset is separately identifiable or not (eg, goodwill), consistent with the purpose of the valuation
	Describes the specific characteristics of the intangible asset (specifications; function; market position; image; value proposition; etc)
	Evaluates how the characteristics of the intangible asset affect the valuation approach(s) and technique(s) applied in the valuation of the asset
Premise of value	Identifies the premise of value that is consistent with the purpose of the valuation and basis of value
	Explains whether the selected premise assumes a going concern or liquidation
	Describes the concept of functional and economic obsolescence in the context of the valuation and the effect on the valuation premise
	Evaluates the potential impact of functional and economic obsolescence on the intangible asset(s)
Valuation approaches and methods	Compares and contrasts the conceptual similarities and differences of the three valuation approaches (income, market, cost) when applied to intangible assets and discusses the strengths and weaknesses of each
Income approach	Explains the concept of the income approach
	Outlines the types of assets and circumstances suited to the application of the income approach

Intangible Assets	
Competence Area	**Learning Outcomes**
	Compares and contrasts the conceptual similarities and differences of the various methods under the income approach and discusses the strengths and weaknesses of each
Income approach: Relief from royalty method	Explains the concept of a relief from royalty method and its strengths and weaknesses
	Selects a hypothetical royalty rate by one or more methods, for example: 1. Evaluates observed royalty rates and makes adjustments as appropriate to estimate a hypothetical royalty rate 2. Estimates a royalty rate via a: a. Profit split method b. Return on assets c. Return on investment method d. Comparable profits method 3. Evaluates if the royalty observed or derived is gross or net of maintenance expenses for the subject intangible
	Applies the concluded royalty to the asset's future revenues over the projected economic life of the asset
	Estimates an appropriate rate of return (discount rate) for the application of the relief from royalty method
	Applies a tax amortisation benefit (TAB), if appropriate
	Evaluates the reasonableness of the conclusion and documents the rationale
Income approach: premium profits method (with-or-without method)	Explains the concept of the premium profits method and its strengths and weaknesses
	Assesses the differential in profits due to the employment of the subject intangible asset over its economic life
	Estimates an appropriate rate of return (discount rate) for the application of the premium profits method
	Applies a TAB, if appropriate
	Evaluates the reasonableness of the conclusion and documents the rationale

Intangible Assets	
Competence Area	**Learning Outcomes**
Income approach: multi-period excess earnings method	Explains the concept of the multi-period excess earnings method and its strengths and weaknesses
	Outlines the types of assets and circumstances suited to the application of the multi-period excess earnings method
	Calculates the revenues and expenses related to the operating group containing the subject intangible asset, and evaluates the projected financial information
	Identifies the period of projection related the subject intangible asset
	Describes the contributory assets in the operating group that the subject intangible asset is part of
	Computes and applies contributory asset charges, and makes other adjustments to the projections, including discounting
	Estimates the period of time over which to apply the multi-period excess earnings method
	Estimates an appropriate rate of return (discount rate) for the application of the multi-period excess earnings method
	Applies a TAB, if appropriate
	Evaluates the reasonableness of the conclusion and documents the rationale
Income approach: disaggregated (distributor) method	Explains the concept of the disaggregated (distributor) method and its strengths and weaknesses
	Outlines the types of assets and circumstances suited to the application of the disaggregated (distributor) method
	Identifies the various functions of the enterprise to which the distributor method could be applied and identifies the assets required to perform such business functions
	Estimates the period of time over which to apply the disaggregated (distributor) method
	Estimates an appropriate rate of return (discount rate) for the application of the disaggregated (distributor) method
	Applies a TAB, if appropriate

Intangible Assets	
Competence Area	**Learning Outcomes**
	Evaluates the reasonableness of the conclusion and documents the rationale
Income approach: greenfield method	Explains the concept of the greenfield method and its strengths and weaknesses
	Outlines the types of assets and circumstances suited to the application of the greenfield method
	Estimates the period of time required to establish the business (ramp up period) under current market conditions
	Deducts the going concern value represented by initial investments and operating losses: 1. Estimates additional costs and investments during the ramp-up period 2. Estimates the normalized level of operation of the business at the end of the ramp up period
	Estimates an appropriate rate of return (discount rate) for the application of the greenfield method
	Applies a TAB, if appropriate
	Evaluates the reasonableness of the conclusion and documents the rationale
Income approach: cost savings method	Explains the concept of the cost savings method and its strengths and weaknesses
	Outlines the types of assets and circumstances suited to the application of the cost savings method Estimates the cost savings generated or implied by owning the subject intangible asset
	Estimates the period of time over which the costs savings related to the subject intangible would continue
	Estimates an appropriate rate of return (discount rate) for the application of the cost savings method
	Applies a TAB, if appropriate
	Evaluates the reasonableness of the conclusion and documents the rationale
Market approach	Explains the concept of the market approach and discusses its strengths and weaknesses when applied to intangible assets

Intangible Assets	
Competence Area	**Learning Outcomes**
	Outlines the types of assets and circumstances suited to the application of the market approach
	Evaluates and interprets observable market evidence related to transactions for identical or similar intangible assets
	Adjusts observed prices as appropriate
	Evaluates and interprets observable market multiples related to similar intangible assets
	Adjusts observed multiples as appropriate
	Adjusts, if necessary, the metric of the subject intangible asset that a market multiple would be applied to
	Reconciles value indications from the market approach
	Evaluates the reasonableness of the conclusion and documents the rationale
Cost approach	Explains the concept of the cost approach and discusses its strengths and weaknesses when applied to intangible assets
	Outlines the types of assets and circumstances suited to the application of the cost approach
	Estimates current replacement cost by purchasing and modifying a similar asset
	Estimates current replacement cost by constructing a similar asset
	Evaluates and applies a developer's profit
	Evaluates and applies an opportunity cost adjustment
	Applies adjustments for functional, technological, and economic obsolescence, as appropriate
	Evaluates the reasonableness of the conclusion and documents the rationale
Obsolescence	Explains the interaction between premise of value and economic obsolescence

Intangible Assets	
Competence Area	**Learning Outcomes**
	Assesses the effect of technological, functional and economic obsolescence on asset value
	Estimates and applies the amount of technological, functional and economic obsolescence to the indicated value of the subject intangible
	Evaluates the reasonableness of the conclusion and documents the rationale
Economic life	Explains the impact of contractual, legal, regulatory, technological factors on the economic life of an intangible asset
	Explains the effects of obsolescence, demand, competition and other economic factors on the economic life of an intangible asset
	Explains the effect of another asset or a group of assets that the subject intangible is used with
	Describes and critiques various methods for estimating the economic life of a subject asset including, but not limited to, methods based on historical customer revenue data; historical customer count data; statistical techniques; industry and third-party data sources; management estimates
	Evaluates the best method(s) to use based on the circumstances, including the type and quality of data available
	Estimates the economic life of the intangible asset for the purpose of applying valuation approaches and techniques 1. Marketing-related intangibles lifing: a. Assesses the longevity of the marketing-related intangible in conjunction with contractual, legal, regulatory, technological (related to the associated product or service) factors on the economic life of the subject intangible asset b. Evaluates the impact of planned marketing spending on the life of the subject intangible 2. Technology-related intangibles lifing a. Assesses the lifecycle of the technology-related intangible in conjunction with contractual, legal, regulatory, technological factors on the economic life of the subject intangible asset b. Evaluates the impact of planned technology development spending on the life of the subject intangible 3. Customer and supplier- related intangibles attrition estimation

<table>
<tr><th colspan="2">Intangible Assets</th></tr>
<tr><th>Competence Area</th><th>Learning Outcomes</th></tr>
<tr><td rowspan="3"></td><td>a. Evaluates if the characteristics of the customer population in terms of size, profitability, and other attributes warrant dividing the population into subsets with comparable attributes for analysis purposes
b. Analyses historical customer count data for the entire population or a subset
c. Assesses historical customer revenue data for the entire population or a subset
d. Assesses comparable customer population revenue or count
e. Assesses customer attrition estimates from third-party data sources
f. Assesses partial period adjustments in the attrition computation, where applicable
g. Applies statistical techniques:
i. Computes historical retirement rates for individual customer vintages using a time series analysis and constructs observed survivor curve
ii. Compares and extends observed survivor curves to Iowa or Weibull survivor curve models
h. Evaluates, critiques and adjusts educated estimates by management
i. Interprets and adjusts irregular attrition patterns
j. Assesses the indications of various lifing methods and documents the conclusion reached
4. Artistic-related intangibles lifing
a. Assesses the longevity of the artistic related intangible in conjunction with contractual, legal, regulatory, factors on the economic life of the subject intangible asset
b. Evaluates the impact of planned spending on the life of the subject intangible</td></tr>
<tr><td>Determines the length of the projection period for the income approach in light of the economic life estimation</td></tr>
<tr><td>Assesses comparability to other intangibles when applying the market approach in light of the economic life estimation</td></tr>
<tr><td rowspan="3">Tax amortisation benefit</td><td>Describes the concept of the Tax Amortization Benefit (TAB) and the effect of the tax laws of a jurisdiction on the ability to apply a TAB</td></tr>
<tr><td>Applies TAB to the present value of the asset</td></tr>
<tr><td>Evaluates the conclusion and documents the rationale</td></tr>
</table>

Intangible Assets	
Competence Area	**Learning Outcomes**
Discount rate	Describes the concepts of discount rate; Internal Rate of Return (IRR) and Weighted Average Rate of Return (WARA)
	Explains the relationship between the discount rate, the IRR and WARA
	Evaluates the characteristics of the cash flows, e.g. expected, conditional, and the impact on the range of selected discount rates
	Evaluates the risk of the subject intangible in the context of its ability to be financed with debt and/or equity
	Evaluates the risk of the subject intangible in the context of the risk of other assets within the group or business, and the risk of the overall business
	Evaluates the risk of the subject intangible in the context of the IRR based on the purchase price of the group of assets or business (when the subject intangible asset is an element of a business combination)
	Analyses the stratified rates of return in a WARA framework
	Evaluates the conclusion and documents the rationale
Reconciliation of concluded intangible values	Reconciles and qualitatively weights the value indications of the income, market and cost approaches and concludes on a value range or a single point value estimate, as needed
	Assesses the reasonableness of the valuation conclusion for the subject intangible in light of the valuation conclusions for any other assets in the group (or business) and in the context of WARA, recent transactions, industry and economic trends
	Analyses further any divergent indications of value, explains and documents how differences were dispensed with
Valuation quality (quality of information, sources and assumptions, integrity of analysis, and robustness of conclusions)	Evaluates information and assumptions provided by management in light of past company performance and industry expectations
	Evaluates the reasonableness of the prospective financial information – revenues, profit margins, taxes, working capital, capital expenditures, growth rates, etc., in light of industry benchmarks, historical performance and industry expectations
	Assesses the nature of the projected cash flows (expected vs. conditional)

Intangible Assets	
Competence Area	**Learning Outcomes**
	Distinguishes between entity specific assumptions and expectations and market participant assumptions and expectations
	Adjusts forecasts and assumptions as appropriate
	Adjusts methods and assumptions used to the type and quality of data available
	Evaluates the valuation conclusion in light of the value creation process at the entity
	Evaluates internal consistency of data, assumptions and methods applied to the subject intangible, including in the context of other assets being valued
	Evaluates, on a high level, relevant historical valuation analyses for the intangible asset or valuations of comparable assets (if available), and explains and rationalizes significant changes in the assumptions and methods used
	Synthesizes key discussions, assumptions, decisions, and significant issues arising in the course of the valuation analysis and the manner in which they were addressed

Review of Technical Knowledge Requirements

12. VPOs that are members of the IVSC shall review and update their professional valuation accreditation programmes that are designed to achieve the learning outcomes in this IPS as considered necessary.

Assessment of Technical Knowledge

13. VPOs that are members of the IVSC shall establish appropriate activities to assess the technical knowledge of Candidates at the end of IPD.

Definitions and Explanations of Key Terms

14. This IPS uses the following definitions and explanations of key terms:

- A professional valuer is a person who has expertise in the field of valuation, achieved through formal education and practical experience and maintained through continuous learning and development, is held to high professional standards equivalent to the IVSC's IPSs and Code of Ethical Principles and whose compliance with such standards is subject to enforcement by a VPO that is a member of the IVSC.
- A professional valuer candidate is an individual who has commenced a professional valuer accreditation programme as part of IPD.

Commentary

Scope of this Standard (para 1-7)

A1. IPD is the learning and development through which Candidates first develop competence leading to performing a role as a professional valuer. IPD includes general education, professional valuation education, practical experience and assessment. IPD continues until Candidates can demonstrate the professional competence necessary to perform the role as a professional valuer.

A2. Internationally, there are legal and regulatory differences in the accreditation of the professional valuer. Each VPO that is a member of the IVSC may define the appropriate relationship between the end of IPD and the point of qualification or licensing for its members.

A3. The inclusion of technical knowledge in IPD lays the base for performing a role as a professional valuer. Further development of technical knowledge is a focus of Continuing Professional Development (CPD), which is covered in IPS 201- Continuing Professional Development.

A4. Competence is the capacity to do something well measured against a defined standard with reference to working environments. It requires the capabilities of professional skills and ethics, and the appropriate level of technical knowledge. Professional competence goes beyond knowledge of valuation theory, principles, concepts, standards and process. Professional competence is the integration of professional skills and ethics with technical knowledge.

A5. A professional valuer needs to recognize limits to professional competence. A competent professional valuer will only provide advice in areas of qualification and capability. A professional valuer will seek assistance from other professionals, eg subject matter experts, when required information extends beyond their area of competence.

A6. A competence area is a category for which a set of related learning outcomes can be specified. Competence areas within technical knowledge include common competencies, such as economic theory, principles and concepts, which are applicable to the asset classes. There are also competence areas specific to each asset class. For example, a competence area specific to a plant would include plans and drawings, whereas financial statement analysis is a competence area specific to a business.

A7. Learning outcomes establish the content and the depth of knowledge, understanding, and application required for each specified competence area. Learning outcomes can be demonstrated within the context of a work environment or professional valuer education program.

Objective (para 9)

A8. Establishing the technical knowledge that Candidates need to develop and demonstrate by the end of IPD serves several purposes. It protects the public interest, enhances the quality of the work of professional valuers and promotes the credibility of the valuation profession.

Requirements

Learning Outcomes for Technical Knowledge (para 10-11)

A9. The competence framework lists the learning outcomes for technical knowledge to be acquired by Candidates by the end of IPD, regardless of their intended future valuation specialisation or role, the purpose of the valuation and the sector in which the asset or liability is classified. These learning outcomes provide the base to enable professional valuers to develop specialisations in different roles.

A10. In the design of professional valuation accreditation programmes, the competence areas listed in the framework table may not be identical to the names of prescribed courses or subjects. The learning outcomes associated with one competence area may be achieved across more than one course or subject and may extend across several different courses or subjects, none of which may be devoted solely to that competence area. For example, the learning outcomes within information technology may be achieved through the integration of relevant material within courses that focus on valuation methods.

A11. There are many ways to describe the level of proficiency, ie, the depth of knowledge, required by the Candidate at the end of IPD. This IPS uses the following descriptions in the learning outcomes to reflect the level of proficiency to be acquired by Candidates by the end of IPD:

- Identifying, defining, describing, explaining, outlining and summarising relate to basic levels.
- Applying, comparing, interpreting, contrasting, distinguishing, adjusting, considering, determining, selecting, assessing and analysing relate to intermediate levels.
- Evaluating, differentiating, estimating, reconciling and integrating relate to advanced levels.

The basic, intermediate and advanced levels of proficiency to be achieved by the end of IPD are outlined in Appendix 1. These are based on Bloom's taxonomy, which is generally described as a set of three hierarchical models used to classify educational learning objectives into levels of complexity and mastery.

A12. In professional valuer accreditation programmes, VPOs that are members of the IVSC may include additional competence areas, increase the level of proficiency for competence areas and develop additional learning outcomes that are not specified in this IPS. For example, these changes may be necessary when a VPO that is a member of the IVSC prepares Candidates to work within a particular industry sector or for a particular role.

A13. VPOs that are members of the IVSC are encouraged to identify the most appropriate approach to learning and development taking into consideration the national and cultural environment. An appropriate approach is likely to include a mixture of learning and development activities which combine structured learning programmes and practical experience.

Review of Technical Knowledge Requirements (para 12)

A14. Professional valuation accreditation programmes are designed to support Candidates to develop the appropriate professional competence by the end of IPD. Such programmes may include formal education delivered through qualifications and courses offered by educational institutions, VPOs that are members of the IVSC and employers, as well as workplace training.

A15. The requirement to review and update professional valuation accreditation programmes reflects the rapidly-changing and complex environment within which professional valuers operate. The review cycle will depend upon the frequency of changes in legislation, regulations and established requirements relevant to professional valuers.

Assessment of Technical Knowledge (para 13)

A16. IPS 105: Initial Professional Development – Assessment of Professional Competence provides the principles that apply to the design of activities used to assess the achievement of technical knowledge and other elements of professional competence.

A17. Various activities can be used to assess the technical knowledge of Candidates. Appropriate assessment activities may include written examinations, case studies, written essays, objective testing, workplace assessments and the evaluation of prior learning, leading to the award of exemptions from aspects of IPD.

Appendix 1

Descriptions of Levels of Proficiency

This IPS provides descriptions of three levels of proficiency. These descriptions, together with the learning outcomes, provide information to help VPOs that are members of the IVSC design their professional valuation accreditation programmes for a variety of professional valuation roles and specialisations. Typically, learning outcomes in a competence area focus on the description indicated in the chart that follows.

Level of Proficiency	**Description**
Basic	Learning outcomes at the basic level relate to work situations that are characterised by low levels of ambiguity, complexity and uncertainty. • Defining, explaining, summarising and interpreting the underlying principles and theories of relevant areas of technical knowledge to complete tasks while working under appropriate supervision, • Performing assigned tasks by using the appropriate professional skills, • Recognising the importance of professional skills and ethics in performing assigned tasks, • Solving simple problems and referring complex tasks or problems to supervisors or those with specialised expertise, and • Providing information and explaining ideas in a clear manner, using oral and written communication skills.
Intermediate	Learning outcomes at the intermediate level relate to work situations that are characterised by moderate levels of ambiguity, complexity and uncertainty. • Independently applying, comparing and analysing underlying principles and theories from relevant areas of technical knowledge to complete work assignments and make decisions, • Combining technical knowledge and professional skills and ethics to complete work assignments, • Applying professional skills and ethics to work assignments, and • Presenting information and explaining ideas in a clear manner, using oral and written communications to valuation and non-valuation stakeholders.
Advanced	Learning outcomes at the advanced level relate to work situations that are characterised by high levels of ambiguity, complexity and uncertainty. • Selecting and integrating principles and theories from different areas of technical knowledge to manage and lead projects and work assignments and to make recommendations to appropriate stakeholder needs, • Integrating technical knowledge and professional skills to manage and lead work projects, • Making judgements on appropriate courses of action drawing on professional skills and ethics,

Level of Proficiency	Description
	• Assessing, researching and resolving complex problems with limited supervision, • Anticipating and consulting appropriately and developing solutions to complex problems and issues, and • Consistently presenting and explaining relevant information in a persuasive manner to a wide range of stakeholders.