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Valuation Performance Framework (VPF)

Documentation Guidance to Support Fair Value Measurements for Financial Reporting

Public Exposure Draft

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INTRODUCTION

As fair value continues to be a key measurement basis in **financial reporting**¹, its application remains under intense scrutiny. **Valuation professionals** are expected to deliver valuations that are supportable and auditable. The **Valuation Performance Framework** (Framework) helps meet this challenge by establishing performance guidance thresholds and **best practices** for the extent of work and documentation that are responsive to stakeholder expectations for robust and well-substantiated fair value analyses.

The Framework promotes a thorough and rigorous approach to valuation work and documentation to ensure that **professional judgment** is exercised with appropriate evidentiary support; foster transparency in both **client deliverables** and supporting **working papers**; and enhance credibility and confidence in valuations for financial reporting purposes.

Fair value for financial reporting purposes is defined by **FASB Accounting Standards Codification (ASC) 820**, *Fair Value Measurement* under U.S. Generally Accepted Accounting Principles (US GAAP), and by **IFRS 13**, *Fair Value Measurement* under International Financial Reporting Standards (IFRS). The two standards are substantially converged. In addition to establishing a single fair value definition, ASC 820 and IFRS 13 both provide guidance for measuring fair value, require disclosures about fair value measurements, and apply when other US GAAP or IFRS standards, respectively, require or permit fair value measurements.

Fair value measurement involves the application of various valuation approaches and methods in conjunction with well-reasoned assumptions; may call for the use of complex valuation models; and requires professional judgment. As the use of the fair value measurement attribute has expanded in financial reporting standards, the expectations of valuation professionals to provide supportable and auditable fair value measurements have likewise increased.

Valuations for financial reporting purposes, when completed in a professional manner, require adherence to a relevant set of professional and technical, as well as ethical standards. Valuations can further benefit from a set of guiding principles for the extent of work and documentation necessary to provide supportable and auditable fair value measurements that serve as the basis for management's assertions in the financial statements.

The valuation profession has been continuously developing **technical standards** and guidance on fair value measurements, essentially addressing the "how-to" aspect in various nuanced areas. Further, **Valuation Professional Organizations (VPOs)** have maintained an increased focus on providing training, accreditation, technical guidance, frameworks for ethical conduct, and developing **professional standards**, essentially addressing the "who is to perform," along with corresponding ethical requirements. This document speaks to another dimension of the valuation process by laying out a **performance framework** that addresses the "how much work to perform" and "extent of documentation" aspect, complementing the above standards.

The predecessor of this performance framework was originally issued in 2017 under the title *Mandatory Performance Framework for the Certified in Entity and Intangible Valuations Credential* and was accompanied by the *Application of the Mandatory Performance Framework for the Certified in Entity and Intangible Valuations* (henceforth collectively referred to as "MPF 2017"). Additional clarifications to MPF 2017 were issued via a Frequently Asked Questions (FAQ) document in 2019. Following an update by a Task Force comprising VPO and

¹ Terms or words defined in the glossary are set in **bold** the first time they are applied in context in this document.

valuation industry professionals (the Task Force), the revised MPF 2017 is being re-issued as the Valuation Performance Framework (VPF or Framework).

The Task Force believes that the VPF **should** be considered best practice for both engaged (contracted/external/third-party) and employed (internal; i.e., internal to the entity) valuation professionals when measuring the fair value of businesses, business interests, and the assets and liabilities within the scope of the Framework for financial reporting purposes, with a few potential differences for internal valuation professionals highlighted in Appendix E.

Valuation Engagements Addressed by the VPF

The VPF applies to engagements to estimate fair value for financial reporting purposes that result in a conclusion of value.

Asset and Liability Classes Addressed by the VPF

The Task Force believes that the core principles laid out in this document can be applied to engagements to estimate fair value for financial reporting purposes across asset and liability classes. However, specific application (documentation) guidance may vary by class:

- In connection with the update of MPF 2017, the Task Force has provided updated application guidance for minimum scope of work and documentation guidance for the valuation of *businesses, business interests, intangible assets, inventory, and contract liabilities* for financial reporting purposes.
- The *Financial Instruments Performance Framework for the Certified in the Valuation of Financial Instruments™ Credential* (“FIPF”) issued in 2019 by the AICPA, embodies identical general principles to those in MPF 2017, and provides application (documentation) guidance related to financial instruments. Since the VPF’s general principles continue to be largely aligned with the guidance in the FIPF, the Task Force believes that the FIPF’s application (documentation) guidance for *financial instruments* may be used in conjunction with the VPF when it is appropriate to do so.

Other Measurements and Valuation Circumstances in Financial Reporting Not Addressed in the VPF

The Task Force believes that the principles and application guidance in the VPF can be leveraged and applied as appropriate to other measurements and valuation circumstances in the context of financial reporting that are not specifically addressed in the VPF, for instance:

- In engagements with a narrower scope of work or entailing limited procedures that do not result in a conclusion of value (e.g., a **calculation**).
- In engagements calling for the estimation of measurement bases for financial reporting other than fair value, including:
 - Fair-value-based measurements under ASC 718, *Compensation—Stock Compensation* and ASC 505, *Equity*;
 - IFRS 2, *Share-based Payment*;
 - Value in Use (VIU) and Fair Value less Costs of Disposal (FVLCD) under IAS 36, *Impairment of Assets*; and so forth.

In situations where the guidance in this VPF is applied to such other measurements and valuation circumstances, the valuation professional should apply professional judgment to assess the extent to which the implementation of the guidance is appropriate. Such considerations may include, but are not limited to, the national, regional, and local regulatory environment; engagement or project attributes; and firm policies.

Benefits of Using the Framework

For the valuation professional, this Framework provides:

- A method to better align an **engagement to estimate fair value** with procedures and documentation that help meet the needs of the client and other potential stakeholders.
- A means to help identify and mitigate ineffective, inefficient, or incomplete valuation procedures that result in insufficient support for, and auditability of, the conclusion of value.
- A guide to improve the quality of the valuation documentation.
- A helpful resource for the valuation review process.

For the reporting entity's management, auditors, and other stakeholders, the use of the Framework promotes:

- Greater confidence in the valuation professional's ability to assist management in meeting the entity's (i.e., company's – used interchangeably) financial reporting requirements.
- Assisting management in performing their internal controls over the valuation.
- Clearer expectations around the threshold amount of procedures and documentation to support a fair value estimate.
- Enhanced understanding and transparency of the valuation professional's application of a process for evaluating, analyzing, and documenting fair value measurements that may serve as a basis for management's financial statement assertions.
- Improved clarity in documenting the rationale for using **key assumptions**, applying valuation methods and relevant industry knowledge, and identifying areas where professional judgment was applied.
- Increased consistency among valuation professionals in the extent and nature of documentation prepared in engagements to estimate fair value.

VALUATION PERFORMANCE FRAMEWORK

1. PURPOSE, SCOPE, AND RELEVANT STANDARDS

Purpose

1.1 The Valuation Performance Framework (VPF or Framework) provides guidance for valuation professionals on the level of support, in terms of scope of work and documentation, that should be prepared or obtained when estimating fair value used for management's assertions made in financial statements issued for financial reporting purposes.

1.2 The Framework sets forth minimum scope of work and documentation best practices and instructs the valuation professional to provide within the **work file** sufficient documentation to support a conclusion of value such that an **experienced professional** not involved in the valuation engagement could review and understand the approaches and methods applied; the key inputs, assumptions, analyses, and outputs; and how they support the conclusion of value.

1.3 Valuation professionals should use the Framework in conjunction with relevant valuation standards and technical guidance to promote quality, consistency, and auditability. Relevant resources are identified in Appendix F – Valuation Standards and Appendix G – Valuation Technical Guidance and Other Resources. The Framework is not intended to address valuation theory or to be a how-to guide regarding valuation methods.

Scope

1.4 This Framework applies to the following:

1.4.1 Engagement types: **Engagements to estimate fair value** for a **subject interest** that culminate in a written conclusion of value determined in accordance with ASC 820 (under US GAAP) and IFRS 13 (under IFRS) and used for management's assertions in public or private company financial statements.

1.4.2 Subject Interests: Fair value measurements of businesses, business interests, intangibles, inventory, and contract liabilities.

Framework Components

1.5 The Framework comprises the following integral components:

1.5.1 General Valuation Performance and Documentation Guidance – lays out engagement processes, considerations, and documentation principles for engagements to estimate fair value across asset and liability classes within the scope of the Framework. [VPF sections 2-5, and Appendices A, B, C, D, E.]

1.5.2 Application Guidance – applies the Framework documentation principles to select areas in the field of business and intangible assets valuation. [Section 6]

1.5.3 Glossary – sets forth terms that may be unique to the Framework or are defined with a specific meaning in the context of the Framework. [Appendix J].

Relevant Valuation Standards and Valuation Technical Guidance

1.6 Valuation professionals should adhere to the respective standards of the VPO that they are a member of and any other (e.g., **non-membership valuation professional organization**) relevant standards that are applied.

1.6.1 *Appendix F, Applicable Valuation Standards* – lists valuation standards issued by VPOs including the Association of International Certified Professional Accountants, the ASA (American Society of Appraisers) and the RICS (Royal Institution of Chartered Surveyors), and non-membership valuation professional organizations including TAF (The Appraisal Foundation) and the IVSC (International Valuation Standards Council).

1.7 Valuation professionals should be familiar with the relevant technical guidance published by various organizations that serve as best practices in the valuation profession. Any relevant technical guidance issued after the publication of the VPF should also be considered to ensure valuation professionals remain current with the latest industry standards and best practices, relevant legislation, and regulatory requirements.

1.7.1 *Appendix G, Valuation Technical Guidance* – lists relevant valuation technical literature as of the date of issuance of the Framework.

Relevant Accounting and Audit Standards

1.8 Due to the relationship of engagements to estimate fair value to certain accounting standards, valuation professionals should, as appropriate, understand the relevant US GAAP and IFRS accounting standards that may impact the work to be performed.

1.9 Valuation professionals should be aware of auditing standards used by the audit profession in connection with conducting an audit of financial statements prepared for financial reporting purposes. It is the responsibility of the valuation professional to be aware of applicable auditing standards in the relevant jurisdictions.

Other Standards, Regulations, Guidance, and Conflicts with the Framework

1.10 Valuation professionals using the Framework should be aware of any governmental regulations and other professional standards that apply to engagements to estimate fair value or to valuation professionals when performing such engagements. Compliance is the responsibility of the valuation professional.

1.11 Valuation professionals using the Framework should be aware of tax laws and regulations that may affect fair value measurements.

1.12 If there are professional requirements prescribed by the VPO that the valuation professional is a member of that are not required by the Framework, the valuation professional should also comply with the respective VPO's requirements.

1.13 Circumstances in which a valuation professional has agreed to comply with a more stringent scope of work and documentation requirements are not restricted or negated by this Framework.

1.14 The FIPF sets out scope of work and documentation principles for financial instruments. Valuation professionals performing engagements to estimate the fair value of financial instruments should adhere to the FIPF. In the event a valuation professional is required to value a financial instrument as part of an engagement that falls within the scope of this Framework, the valuation professional should look to the FIPF and apply the appropriate guidance. The principles of this Framework are largely aligned with those of the FIPF; however, where

differences exist between the two frameworks, the valuation professional needs to apply professional judgment to determine which guidance is most appropriate for the particular facts and circumstances.

1.15 If any part of this Framework conflicts with a published governmental, judicial, or accounting authority, then the valuation professional should follow the applicable published authority or stated procedures with respect to the part applicable to the valuation in which the valuation professional is engaged. The other parts of this Framework should still be applied. If a published governmental, judicial, or accounting authority differs in that it simply requires less than this Framework, the guidance in this Framework should still be applied.

GENERAL VALUATION PERFORMANCE AND DOCUMENTATION GUIDANCE

2. PROFESSIONALISM

2.1 A valuation professional, prior to accepting an engagement to estimate fair value, should conclude that he or she can reasonably expect to complete the engagement with professionalism. Professionalism includes having the requisite level of professional competence, applying professional skepticism and acting in an ethical manner when performing an engagement to estimate fair value.

Professional Competence

2.2 A valuation professional should be able to demonstrate the fulfillment of the following criteria:

2.2.1 The appropriate academic and professional qualifications demonstrating technical competence.

2.2.2 The appropriate level of experience, including specific industry and fair value experience, to identify the issue(s) to be addressed.

2.2.3 The appropriate level of experience in valuing the subject interest and in completing engagements for a similar purpose.

2.2.4 Recognition of and compliance with applicable local laws and regulations that apply to the valuation engagement or valuation professional.

2.3 If a valuation professional concludes, either before accepting an engagement or during an engagement, that he or she does not have the required level of subject matter expertise to competently complete the engagement, the following steps should be undertaken:

2.3.1 When possible, assemble and use appropriately competent and qualified subject matter **specialists** within the valuation professional's firm (internal specialists).

2.3.2 Retain appropriately competent and qualified specialists external to the professional's firm (external specialists).

2.3.3 Decline the engagement or withdraw from the engagement if already accepted.

Professional Skepticism

2.4 Professional skepticism is an attitude that includes a questioning mind and critical assessment of valuation evidence. The valuation professional uses the knowledge, skill, and ability called for by the valuation profession to diligently perform, in good faith and with integrity, the gathering and objective evaluation of evidence.

2.5 A valuation professional should apply professional skepticism throughout the engagement where the valuation professional provides a conclusion of value that will be used to support management's assertions in financial statements issued for financial reporting purposes.

2.6 Professional skepticism requires that the valuation professional has an attitude that emphasizes the following:

2.6.1 Evidential skepticism. Valuation professionals should exercise due professional care by continuously questioning and assessing critically all information and data with the appropriate level of skepticism. The level of skepticism should be based on the potential for bias within the information and data.

 *For example, the level of professional skepticism would differ when evaluating multiple sources of external corroboration versus a management-generated estimate with no external corroborating support.*

2.6.2 Self-skepticism. The valuation professional should regularly monitor his or her own client-based presuppositions that could detract from applying skepticism because of comfort level or familiarity with the client, industry, or both.

Ethics

2.7 All valuation professionals who are members of an organization that issues a code of ethics or prepare valuations in a jurisdiction that requires adherence to a professional code of ethics or conduct should observe their respective code of ethics. Valuation professionals who are not required to follow a code of ethics should follow a code of ethics from an appropriate professional or membership organization.

3. SCOPE OF WORK

3.1 The Task Force emphasizes that the scope of work, including the extent of research and analysis, underlying a valuation engagement is a distinct notion from the format, content, or length of the client deliverable (i.e., valuation report type).

Fit for Purpose Principle. A valuation professional should ensure that the scope of work, including the extent of research and analysis, are appropriate for the nature of the engagement, subject interest, and the intended use of the valuation.

3.2 The Task Force believes that in performing an analysis that results in a conclusion of fair value, it is best practice for valuation professionals to consider all relevant factors and information and apply professional judgment in the i) extent of research and analysis performed; ii) selection and application of valuation approaches, methods, and inputs; and iii) development of a conclusion of value.

3.3 In certain circumstances, a more limited scope of work, including extent of research and analysis, may be conducted by a valuation professional if in his or her professional judgment, the analysis is appropriate for the purpose and intended use by management.

3.4 If, at the outset or during the engagement, the valuation professional encounters a reason to believe that either significant limitations on the extent of research and analysis, the selection and application of valuation approaches or inputs, or constraints placed on the application of professional judgment may lead to an analysis that will be inappropriate for management's intended use, the valuation professional should evaluate if it is professionally responsible to decline the engagement or resign from the engagement if already engaged.

3.5 If during the engagement, the valuation professional determines that there is a scope change and believes it is appropriate to proceed, the valuation professional should ensure that any amendments to the scope of work are communicated to and agreed upon in writing with the client before the valuation is completed.

3.6 As a general matter, if the valuation professional identifies any limitations affecting the valuation analysis and the resulting value that he or she believes is professionally responsible to draw attention to, the valuation professional should disclose these limitations in the Engagement Agreement (EA), in the client deliverable, or in both, as appropriate.

3.7 As a matter of principle, clear communication by the valuation professional of the limitations during the valuation engagement is essential for maintaining transparency and managing client expectations. Addressing these limitations upfront to the best extent possible enhances the transparency of the valuation and mitigates the risk of potential misunderstandings.

Materiality

3.8 Considerations involving materiality, an audit concept, can affect the inclusion of assets, liabilities, or entities within the scope of work in a valuation engagement. Determinations about the materiality of an asset or liability are made by auditors and may influence what information management may provide to the valuation professional. Neither management nor the valuation professional can set or adjust the materiality thresholds established by the auditors.

3.9 If management elects *not* to provide information regarding assets and liabilities or limits the scope of the engagement based on materiality considerations, and the valuation professional believes in his/her professional judgment that the information could be significant to the valuation, the valuation professional should:

3.9.1 Communicate to management the potential impact the unavailable information could have on the integrity of the valuation and request management to reconsider providing the requested information.

3.9.2. Evaluate if it is professionally responsible to continue with the engagement if management does not provide the requested information, in accordance with 3.4.

3.9.2.1 A valuation professional should not accept or continue an engagement when scope limitations or information restrictions are so significant that a valuation conclusion that is supportable and appropriate for the intended use cannot be developed. In such circumstances, the valuation professional should decline the engagement or withdraw from the engagement if already engaged.

3.9.2.2 If the valuation professional concludes that the limitations do not preclude the development of a valuation that is appropriate for the intended use and elects to proceed, the valuation professional should disclose these limitations in the Engagement Agreement (EA), in the client deliverable, or in both, as appropriate, consistent with 3.5 and 3.6.

4. USE OF SPECIALISTS

External Specialists Retained by the Valuation Professional

4.1 As part of the engagement to estimate fair value, the valuation professional may seek assistance from an external specialist to assist with outsourced components of their analysis. If an external specialist is engaged to assist the valuation professional due to the lack of expertise within his or her firm (e.g., because the firm does not have professionals who are specialists in a niche field or very technical subject matter), the valuation professional should notify the client in writing and obtain written acknowledgment from the client (e.g., within the EA; in an addendum to the EA if the need for a specialist arises after the initial EA is executed; or by email).

4.2 The valuation professional who uses specialists to assist with **valuation services** outside of his or her area of expertise should establish a reasonable basis for relying on the specialist's work. This includes:

4.2.2. Evaluating the specialist's qualifications and ensuring that they possess the necessary competence to perform the work.

 *For example, the valuation professional may use the criteria in VPF section 2.2 to evaluate the specialist's professionalism and professional competence.*

4.2.3. Obtaining an understanding of the specialist's process and findings from the perspective of an experienced professional.

 *For example, the valuation professional may use the criteria in VPF section 5.7.4 to determine if the specialist's work product is sufficiently documented to support his or her conclusion of value.*

4.3 The valuation professional should assemble and evaluate the relevant information provided by the retained specialist and should document it, along with any interpretations made, in the work file.

4.4 The valuation professional should identify the external specialist's work and conclusions in the client deliverable. Additionally, the client deliverable should indicate the level of responsibility, if any, being assumed by the valuation professional over the external specialist's work and conclusions.

Internal Specialists Used by the Valuation Professional

4.5 A valuation professional may determine, either prior to accepting an engagement or during an engagement, that it is necessary to involve a specialist within his or her firm who possesses the required subject matter expertise. If the contribution of the specialist is expected to be significant to the engagement, the valuation professional should inform the client in writing about the inclusion of a specialist as part of the firm's engagement team, outlining their role and expertise (e.g., real property valuation, financial instruments valuation).

 *For example, this can be addressed within the EA, or in an addendum to the EA if the need for a specialist arises subsequently, or by email.*

4.6 The valuation professional should establish a reasonable basis for relying on the internal specialist's work. Usually, internal firm processes and policies that evaluate and monitor quality, professionalism, and professional competence are sufficient to ensure that the specialist has the appropriate qualifications and competence to perform the work and that the internal specialist's work is appropriately documented.

4.7 The valuation professional should evaluate the relevant information provided by the internal specialist and should document it, along with any interpretations made, in the work file.

4.8 The internal specialist's work and conclusions need not be specifically identified in the client deliverable unless called for by professional or other standards applicable to the specialist, or by firm policies.

External Specialists Retained by Client

4.9 When a client retains an external specialist to separately value certain subject interests (e.g., real property or fine art), the valuation professional may reference the client's external specialist's conclusion in the valuation professional's client deliverable.

4.10 When the valuation professional relies on other client-provided information, including information prepared by specialists retained by the client and does not assess or evaluate it for reasonableness (e.g., does not have the subject matter expertise to evaluate and does not retain a subject matter expert to evaluate), the valuation professional should clearly describe in the valuation work file the information he or she relied on and the rationale for the reliance. In addition, the client deliverable should indicate that the valuation professional has relied on the third-party specialist's work but has not assumed any responsibility for the work.

5. DOCUMENTATION GUIDANCE FOR ENGAGEMENTS TO ESTIMATE FAIR VALUE

5.1 The work file comprises all written documentation that sufficiently supports a conclusion of value in the judgment of the valuation professional. The work file includes the client deliverable (which is typically a valuation report) as well as supporting and other relevant engagement documentation retained by the valuation professional, broadly described as working papers. The work file also includes documents that set forth the fundamental parameters of the valuation engagement, such as the EA, correspondence with clients, and other.

Work File Completeness Principle. Regardless of the format or content of the client deliverable that will be issued, the valuation professional should include the entire analysis and the explanatory notes (or narrative) supporting the analysis, findings, and conclusions within the work file. The client deliverable draws upon information comprising the work file.

5.2 Written documentation included in the valuation work file may encompass paper, electronic files, or other forms of recorded media, and includes engagement agreements, representation letters, and correspondence with clients (such as email, recordings of calls, voice messages).

5.3 Documentation comprises two key components, **source documents** and **analysis documents**:

5.3.1 Source documents generally refer to data and information collected from both company sources and external third-party data sources relevant to the valuation analysis. Source documents should be included in the work file to the extent that they provide evidential support to an input, process, or output required to arrive at a conclusion of value; or to the extent they indicate contrary evidence to the conclusion of value (in which case they should be accompanied by the valuation professional's explanation of how this information was considered).

 *For example, source documents include, but are not limited to, client-provided information and, information collected from external third-party data sources relating to the company, its financial position, its competitors, the industry it competes in, its customers and suppliers, the state of the economy, financial markets, and risk factors.*

5.3.1.1 Source documents, whether they provide evidential support or contrary evidence, may be identified (referenced) instead when their inclusion in the work file is not feasible or practicable.

 *For example, reference could be made to all publicly filed year-end financial statements for a particular period for a group of comparable companies.*

5.3.1.2 Financial information that has been subject to an assurance engagement should be identified as **assured financial information**, including the source of the information and the applicable period covered by the assurance engagement. Unless otherwise identified as assured financial information, financial information used in the valuation engagement should be considered **non-assured financial information**.

 *For example, assured financial information may include audited financial statements and other financial information that has been subject to an assurance engagement. Non-assured financial information may include information from the company's general ledger, reports from ERP systems, tax returns, and other.*

5.3.2 Analysis documents set forth the analysis that was performed by the valuation professional and generally comprise computational analyses and narrative-based documents:

5.3.2.1 *Computational analyses* show “what” the valuation professional performed and “how” it was performed. To the extent that this type of analysis provides evidential support (or contradictory indications) to an input, process, or output, it should be included in the work file.

💡 *For example:*

- *Computational analyses include, but are not limited to, exhibits, schedules, spreadsheets, database use, and working papers that numerically lay out the analysis that was performed.*
- *At times, the valuation professional may need to make certain **valuation adjustments** to the PFI or to other financial information in connection with the application of valuation approaches and methods in fair value measurement. The rationale for the adjustment or change, including the currency amount, proportional percentage, or both, of each adjustment or change should be documented.*

5.3.2.2 *Narrative-based documents* complement the computational analyses by providing commentary on “why” the valuation professional selected certain methods, inputs, and made certain judgments in performing the analysis.

💡 *For example, narrative-based documents include, but are not limited to, footnotes to schedules or narrative fields in the analysis documents; the narrative of the client deliverable; notes from field visits; and memoranda to the work file.*

Valuation Documentation Guidance

Guiding Documentation Principle. The documentation contained in the work file should be clear and comprehensive such that, conceptually, an experienced professional not involved in the valuation engagement can review and understand the key inputs in the analysis, the valuation approaches applied, the resulting outputs, and how they collectively support the conclusion of value.

The extent of documentation should generally increase with the level of subjectivity, complexity, and professional judgment required when addressing value-impacting assumptions and should be commensurate with how significant or uncommon an assertion or assumption appears to be.

5.4 Regardless of the type of subject interest valued and the nature of the valuation engagement, or the type of client deliverable issued, a valuation professional should ensure that the work file contains sufficient documentation to support the conclusion of value.

5.5 When assessing the extent of documentation to support a conclusion of value in the work file, the valuation professional should consider:

5.5.1 The significance the data or information has on the conclusion of value.

5.5.2 The risk of management bias affecting the conclusion of value.

5.5.3 The degree of judgment required by the valuation professional to analyze information and develop assumptions used to estimate the conclusion of value.

5.5.4 The nature of the approaches and methods used to estimate the fair value of the subject interest and whether they are consistent with customary valuation practice in the facts and circumstances.

5.5.5 The presence of contrary evidence.

5.5.6 The risk that insufficient documentation may cause an experienced professional not involved in the valuation engagement to misunderstand the key inputs, analyses, and conclusion of value.

5.6 The valuation professional should ensure that the valuation documentation in the work file identifies (a) each **key assumption** or estimate; (b) the source, person(s) or firm (including management or the valuation professional's engagement team) responsible for developing the assumption; and (c) the rationale for using the assumption.

5.6.1. The identification of key assumptions and estimates is based on professional judgment, communication with management, and where applicable, communication and input from specialists.

Further Implementation Guidance on Work File Documentation

5.7 General Valuation Documentation. Certain types of valuation documentation in the work file are relevant for fair value engagements generally, without regard to the nature of the subject interest valued. This includes:

5.7.1 *Engagement Agreement (EA)* – When a valuation professional is engaged by an entity, firm, or individual, he or she should obtain a signed EA for an engagement that results in the valuation professional providing a conclusion of value. The EA establishes the nature, timing, and scope of the valuation analysis, and the intended user(s) of the client deliverable, which is the client (or clients) of record. In addition to the client, other parties specifically identified as addressees in the EA may also be considered **intended users**. The facts and circumstances of each valuation engagement will determine the content of the EA. Any changes to the scope of work outlined in the EA prior to the completion of the valuation should be communicated and agreed upon in writing. Appendix A describes the components that should be included in the EA, to the extent applicable.

5.7.2 *Documentation of Discussions With Management and Site Visits* — The valuation professional should carry out discussions or interviews with management to gather information relevant to various aspects of the valuation analysis and should conduct site visits whenever necessary and practicable. Professional judgment should be used in making the latter determination (e.g., cost-benefit concerns). Appendix B describes the components that should be included in the documentation of discussions with management and site visits, to the extent applicable.

5.7.3 *Other Relevant Documentation* – this may include documentation related to:

5.7.3.1 Client. Additional correspondence with clients.

5.7.3.2 Internal specialists:

- The internal specialist's client deliverable, unless included in the valuation professional's client deliverable;
- Documentation related to the 1) key assumptions used by the internal specialist; 2) assessment by the valuation professional of the relevant information and conclusions provided by the

internal specialist; and 3) any interpretations made by the valuation specialist based on the foregoing.

5.7.3.3 External specialists:

- The external specialist's client deliverable;
- Documentation of the 1) assessment by the valuation specialist of the work product and conclusions of the external specialist; and 2) any interpretations made by the valuation specialist based on the foregoing;
- Documentation related to the assessment of the external specialist's competence.

5.7.3.4. Other matters: As appropriate.

5.7.4 *Client Deliverable* - The final deliverable, which is usually a valuation report, represents the culmination of the planning and execution of the engagement, documenting and communicating the conclusion reached by the valuation professional to the client. The client deliverable comprises an integral part of the work file maintained by the valuation professional.

5.7.4.1 The substance and format of the deliverable may differ substantially depending on the specific requirements of an engagement as well as the purpose and/or intended use of the valuation (e.g., it may be a narrative report with schedules, a presentation deck, or a digital dashboard). The client deliverable should be organized and written in a way to ensure that the intended users and other **expected recipients** can understand the analyses, narrative, and any exhibits that are included therein.

5.7.4.2 Conceptually, an experienced professional reviewing the client deliverable, who has no prior involvement with the engagement, should be able to:

5.7.4.2.1 Understand the purpose, nature, extent, and results of the valuation procedures performed.

5.7.4.2.2 Identify the measurement date.

5.7.4.2.3 Understand all approaches and methods used in the valuation analysis and, if applicable, understand why commonly used approaches and methods were not applied.

5.7.4.2.4 Understand the key inputs, judgments, and assumptions made and the rationale for their use.

5.7.4.2.5 Identify the sources and supporting data for the inputs, assumptions, and judgments made.

5.7.4.2.6 Determine who performed the work (e.g., valuation professional, specialist, etc.) and their qualifications.

5.7.4.2.7 Identify the intended users of the valuation.

! Take note: The Task Force believes that it is best practice to include footnotes to the valuation schedules that are as robust and as thorough as reasonably possible to enable an experienced professional reviewing the analysis to understand items 5.7.4.2.1 through 5.7.4.2.5 above. Placing the bulk of this information in the footnotes to schedules rather than in any narrative portion of the client deliverable or elsewhere in the work file also has many practical benefits, including facilitating review and communication with intended and expected users of the analysis.

5.7.4.3. In addition to the intended users specified in the EA, the client may share the client deliverable with additional expected recipients including its advisers (e.g., auditors or attorneys) in conjunction with the client's intended use of the valuation as specified within the EA. Additional non-clients may subsequently be added as intended users if mutually agreed upon through a contractual arrangement between the valuation professional and the client.

5.7.4.4 The client deliverable should include the components outlined in Appendix C, to the extent relevant to the valuation engagement. The components of a client deliverable should also meet any requirements set forth in VPO standards that the valuation professional is a member of, and any relevant guidelines from non-membership valuation professional organizations, to the extent applicable. VPO and non-membership valuation professional organizations standards may distinguish between different client deliverables.

5.8 Specific Valuation Documentation – addresses the documentation of the analyses and other support related to the valuation of the subject interest(s) and may differ by asset/liability class. Certain elements of the specific valuation documentation may be incorporated into the client deliverable (e.g., as part of any supporting schedules), in accordance with the guidance set forth in paragraph 5.7.4.2.

5.8.1 Section 6 addresses the minimum documentation guidance related to the fair value measurement of businesses, business interests, intangibles assets, inventory, and contract liabilities.

SPECIFIC DOCUMENTATION GUIDANCE

6. APPLICATION OF VPF PRINCIPLES TO CERTAIN ASSETS AND LIABILITIES

This section addresses minimum scope of work and documentation thresholds related to the *fair value measurement of businesses, business interests, intangibles assets, inventory, and contract liabilities* that the Task Force believes can support a professional work product in engagements to estimate fair value that result in a conclusion of value. While outlining minimum thresholds, the guidance herein does not preclude the valuation professional from undertaking a broader scope of work and/or providing more comprehensive documentation, where deemed appropriate.

! Take note: To the extent various topics, methods, or key inputs used in fair value measurement are not addressed in this section, the valuation professional should apply the core principles outlined in VPF sections 3 and 5 in setting the appropriate scope of work and meeting a minimum documentation threshold for engagements to estimate fair value.

The guidance herein is organized by core topics which are commonly encountered in the fair value measurement of assets and liabilities in the scope of the VPF.

Topic overviews have been included for the sole purpose of providing valuation context for the scope of work and documentation guidance; aid in its application; and serve as an *optional* frame of reference. Neither the topic overviews nor the documentation guidance itself are intended to address valuation theory; be a how-to regarding appropriate valuation procedures; or address the unique circumstances of a specific valuation engagement. Topic overviews are set off from the rest of the text by a grey vertical bar as shown on the left. Topic overviews provided herein are not intended to serve as a replacement for being well acquainted with the relevant technical guidance (see Appendix G).

6.1 GENERAL FAIR VALUE DOCUMENTATION GUIDANCE

This section addresses three core areas in fair value measurement and scope of work encountered when performing fair value engagements that result in a conclusion of fair value:

- Fair Value Measurement – Select Topics (section 6.1.1)
- Valuation Methods and Value Indications – General Considerations (section 6.1.2)
- **Prospective Financial Information** (section 6.1.3)
- Tax Amortization Benefit (TAB) (section 6.1.4).

6.1.1 Fair Value Measurement – Select Topics

TOPIC OVERVIEW

Fair Value at Initial Recognition

6.1.1.1 US GAAP and IFRS require certain assets and liabilities to be measured at fair value when initially recorded in the financial statements in specific circumstances.

 For example, investments (financial instruments) may be required to be recorded at fair value upon purchase. Likewise, acquired tangible and identifiable intangible assets are initially recorded at fair value in a business combination, with limited exceptions.

6.1.1.2 In many situations, the transaction price may equal the fair value of a subject interest. However, the accounting guidance does not make this presumption. Accordingly, the valuation professional should evaluate and document his or her assessment of fair value at the transaction date at initial recognition. ASC 820 and IFRS 3 provide several factors that need to be considered when determining whether the transaction price reflects the fair value of the subject interest on the transaction date.

 For example, the transaction price paid in a business combination does not represent the fair value of a specific acquired tangible or identifiable intangible asset because such asset represents only one element of the acquired business (different units of account). The transaction price may not equal fair value for a financial instrument if it includes a transaction or structuring fee (a separate unit of account from the financial instrument).

Subsequent Measurement – Calibration

6.1.1.3 **Calibration** is required in US GAAP and IFRS when, at initial recognition, the transaction price for a subject interest is deemed to be equivalent to fair value, and the same subject interest (the same unit of account) is required to be measured at fair value at subsequent dates. Calibration ensures that the valuation method(s) employed to value the subject interest at subsequent measurement dates are appropriate and use inputs that have been initially calibrated to the transaction price (which was determined to be fair value) and subsequently updated for changes related to the subject interest and market conditions. (Further guidance is provided in ASC 820 and IFRS 13.)

6.1.1.4 When calibration is required by US GAAP and IFRS, the valuation professional should evaluate and document the rationale for the calibrated inputs at initial recognition, as well as the rationale for the selection of calibrated inputs used to value the subject interest on subsequent measurement dates.

 For example, calibration may often be applied in fair value measurement of portfolio investments, when the requirement is to initially record the investment (the subject interest) at fair value, and to remeasure it at fair value at subsequent reporting dates.

6.1.1.5 The Task Forces observes that the term ‘calibration’ is used more loosely in practice in various circumstances, even if not specifically meeting the requirements of US GAAP or IFRS.

 For example, some might refer to:

- ‘Calibrating’ to the transaction price of an acquired business, if deemed to be fair value, to serve as quantitative support for the company-specific risk premium (CSRP). Another way to describe this process in this situation would be as a ‘back-solve’.

- ‘Calibrating’ to market capitalization when performing a goodwill impairment test for a single- or multiple-RU company to serve as quantitative support for the CSRP. Another way to describe this process in this situation would be as a ‘market capitalization reconciliation’.
- ‘Calibrating’ subsequent valuations of RUs to the fair value measurement of the RUs as part of the initial purchase price allocation, to serve as a baseline for the purpose of future impairment testing or for reference. Another way to describe this process in this situation would be as ‘**benchmarking**’ or ‘trending.’
- When it was determined that the transaction price was not fair value upon initial recognition and a Level 3 fair value measurement for the investment was developed, ‘calibrating’ to the initial Level 3 measurement for future fair value marks.

Documentation Guidance

Initial Recognition

6.1.1.6 For fair value measurement in connection with the initial recognition of the subject interest required by US GAAP or IFRS, the valuation professional should document the following in the work file, if applicable:

- a. Assessment of the fair value of the subject interest at initial recognition (e.g., consideration of factors including unit of account, principal market, and market participants).
- b. If the transaction price is deemed to represent the fair value of the subject interest, evaluation of the appropriateness, rationale, and support for the inputs, assumptions, and methods used to calibrate to the fair value of the subject interest at initial recognition.
- c. If the transaction price is deemed to not represent the fair value of the subject interest, the inputs, assumptions, and methods used to determine fair value.
- d. The reason why the transaction price is not fair value, if applicable.

Subsequent Measurement – Calibration

6.1.1.7 For fair value measurement of the subject interest at subsequent dates required by US GAAP or IFRS, the valuation professional should document the following in the work file, if applicable:

- a. The appropriateness of all initially calibrated inputs used to estimate fair value on each subsequent measurement date.
- b. The evaluation of the key inputs and assumptions used to estimate fair value on each subsequent measurement date.
- c. The rationale for any changes in valuation approaches or methods used for any subsequent measurement dates as compared to the initial transaction (as part of calibration) and/or compared to recent measurement date(s) (if applicable).

6.1.2 Valuation Methods and Value Indications – General Considerations

TOPIC OVERVIEW

6.1.2.1 Consistent with accounting and valuation guidance, the three valuation approaches to estimate the fair value of a subject interest are the income, market, and cost (or asset-based) approaches. There are various valuation methods (a.k.a. techniques) that fall within each of these three approaches. ASC 820 and IFRS 13 refer to valuation approaches and valuation techniques; however, many VPO standards refer to valuation approaches and methods (not techniques). In practice, many valuation techniques are referred to as methods (e.g., discounted cash flow method, multiperiod excess earnings method, relief from royalty method, Greenfield method, etc.). Accordingly, this Framework uses the terms technique and method interchangeably to refer to a specific way of determining value within an approach. This section addresses general considerations in the selection of valuation approaches and methods and related documentation support.

Valuation Methods

6.1.2.2 The following methods are commonly used in fair value measurement. The applicability of these methods would vary primarily based on the nature of the subject interest:

a. Methods under the income approach

- i. Discounted cash flow (DCF) method [§]
- ii. Income capitalization method [§]
- iii. Relief-from-royalty method (RFRM) [†] (also referred to as the royalty savings method)
- iv. Multi-period excess earnings method (MPEEM) [†], including its variations
 - Greenfield method [†]
 - Disaggregated method [†] (a subset of MPEEM, which describes functional or activity-based methods(e.g., the distributor method))More generally, the excess earnings method also includes other additional variations (e.g., the single-period excess earnings method), which are used infrequently in valuing intangible assets.
- v. Cost savings method [†]
- vi. With-and-without method [†](sometimes referred to as the premium profit method)
- vii. Other income approach methods as applicable

b. Methods under the market approach

- i. Guideline transactions method (GTM) [§]
- ii. Guideline public company method (GPCM) [§]
- iii. Prior transaction method ^{§, †}
- iv. Other market approach methods as applicable

c. Methods under the cost approach

- i. Adjusted net asset (balance sheet) method [§]

- ii. Replacement cost method [†]
- iii. Other cost approach methods as applicable

d. Methods combining elements of the market, cost, and income approach

- i. Top-down method ^{Σ,^}
- ii. Bottom-up method ^{Σ,^}

Note: Primarily used in the valuation of businesses [§], identifiable assets [†] (including inventory ^Σ), or contract liabilities [^].

Selection of Approaches and Methods / Assessment and Reconciliation of Value Indications

6.1.2.3 ASC 820 and IFRS 13 require the use of valuation methods that are appropriate in the circumstances and for which sufficient data is available, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs. While all relevant approaches should be considered, ultimately, the approach(es) selected will depend on the facts and circumstances.

6.1.2.4 If multiple valuation methods are used, where relevant, the fair value indications should be assessed in the context of the reasonableness of the range and reconciled, and the conclusion should be the point therein deemed most representative of fair value in the circumstances. If a single method is used (which may be the case for intangible assets), the value indication should be assessed for reasonableness in the context of all relevant information and analyses performed as part of the engagement.

! Take note: The Task Force believes that a process of assessment and reconciliation, and related documentation, is critical in arriving at a supportable conclusion of value. The reconciliation process aims to resolve and explain differences among the value indications. The reconciliation process may inform the professional judgment of the valuation professional as to the need for conducting additional research and analysis; adjusting the inputs and assumptions used; changing the weighting of approaches and methods; or applying different method(s) altogether. Similar considerations apply when assessing a value indication from a single relevant valuation method. The assessment and reconciliation process and rationale for the valuation conclusion should be adequately documented and is an integral step of a supportable valuation analysis.

6.1.2.5 ASC 820 and IFRS 13 also call for consistency in the application of valuation methods in fair value measurements over time, unless a change in the method or its application results in a conclusion that is equally or more representative of fair value in the circumstances at the measurement date. Both standards provide examples of factors that might indicate such circumstances.

6.1.2.6. The Task Force has provided further documentation guidance on method selection and reconciliation for business valuation in section 6.2.7 and intangible assets valuation in section 6.3.7.

6.1.3 Prospective Financial Information (PFI)

TOPIC OVERVIEW

6.1.3.1 Prospective financial information (PFI) is a broad term that encapsulates several types of forward-looking financial information. For purposes of this Framework, the terms "forecasts" and "projections" are used interchangeably. The information may be presented as complete financial statements or limited to one or more elements, items, or accounts. Common categories include, but are not limited to, forecasts, projections, budgets, deal models, break-even analyses, or feasibility studies. This type of information is commonly prepared for external financing, budgetary purposes, or calculating the expected return on investments. The intended use of the PFI will usually dictate the type of PFI that is prepared.

6.1.3.2 PFI is prepared by management. Management is responsible for the PFI and its completeness and accuracy, including its underlying assumptions and any adjustments made thereto, for use in the valuation analysis. The valuation professional is responsible for evaluating whether the PFI provided by management is reasonable for use in the valuation analysis in conjunction with the selected discount rate(s).

! Take note: Although the valuation professional does not take responsibility for management's PFI and is not expected to attest to the PFI's accuracy or achievability, the valuation professional should not simply accept the PFI from management without investigating management's basis for the PFI and its suitability for use in the valuation analysis.

 *For example, for fair value measurement purposes, typical PFI elements that the valuation professional should assess include, but are not limited to, whether the PFI uses market participant versus entity-specific assumptions; whether it is based on expected or conditional cash flows; and if it incorporates management bias (optimistic or conservative).*

6.1.3.3 Fair value measurement is based on the assumptions market participants would make about the subject interest as of the measurement date. Market participants can be strategic or financial buyers and are presumed to be rational and acting in their best economic interest. Given this perspective used in fair value measurement, PFI should reflect the assumptions of market participants about the subject company (or the subject asset or liability) and should be adjusted if necessary (e.g., by removing any entity-specific cash flows synergies).

! Take note: This is not intended to imply that the subject company should be valued based on assumptions that would be utilized in valuing the market participants; rather, the subject company or asset would be valued through the lens of market participants.

6.1.3.4 Market participants may use either expected cash flows with an expected rate of return or conditional cash flows in conjunction with a commensurate risk-adjusted rate of return (e.g., in venture capital) to measure fair value.

6.1.3.5 In some circumstances, PFI provided by management is deemed representative of expected cash flows. When using an income approach with PFI that is deemed representative of expected cash flows, the valuation professional should employ an expected present value technique (EPVT).

! Take note: Conceptually, the EPVT uses as a starting point a set of cash flows that represents the probability-weighted average of all possible future cash flows (that is, the expected cash flows). Practically, the term ‘expected cash flows’ is intended to be interpreted as PFI that represents neutral and unbiased projections (not conservative or aggressive /optimistic case estimates) of the subject company’s (or intangible asset’s) future cash flows. While an unbiased and neutral set of PFI may be based on a probability-weighted approach or a scenario analysis, it could also be represented by a single scenario, or can be derived based on discrete and well-documented adjustments starting from a single scenario (e.g., by management when preparing PFI for the valuation analysis, or when the valuation professional performs analysis to support a CSRP). Regardless of the approach chosen to develop expected cash flows, further analysis of such PFI should be performed by the valuation professional by applying the guidance in 6.1.3.18 and 6.1.3.20 to be able to conclude that the PFI is representative of expected cash flows.

Paragraph 6.1.3.18 addresses common factors to consider in assessing PFI; additional considerations in a business combination context are outlined in paragraph 6.1.3.20.

6.1.3.6 In circumstances in which the PFI is not representative of expected cash flows (e.g., PFI may be based on conditional cash flows or reflect an optimistic case), the valuation professional should determine the most appropriate way to align the PFI and the discount rate(s) applied to those cash flows. The valuation professional may elect to do the following, among other courses of action:

- a. Request management to revise its PFI;
- b. Use a discount rate adjustment technique (DRAT); or
- c. Use an entirely different approach from the income approach.

! Take note: The Task Force believes that it is best practice for the valuation professional to make a stronger effort to obtain expected cash flows from management – which, if provided, need to be evaluated by applying the PFI assessment guidance in 6.1.3.18 and 6.1.3.20 to gain comfort in the assertion that the PFI is representative of expected cash flows. If the valuation professional has exhausted all efforts to obtain expected cash flows from management, the PFI provided instead should likewise be evaluated using the guidance in 6.1.3.18 and 6.1.3.20 to understand the nature and risk inherent in the PFI and to develop support for the CSRP (see par. 6.2.1).

6.1.3.7 If, after considering these above-mentioned steps, the valuation professional believes that management’s PFI is ultimately unsuitable for use in the valuation analysis (e.g., because it is substantially inaccurate and incomplete or there is significant inconsistency with other information), and changes to the PFI cannot be made (e.g., management is not willing to make appropriate revisions and/or the use of the DRAT is not considered to be supportable based on the facts and circumstances), he or she should determine whether it is professionally responsible to continue with the engagement. If the valuation professional decides it is appropriate to continue with the engagement, he or she should value the subject

interest or entity using an entirely different approach from the income approach (i.e., a market or cost approach) if there is sufficient information and it is considered technically appropriate, given the facts and circumstances of the subject interest.

 For example, the application of the cost approach alone may significantly understate the intangible value created from a going concern business. Similarly, the use of a cost approach alone will likely significantly understate the value created by a pivotal intangible asset, given that the cost approach cannot adequately capture excess profit – which is a defining characteristic of a pivotal intangible asset.

6.1.3.8 Conceptually, both the DRAT and the EPVTs should produce consistent results, though in practice, the application of the DRAT to a mix of acquired assets may produce more nuanced results. In either case, the concluded value should represent the fair value of the subject interest or subject asset from a market participant perspective.

6.1.3.9 Valuation professionals who obtain management's PFI for use in their valuation procedures should assess the PFI with the appropriate level of professional skepticism (see sections 2.4 to 2.7). The valuation professional should perform analyses to evaluate the PFI, the assumptions underlying the PFI, and their appropriateness for the valuation purpose. Paragraph 6.1.3.18 sets forth examples of factors and common procedures the valuation professional may consider when evaluating the PFI provided by management for suitability for use in the valuation analysis. Additional considerations for evaluating PFI in a business combination context are outlined in paragraph 6.1.3.20.

6.1.3.10 The valuation professional is also responsible for supporting his or her selected discount rate(s) applied to the PFI in the valuation analysis as discussed in section 6.2.1.

Reasonably Objective Basis

6.1.3.11 Since PFI represents future expectations, it is, by its very nature, uncertain and subject to variation from subsequent actual performance. Therefore, the assumptions used in preparation of the PFI should be reasonable and supportable for the valuation purpose and reflect reasonable future expectations. The valuation professional should evaluate the nature and magnitude of **projection risk** in the PFI to determine whether PFI for an underlying asset or the subject entity is reasonable for use in the valuation analysis in conjunction with the selected discount rate(s). This process requires the valuation professional to evaluate management's PFI along various parameters, such as those listed in paragraph 6.1.3.18; additional considerations in a business combination context are provided in paragraph 6.1.3.20.

6.1.3.12 In order to evaluate PFI for reasonableness for use in the valuation analysis in conjunction with the selected discount rate(s), the valuation professional should use professional judgment and maximize the use of relevant observable market information that would be considered by market participants in valuing the subject interest(s).

Understanding Management's Approach to Developing the PFI

6.1.3.13 A company's PFI might be routinely prepared by one or more members of management or, in larger companies, by an internal functional group often called financial planning and analysis (subsequently referenced as 'management'). Valuation professionals should understand and document

how the PFI was developed by management. Management may prepare PFI using a “top-down” method or a “bottom-up” method or some combination of the two:

- A top-down method starts with aggregate assumptions regarding the entity and allocates those assumptions across the elements of the entity (such as functional groups or reporting units).
- A bottom-up method generally begins by collecting data at a lower (or lowest) level of the entity, coalescing the expectations to arrive at a unified plan for PFI.

6.1.3.14 Combining the top-down and bottom-up methods may involve an iterative process. For example, “top-level” management sets certain high-level goals and, as a result, “mid-level” management revises its initial projections to conform to such high-level goals. However, when mid-level management’s revisions do not reflect top-level management’s goals, top-level management may revise its goals to reflect the entity’s collective best estimates. Further, one method may be utilized to corroborate the results of the other method.

 For example, if a bottom-up forecast is prepared, then the resulting revenue growth may be assessed relative to aggregate industry forecasts to calculate and assess whether the resulting implied market share captured over the forecast period appears reasonable. Similarly, if a top-down forecast is prepared, then one may calculate the level of incremental customer capture this would imply and then assess whether this implied assumption is consistent with metrics like historical customer capture, sales and marketing spend, and other headcount changes forecasted.

6.1.3.15 Valuation professionals should be aware of the purpose for which the PFI was prepared. Management might prepare conservative PFI (with a goal of exceeding their plan) or optimistic PFI (as a goal or incentive). In addition, valuation professionals should understand whether the PFI was prepared using market participant assumptions. Valuation professionals should strive for objective, reasonable, and supportable PFI relevant for use in the valuation analysis with the understanding that management bias may exist. If present, management bias or other deviations from the assumptions that would underlie expected cash flows from the perspective of market participants should be addressed through the analysis discussed in paragraph 6.1.3.18. Additional considerations for evaluating in a business combination context are outlined in paragraph 6.1.3.20.

Key Components of PFI

6.1.3.16 As part of the process for the valuation professional to assess the quality and reliability of the PFI, the key components of PFI should be identified. These components commonly include, but are not limited to, the following:

- Base-year metrics
- Revenue forecasts or revenue growth rates
- Gross margins
- EBITDA/EBIT margins
- Depreciation and amortization (book and tax)
- Effective tax rate

- Capital expenditures
- Research & Development (R&D) expenditures
- Debt-free net working capital (DFNWC) requirements
- Currency denomination of the underlying cash flow forecasts; applicable forward exchange rates, spot exchange rates, or both, utilized to convert cash flows from one currency to another
- Other metrics where applicable, including relevant metrics disclosed under applicable financial reporting standards
- Additional considerations may include, for example, duration and impacts of seasonality and cyclicity on PFI components.

6.1.3.17 Written inquiries of management, or management interviews, help to establish the components that are based directly on relevant observable or objective market data and the components that are more subject to judgment.

The Valuation Professional's Assessment of the PFI

6.1.3.18 It is the valuation professional's responsibility to evaluate whether the PFI provided by management is appropriate for the valuation purpose and reasonable for use in the valuation analysis in conjunction with the selected discount rate(s). Factors and common procedures to consider when performing this assessment may include, but are not limited to, these:

- Understanding of the frequency of preparation of PFI.* If a designated and qualified management group regularly prepares forecasts and critically reviews the factors driving deviations in budget-to-actual results, those forecasts are likely to be more consistent and relatively more accurate compared to circumstances when management does not regularly prepare forecasts.
- Comparison of management's prior forecasts with actual results.* The valuation professional should perform a comparison of prior forecasts (if they exist) against actual results. This type of analysis will help assess whether management's forecasts tend to be optimistic, conservative, or just generally inaccurate. Many external influences might make forecasting difficult, and an inaccurate forecast does not necessarily indicate that management's process in preparing forecasts is deficient.
- Comparison of entity PFI to historical trends.* The valuation professional should compare PFI to historical information and trends focusing on items such as revenue growth, decline, or variability; various levels of profitability; and levels of specific items (such as sales and marketing expenses). The valuation professional should also perform other comparisons to internal data or information (e.g., evaluating the impact of the planned departure of a key executive). Valuation professionals should scrutinize PFI trends that are inconsistent with long-term or short-term limitations.

 *For example, if management builds a forecast indicating a trend of continued improvement in operating margin and there are structural or economic limitations that support an upper-bound limit on operating margins, the valuation professional should assess what that reasonable limit is to gauge how long the improvement trend might continue compared to management's assumptions.*

In some instances, PFI for the subject company may not align with the company's historical performance. When this occurs, the valuation professional should understand the reasons for the divergence and assess this information accordingly.

 *For example, this may be the result of a significant change in the company's business focus, geographical location, or other factors; or a transaction may introduce the potential for market participant synergies that were not present historically.*

Key factors for deviation from historical trends should be understood and assessed by the valuation professional with an appropriate level of professional skepticism. The objective is to have a well-supported explanation as to why the differences exist, and the level of documentation should be commensurate with how extraordinary the claim or assertion appears to be.

A comparison of entity PFI to historical trends could also help the valuation professional understand the entity's past versus future strategy, including planned strategy shifts, which could yield insight into the sources of any competitive advantage and future value creation, and may contribute to a better understanding of the relative value of the entity's intangible assets. This could be particularly useful when the valuation professional is also engaged to value the entity's identifiable intangible assets.

- d. *Comparison of entity PFI to industry expectations.* The valuation professional should perform an analysis of the PFI relative to the economy, industry, and other external data, including benchmarking, whenever possible. The PFI analysis might include comparing key components of the entity's PFI to relevant industry data resources (e.g., competitor disclosures, market or industry studies, analyst reports, government reports, or other sources).

The valuation professional should perform qualitative and quantitative comparative analyses to help assess where the entity stands relative to the range of economic and industry data available. Although such comparisons can (and should) be displayed in a quantitative fashion (e.g., PFI revenue growth rates as compared to industry revenue growth rates), they should be supplemented by a qualitative analysis to evaluate the reasons why the entity's PFI may be consistent or may diverge from industry data.

 *For example, this may include, but is not limited to, assessing industry data that produces disparate or conflicting expectations. Under such circumstances, the valuation professional might decide to compare industry benchmark data to the entity's key PFI assumptions rather than comparing single point estimates to means or medians.*

In some instances, PFI for the subject company may not align with relevant industry information. When this occurs, the valuation professional should investigate the reason for the divergence and assess this information accordingly.

 *For example, this could occur if a subject company is in a niche industry with relatively sparse industry information available, or the expectations of the subject company differ from that of its industry in the near-term to mid-term due to a different stage of development versus the guideline public companies or industry.*

Key factors for deviation from industry information should be understood and assessed by the valuation professional with an appropriate level of professional skepticism. The primary goal is to

have a well-supported explanation as to why the differences exist, and the level of documentation should be commensurate with how unusual or infrequent the claim or assertion appears to be.

- e. *Consideration of life-cycle stage of the company.* There may be cases where the valuation professional may prioritize comparability of the subject company's life-cycle stage to be a more relevant or determinative factor in assessing the PFI than the specific industry that the subject company operates in, and thus the industry for benchmarking may be considered relatively more broadly.

💡 *For example, the valuation professional may assess the assumed rate of adoption of a new technology for similar early-stage industry disruptors from companies in industries that may have certain key aspects of comparability to that in which the subject company operates; particularly when there are data limitations related to the subject company's industry.*

- f. *Consideration of non-operating or other items in PFI.* There may be cases in which PFI includes income from non-operating assets (e.g., investments in joint ventures, excess real estate) and any related liabilities (e.g., mortgage interest on excess real estate), which should be excluded from the operating cash flows, as assets with characteristics and risk profiles different from that of the **business unit** are typically valued separately. Care should be taken not to double-count the impact of such valuation adjustments to PFI.

💡 *For example, if the impact of off-market contracts is removed from PFI, such that operating cash flows reflect market rates, the off-market contracts should be valued separately. Or, if working capital was adjusted to normalized levels in the PFI, any excess/deficit working capital as of the measurement date should be captured separately.*

- g. *Check for internal consistency.* The metrics used in the analysis should be reviewed individually as well as concurrently to evaluate if they are collectively consistent with each other.

💡 *For example:*

- *PFI with aggressive growth rates and improving margins generally would not be collectively consistent with forecasts for disinvestment of capital investments or expenditures, or with significant reduction in sales and marketing expenses.*

- h. *Mathematical and logic check of PFI.* It is important that valuation professionals assess management's PFI for accuracy. Common errors include, but are not limited to: (a) use of inaccurate cell references in applying functions (such as growth rates); (b) simple summation errors (including use of inaccurate cell ranges); (c) use of improper functions; (d) use of improperly specified "macros" in the context of the use of spreadsheet analyses.

! **Take note:** The 'mathematical and logic check' would require simply documenting what steps were performed by the valuation professional. This does *not* impose a requirement to validate or provide any form of assurance over management's models.

- i. *Concluding assessment of projection risk embedded in the PFI.* The valuation professional should assess if the assumptions underlying the PFI for the subject entity or interest are deemed to be reasonable and supportable from the perspective of market participants. This assessment should involve benchmarking of PFI assumptions against guideline public companies and other industry metrics and economic data; various diagnostic or other procedures, including those outlined in

paragraph 6.1.3.18 a. through h.; and so forth, as appropriate. If, based on this assessment, in the judgment of the valuation professional:

- PFI is considered neutral and unbiased and appears aligned with assumptions that would underlie expected cash flows from the perspective of market participants, CSRP for projection risk would likely be considered zero. Based on these procedures, the valuation professional may be able to support a discount rate with a CSRP of 0%.
- PFI is not deemed to be aligned with assumptions that would underlie expected cash flows from the perspective of market participants (i.e., the PFI represents conditional cash flows or reflects an optimistic or pessimistic bias), the valuation professional should perform further procedures to evaluate the nature and magnitude of projection risk inherent in the PFI and support a CSRP. (See further discussion of CSRP and support thereof in section 6.2.1.)

! Take note: The objective of the assessment of projection risk embedded in the PFI is to evaluate the reasonableness of the PFI for use in the valuation analysis in conjunction with the selected discount rate(s) and support the selected discount rate(s), inclusive of the estimated CSRP assumption (whether that is 0% or any other number).

Additional Considerations for PFI Assessment in Business Combinations

6.1.3.19 Business combination transactions give rise to additional considerations in a PFI assessment. The valuation professional's analysis of PFI should consider the price paid in the transaction (an observable input) and the remaining elements of the capital structure (e.g., any PHEI, NCI, interest-bearing debt, debt equivalents, hybrid securities) in conjunction with management's PFI. The general rebuttable presumption is that the transaction (purchase) price paid is fair value, absent evidence to the contrary. When evidence exists that the purchase price paid is not fair value (e.g., a bargain purchase is present, or some portion of an entity-specific synergy value was paid for), additional considerations apply.

! Take note: The Task Force recognizes that it is management's responsibility to assess whether a bargain purchase exists. Bargain purchases are considered anomalous transactions.

6.1.3.20 When assessing PFI in connection with business combinations, the valuation professional should perform the relevant procedures discussed throughout section 6.1.3 (e.g., a. and b. below), as well as certain additional procedures (e.g., c. and d. below). These include, but are not limited to:

- a. Remove any entity-specific cash flow synergies from the PFI (consistent with para. 6.1.3.3). Business combination transactions seek to generate synergies, thus in addition to market participant synergies, entity-specific synergies may be present in the PFI.
- b. Remove any income attributable to any non-operating assets from PFI (consistent with par. 6.1.3.18 f.). An analysis undertaken in connection with purchase accounting in a business combination is focused on the **operating value** of the acquired business; typically, non-operating items are considered separately.
- c. Perform an IRR diagnostic analysis to assess the nature of the PFI and the nature and magnitude of projection risk therein. This analysis is performed based on 1) management's PFI used in pricing the acquisition, adjusted per above, to derive market participant operating cash flows, and

2) the transaction operating value (which reflects all funds invested as of the acquisition (measurement) date less the fair value of any non-operating assets and the *portion, if any*, of entity-specific synergy value that is deemed to have been included in the purchase price).

In this process, the valuation professional should ensure that there is consistency between the treatment of certain items in the PFI and the transaction operating value.

 *For example, if lease expense for operating leases is reflected in the PFI under US GAAP, then the operating lease liability should not be included in the transaction operating value.*

- d. Assess the IRR against the WACC or against a reasonable range thereof (excluding a CSRP), and understand the nature and source of projection risk and, when appropriate, the factors to which the differences may be attributable (see further discussion on CSRP in section 6.2.1).

 *For example, a situation in which $IRR > WACC$ may indicate the presence of entity-specific synergy cash flows in the PFI, an optimistic bias, or a purchase price below fair value; conversely, $IRR < WACC$ may indicate PFI that does not reflect the improvements market participants would make, a conservative bias, or a purchase price above fair value.*

6.1.3.21 The valuation professional's assessment of the transaction operating value and related market participant PFI (which may be presented as conditional cash flows or expected cash flows) sets the overall parameters for the valuation of the operating identifiable assets, including intangible assets, acquired in the business combination.

6.1.3.22 In some cases, the valuation professional may be able to apply the above procedures even if the acquired **collection of assets** does not meet the accounting definition of a business.

Documentation Guidance

6.1.3.23 The valuation professional should document the following within the work file, if applicable:

PFI Background & Assumptions

- a. The identification of the party or parties responsible for preparation of the PFI; the process used by management to develop the PFI; and the purpose for which it was prepared.
- b. The explanation of key underlying assumptions used in the PFI such as revenue forecasts, percentage of market share captured by the entity, projected margins, capital expenditure, and working capital needs.
- c. The currency denomination of the underlying cash flow forecasts and, when applicable, forward and / or spot exchange rates utilized to convert cash flows from one currency to another; the source of the exchange rates; and consistency of the currency denomination of the cash flows with discount rate assumptions.

Valuation Adjustments

- d. Identification of entity-specific inputs (e.g., entity-specific synergy cash flows) and/or non-operating income included within the PFI and valuation adjustments applied, if applicable, including discussions with management supporting the adjustments.

- e. Other valuation adjustments to PFI in connection with the application of valuation methods in fair value measurement.

PFI Assessment

- f. The steps used in, and results of, assessing the PFI for reasonableness for use in the valuation analysis in conjunction with the selected discount rate(s) including, but not limited to:
 - i. A comparison of the PFI to historical performance,
 - ii. A comparison and evaluation of prior year's PFI against actual historical results (when prior PFIs are available),
 - iii. An analysis of the PFI assumptions relative to economic and industry expectations,
 - iv. A consideration of internal consistency among PFI assumptions (e.g., projected growth, profitability, and required investment)
 - v. An evaluation of the presence of any potential bias in the PFI and an assessment and benchmarking of the assumptions in the PFI relative to assumptions that would underlie expected cash flows from the perspective of market participants.
 - vi. Where relevant, additional procedures performed to evaluate the nature and magnitude of projection risk in the PFI and support the magnitude of a non-zero CSRP (see additional documentation guidance for CSRP in section 6.2.1).
 - vii. Whether the PFI is representative of expected or conditional cash flows based on procedures performed and the judgment of the valuation professional.
- g. An analysis of any evidence that contradicts management's assumptions or conclusions used in their PFI.

Other Procedures & Information

- h. Evidence that a mathematical and logic check was performed over the aspects of the management's PFI used in the valuation analysis.
- i. The components of the prospective balance sheet and cash flow statements, if available.

Business Combinations

- j. In addition to the relevant foregoing documentation items, in business combinations, and other transactions where applicable:
 - i. Valuation adjustments made to the PFI and/or the purchase price for the purpose of the IRR diagnostic analysis, including discussions with management supporting the adjustments.
 - ii. The build-up of transaction operating value.
 - iii. The nature of the difference between the IRR and WACC (exclusive of a CSRP). (See additional documentation guidance for a non-zero CSRP, where relevant, in paragraph 6.2.1.11 b. (vi.)).
 - iv. Discussions of any apparent underpayments or overpayments for the entity, including discussions with management and/or auditors, if relevant.

6.1.4 Tax Amortization Benefit (TAB)

TOPIC OVERVIEW

6.1.4.1 A tax amortization benefit (TAB), where available and appropriate, reflects the incremental cash flows (or incremental value) resulting from the tax deduction and related tax savings generated by the tax amortization of identifiable intangible assets and goodwill (similar to the tax benefit related to depreciable tangible assets). A TAB may be relevant when estimating the fair value of individual identifiable intangible assets or an entity.

6.1.4.2 A TAB should be included in the fair value measurement of the subject interest only when appropriate in the circumstances, including:

- a. *When available in the relevant tax jurisdiction:* To evaluate if a TAB should be included in the valuation, the valuation professional should first identify the tax jurisdiction in which each asset is domiciled, because that jurisdiction will determine whether a new tax basis would hypothetically be established by market participants upon an acquisition transaction. For each relevant jurisdiction, the valuation professional should discuss and confirm with management (and consult with tax professionals, if appropriate): (1) whether specific identifiable intangible assets or goodwill (or depreciable tangible assets) can be amortized (depreciated) for tax purposes; (2) the applicable tax amortization/depreciation method(s); and (3) the applicable tax amortization/depreciation life for each of these assets. The identified tax jurisdiction(s) therefore impact both the applicability of TAB and the key inputs used in the TAB calculation(s).
- b. *When available to market participants:* Since fair value measurement assumes an exit transaction and market participants are presumed to act in a rational manner, the exit transaction should maximize value.

For example

- *The fair value of an intangible asset should not change based on the form of the exit transaction and should reflect market participants' value-maximizing behavior, subject to the rules of the relevant jurisdiction. This implies that the fair value of an individual intangible asset should include a TAB, where applicable, because market participants would sell the asset in a **taxable transaction**.*
 - *When assuming the form of the exit transaction for the purpose of an ASC 350 impairment test for a reporting unit, a specific requirement imposed by US GAAP is to consider if the transaction structure is feasible and used by market participants, and if both a taxable and **nontaxable transaction** meet these criteria, to further assess which transaction structure is likely to result in higher proceeds, net of taxes, to the seller.*
- c. *When consistent with the valuation approach used to value the subject interest:* In addition to considering the tax jurisdiction and the market participant perspective, whether a TAB would be applied in the valuation of an identifiable intangible asset, goodwill, or an entity as an assumption would depend on the valuation method applied:

- i. *Income Approach.* An income approach would typically include a TAB in the analysis, if applicable.

 *For example,*

- *The fair value of an intangible asset (e.g., a trade name or IP) would consider the tax benefits of amortization if available to market participants in the relevant tax jurisdiction for the respective asset, consistent with paragraph 6.1.4.2 a.*
- *PFI for an entity may consider the amortization/depreciation of the existing tax basis of the assets (including any recognized intangible assets) among other PFI components when the fair value measurement assumes a transaction without a step-up in tax basis, and amortization benefits are available to market participants in the relevant tax jurisdiction for the respective assets.*
- *Similarly, PFI for an entity may consider the amortization/depreciation of the entire stepped-up basis of the assets (including previously unrecognized intangibles) when the fair value measurement assumes a transaction with a step-up in tax basis, and amortization benefits are available to market participants in the relevant tax jurisdiction for the respective assets.*

- ii. *Market Approach.* A market approach would not typically include an incremental TAB as an assumption when applied to a tangible or intangible asset, as it is generally assumed that tax benefits are already factored into observed market prices.

! Take note: Where appropriate, a market approach for an entity may include consideration of an MPAP, which may encompass certain elements related to TABs arising from a hypothetical step-up in basis when not reflected in the guideline public companies' (GPC) and guideline transactions (GT) multiples.

- iii. *Cost Approach.* A cost approach would not typically include an incremental TAB, as this approach uses the concept of replacement or reproduction cost and the valuation reflects the pre-tax cost to recreate the asset without considering any incremental tax advantages to capitalized costs; thus, the conclusion is typically arrived at on a pre-tax basis.

 *For example, the valuation of assembled workforce is typically performed with a cost approach. The cost of reproducing or replacing the asset should reflect pre-tax costs because in economic character these costs are capital investments, which are recorded gross of tax and without any TAB.*

A pre-tax cost perspective correlates the replacement costs with the price that a market participant would receive for the asset (exit price). If a market participant were to acquire the subject asset, the implicit assumption is that the purchase price already contemplates all benefits to be received, inclusive of any tax amortization benefit (i.e., there is no incremental benefit to be realized).

The same commentary applies to the adjusted net assets method applied to an entity valuation.

! Take note: The cost approach should be differentiated from the cost savings method (a form of the income approach), where the inclusion of TAB would be appropriate.

Further Considerations

WARA and TAB Considerations

6.1.4.3 If TABs for acquired assets (including goodwill) are available to market participants in the relevant tax jurisdiction, the application of a TAB as an assumption may be needed when performing a WARA diagnostic analysis, to avoid a disconnect between the purchase price (and PFI) in a nontaxable transaction and the fair value measurement of the acquired assets, which are not impacted by the form of the transaction (also see 6.3.6.8).

CAC and TAB Considerations

6.1.4.4 Charges for contributory assets are generally based on the fair value of intangible assets inclusive of the tax benefits of amortization (where TAB is applicable) because the resulting fair value would be the basis for economic rent if such contributory assets were to be leased.

Documentation Guidance

6.1.4.5 The valuation professional should document the following within the work file, if applicable:

- a. Identification of the tax jurisdiction where the subject intangible asset is domiciled, as this will determine the relevant assumptions in the calculation of the TAB; if the analysis involves multiple jurisdictions, a discussion of where each asset is domiciled and the jurisdiction(s) selected to perform the TAB calculation.
- b. The valuation professional's understanding of the requirements of the applicable tax jurisdiction and market participant perspective to determine:
 - i. The applicability of the TAB to the subject intangible asset,
 - ii. The tax amortization method for the subject intangible asset (e.g., straight-line),
 - iii. The tax amortization life of the subject intangible asset,
 - iv. For an entity, the applicability and assumptions related to a TAB under the assumed transaction structure, including the rationale for the asset base used to calculate the TAB for an entity, where applicable, and,
 - v. The rationale for the market participant tax rate assumptions for (i) the overall business; (ii) the identifiable intangible assets valued under the income approach; and (iii) the TABs associated with these subject intangible asset(s).
- c. The rationale for selecting the discount rate used to estimate the TAB—whether it is the discount rate used to estimate the fair value of the intangible asset, the WACC, or another rate.
- d. If the analysis involves multiple jurisdictions, the weighted average TAB calculation (if used) or the TAB calculation for each jurisdiction with a description of the key assumptions under each jurisdiction.

- e. The consideration of the TAB in either a taxable or nontaxable transaction when performing a DCF or internal rate of return analysis.
- f. The interaction of TAB with the WARA analyses (cross-reference is made to the documentation guidance in paragraph 6.3.6.11 e).

6.2. BUSINESS VALUATION DOCUMENTATION GUIDANCE

Section 6.2 addresses several core topics common in performing engagements that result in a conclusion of fair value for a business or business interest and provides minimum scope of work and documentation thresholds in the application of certain valuation approaches and related key inputs and assumptions, outlined below.

- In connection with the application of the DCF method:
 - Discount rate (section 6.2.1)
 - Growth rates (section 6.2.2)
 - Terminal value methods and models (section 6.2.3)
- In connection with the application of the market approach:
 - Selection of guideline public companies (GPCs) or guideline transactions (GTs) (section 6.2.4)
 - Selection of, and adjustments to, valuation multiples (section 6.2.5)
- In connection with adjustments to arrive at a conclusion of value for a business interest:
 - Discounts and premiums (section 6.2.6)
- In connection with conducting the fair value measurement process and arriving at a conclusion of value:
 - Selection of valuation approaches and reconciliation of value indications (section 6.2.7)

! Take note: Section 6.2 is not intended to provide a comprehensive discussion of all relevant matters a valuation professional might encounter. To the extent various topics, methods, or key inputs used in the fair value measurement of businesses and business interests are not addressed in this section, the valuation professional should apply the core principles outlined in VPF sections 3 and 5 in setting the appropriate scope of work and meeting a minimum documentation threshold for engagements to estimate fair value.

6.2.1 Discount Rate

TOPIC OVERVIEW

6.2.1.1 The application of the income approach requires the selection or estimation of a discount rate to be used with the PFI for the subject interest. The discount rate is a key input in the application of the income approach; since even minor changes in the discount rate can have a significant impact on the value of the subject interest, it is of critical importance for the discount rate to be developed with a supportable basis. Further, given the range of existing discount rate models, the valuation professional should carefully assess which model is most appropriate in the circumstances.

6.2.1.2 The valuation professional is responsible for selecting and supporting the discount rate(s) applied to the PFI in the valuation analysis. Accordingly, the valuation professional should perform sufficient procedures to develop an informed view about the nature and magnitude of projection risk in the PFI and should perform an assessment and benchmarking of the assumptions in the PFI for the subject interest relative to the assumptions that would underlie expected cash flows from the perspective of market participants (see paragraphs 6.1.3.18 and 6.1.3.20). The procedures that the valuation professional performs to understand and assess the PFI are related to the discount rate selection and support.

Company Specific Risk Premium

! Take note: The discussion herein addresses CSRP attributable to projection risk. The Task Force observes that as of the time of issuance of this Framework, industry efforts were underway to develop best practices for supporting assumptions for CSRP, which may be attributable to factors including, but not limited to, projection risk. Valuation professionals should monitor such efforts and implement the recommended and/or incremental considerations in their analyses when such best practices guidance is finalized and issued. Further, the Task Force recognizes that CSRP is typically the most subjective part of the derivation of the cost of equity capital and, therefore, documentation related to this item should be extensive.

6.2.1.3 Quantitative support for the CSRP deemed attributable to projection risk (whether 0%, or any other number) should reflect the valuation professional's consideration of the divergence (if any) between the assumptions in the PFI being discounted and the assumptions underlying expected cash flows from the perspective of market participants, as addressed in paragraph 6.2.1.2.

! Take note: The Task Force believes that the valuation professional's judgment or the level of CSRPs observed in other valuations of the subject company or subject interest does not constitute quantitative support for a CSRP.

6.2.1.4 When the PFI does not represent expected cash flows and a DRAT is used, a common form of quantitative support for the portion of CSRP attributable to projection risk includes the following steps:

Step 1: Calculate a market-based WACC excluding the portion of the CSRP attributable to projection risk.

Step 2: Adjust the assumptions in management's PFI to approximate the assumptions underlying expected cash flows from the perspective of market participants. Expected cash flows can be estimated through various methods, including line-by-line analysis and adjustments, estimating discrete PFI scenarios and probabilities, or advanced statistical modeling methods such as Monte Carlo simulation or binomial models.

! Take note: The valuation professional should be able to demonstrate why the adjusted PFI is representative of expected cash flows, from the perspective of market participants, based on procedures performed over the PFI (see paragraphs 6.1.3.18 and 6.1.3.20). The Task Force believes that without being able to demonstrate the market participant expected cash flow perspective in the adjusted PFI, the adjustments amount to a sensitivity analysis and do not rise

to the level of CSRP support. Further, management should be aware of / should have reviewed the expected cash flows used in supporting a CSRP. **Step 3:** Discount the expected cash flows resulting from Step 2 using the market-based WACC from Step 1.

Step 4: Use the operating value resulting from Step 3 to “back-solve” for the appropriate CSRP using management’s PFI.

! Take note: The Task Force believes that all four steps are necessary to adequately support the selected CSRP assumptions under the DRAT.

6.2.1.5 Calibration can be a useful tool in assessing the CSRP and discount rate, such as when these inputs can be supported by a transaction price for the same unit of account, e.g., an acquired business, and the price is deemed to be fair value (in this context, ‘calibration’ can be described as ‘back-solve’; see paragraph 6.1.1.5).

6.2.1.6 Calibration can also be useful in assessing the CSRP and discount rate when there are other observable indications of fair value (in this context, ‘calibration’ can be described as ‘benchmarking’ or a ‘market capitalization reconciliation’; see paragraph 6.1.1.5); however, this procedure may not always be sufficient on its own to support the CSRP.

 *For example, a market capitalization reconciliation may not be sufficient on its own to support different CSRPs being applied to different RUs of the same company, compared to the same procedure if the company comprises a single RU. However, even in the latter case, there may be reconciling items due to differences in the units of account compared (the entire company vs. an aggregation of minority shares). Thus, the valuation professional should apply professional judgment in assessing the weight of the evidence under the facts and circumstances when supporting CSRP.*

6.2.1.7 Reference to private equity or venture capital required rates of return (which contemplate successful scenarios for similar stage companies as the subject company) may also be helpful in supporting the reasonableness of the valuation professional’s assumptions regarding CSRP, though they may not be sufficient on their own to support the CSRP.

! Take note: The Task Force believes that when using calibration (including ‘back-solve,’ a ‘market capitalization reconciliation,’ or ‘benchmarking’), the valuation professional should still understand the basis for and sources of the level of risk implied by the calibrated CSRP. This insight can be useful in the valuation of the various intangible assets acquired as part of a business combination, as well as in the valuations of such intangible assets or the valuation of the entire business at subsequent dates.

6.2.1.8 When calibration (including ‘back-solve,’ a ‘market capitalization reconciliation,’ or ‘benchmarking’) is not deemed sufficient to support the CSRP, the valuation professional may consider supplementing the analysis with the approach outlined in paragraph 6.2.1.4.

6.2.1.9 In certain cases, the valuation professional may conclude that CSRP is likely 0%. This may be the case when, based on the entirety of procedures performed on management’s PFI, the valuation

professional concludes that the PFI is considered neutral and unbiased and appears aligned with assumptions that would underlie expected cash flows from the perspective of market participants. See paragraph 6.1.3.18 i.

Asset Specific Risk Premium

6.2.1.10 Similar to the challenges associated with the estimation of a CSRP for a business valuation, valuations of certain intangible assets such as in-process research and development (“IPR&D”) may require application of a risk premium for projection risk.. Furthermore, when a portion of an entity’s PFI is being isolated and assigned to the intangible asset (e.g., PFI is isolated for IPR&D valuation), the ASRP used in the intangible asset valuation should be reasonable in the context of the business unit PFI and CSRP, as effectively some of the overall projection risk in the entity’s PFI is being isolated and assigned to the intangible asset.

Documentation Guidance

6.2.1.11 The valuation professional should document the following within the work file, if applicable:

- a. The rationale for selecting the discount rate model(s) applied under the facts and circumstances.
- b. Cost of equity
 - i. The rationale for the selection of the cost of equity model or models (e.g., CAPM or build-up).
 - ii. The source of the risk-free rate used in the calculation and the rationale for its selection.
 - iii. The source or calculation of the equity risk premium and rationale for its use.
 - iv. An explanation of the calculation of beta of the guideline public companies (or other industry risk adjustments) and the rationale for the method used (or the basis for using another source of beta) when applying CAPM. The rationale for the selected beta should also be documented.
 - v. The amount of size premium, the source of the premium data, and the rationale for selecting the concluded premium (even if that premium is zero), when applicable.
 - vi. The amount of CSRP (including 0%), the rationale for application of the adjustment, and the objective and quantitative support used to develop the specific concluded adjustment.
 - (1) Qualitative factors may be considered in determining whether a CSRP adjustment should be applied; however, quantitative support should also be provided to support the amount of the adjustment.
 - (2) When the DRAT is used to support the CSRP, the documentation should address the components outlined in paragraph 6.2.1.5.
 - (3) When calibration (including ‘back-solve,’ a ‘market capitalization reconciliation,’ or ‘benchmarking’) is based on a fair value transaction price for the same unit of account or other observable indications of fair value are used to support the CSRP, whether alone or in conjunction with other procedures, the documentation should address the rationale for arriving at the concluded CSRP.
 - (4) When CSRP is concluded to be 0%, a cross-reference is made to the relevant items in the documentation guidance in paragraph 6.1.3.23 f.

- vii. The amount of country-specific risk adjustment, the source of the adjustment data (if applicable), and the rationale for selecting the concluded adjustment (even if that adjustment is zero).
 - viii. Other key assumptions should be clearly explained and documented as well as other inputs that may apply depending on the model(s) chosen by the valuation professional.
- c. Cost of debt
- i. The source(s) of data used and the rationale for use of the source(s) (e.g., spot market YTM on bonds with a debt rating commensurate with the creditworthiness of the subject entity or debt rating consistent with the market participant assumed capital structure).
 - ii. The rationale for the selection of the pre-tax cost of debt and related sources, given the legal form of the subject entity as well as market participant expectations.
 - iii. The rationale for the statutory tax rate used to adjust the pre-tax rate to an after-tax rate.
 - iv. The amount of country-specific risk adjustment, the source of the adjustment data (if applicable), and the rationale for selecting the concluded adjustment (even if that adjustment is zero).
- d. Capital Structure
- i. The capital structures of the guideline public companies, industry sector, or subject company and rationale for selection of the time frame over which they are measured, as applicable.
 - ii. The capital structure selected in the calculation of the WACC and rationale for its selection.
 - iii. If the assumed capital structure includes other forms of invested capital that have claims on a company's operating cash flow (e.g., finance lease obligations (as appropriate); non-equity claims; and/or hybrid securities), the valuation professional should explain and document the source, calculation, and rationale for such items in the discount rate derivation.
- e. Other considerations
- i. When other discount rate models are used instead of CAPM or WACC, the valuation professional should provide within the work file details on
 - (1) the model specification,
 - (2) inputs chosen and the sources of those inputs,
 - (3) sub-methodological selections made, and
 - (4) support for any adjustments made to the model results (if applicable).
 - ii. When applicable, forward and/or spot exchange rates utilized to convert one currency to another, including sources, should be explained and documented, as the currency denomination of the underlying cash flow forecasts should be internally consistent with the discount rate assumptions.
 - iii. If multiple discount rates are developed and used in a valuation engagement, the valuation professional should explain and document a reconciliation of such inputs to ensure internal consistency.

6.2.2 Growth Rate

TOPIC OVERVIEW

6.2.2.1 The growth rate (GR) is a key input in the application of the income approach. Since even minor changes in the GR can have a significant impact on the total value of the subject interest, it is of critical importance for the GR to be developed with a supportable basis.

6.2.2.2 Nominal growth has both a real and inflationary component. In theory, a valuation can be performed based on either nominal or real PFI. However, in practice, the Task Force observes that most valuations are performed based on nominal PFI, given that the challenges associated with accurately modeling real projected cash flows (e.g., taxes are calculated based on nominal profits; historical results typically considered in benchmarking reflect nominal cash flows) often outweigh the potential benefits unless the subject company operates in highly inflationary environment(s).

6.2.2.3 Generally, if applied properly, both valuations performed based on real or nominal PFI should produce consistent results. In limited cases, valuations may be performed on both a nominal and real basis to corroborate one another. In either case, the terminal GR (and discount rate) assumption should reflect inflation that is internally consistent with that which is reflected in the PFI over the discrete projection period (and associated discount rate).

 *For example, if the PFI reflects real growth then the terminal GR should also reflect market participant real terminal growth expectations; and if the PFI reflects nominal growth then the terminal GR should reflect market participant nominal growth expectations. There should also be consistency with the inflation assumption inherent in the discount rate.*

6.2.2.4 The valuation professional should consider several factors when estimating the terminal GR utilized to determine terminal value including:

- a. *Macroeconomic growth*: There are technical arguments that the terminal GR of a mature industry cannot exceed that of the macroeconomy (composed of the weighted average of growth, mature, and declining industries) or markets where the products and services are sold in perpetuity but may be lower.
- b. *Industry growth*: Long-term industry forecasts should generally implicitly capture both the pricing and real consumption components of the GR. Alternatively, these two components of growth may be forecasted separately (and then aggregated) based on consideration of inflation, population growth in the addressable markets, and/or other macroeconomic factors. Conceptually, the terminal GR estimated for a subject company cannot significantly exceed that of the industry/sub-industry that the subject company operates in perpetually or else the implicit assumption is that the subject company's revenue would eventually overtake that of the overall industry.
- c. *Real growth of products/services and pricing increases*: Terminal GRs should reflect: (i) expected pricing increases/(decreases) and (ii) expected real consumption increases/(decreases) for the subject company's goods and/or services. It is possible for terminal GRs to be negative for industries that are projected to decline.

- d. *Internal consistency with investment assumptions:* The terminal GR generally is also driven to some extent by the level of investment forecasted for working capital, capital expenditures, R&D, sales and marketing, and/or other applicable growth type expenditures. Accordingly, the valuation professional should assess internal consistency in the terminal GR and investment assumptions.
- e. *Internal consistency with currency of PFI and discount rate:* The terminal GR assumption should be internally consistent with the currency of the discrete forecasts and the currency of the risk-free rate in the discount rate (i.e., internally consistent implied inflation assumptions should be used throughout the analysis).
- f. *Internal consistency or reconciliation of GR assumptions throughout analysis:* There should be internal consistency, or a reasonable reconciliation, among terminal GRs used in the same valuation analysis (e.g., identifiable intangible assets vs. overall business in a purchase price allocation; reporting units vs. overall business in an impairment analysis).
- g. *Discrete projection period and steady state.* The valuation professional should assess if the discrete projection period is adequate for the entity to reach steady state growth.

 *For example, if company management provides a five-year forecast, the valuation professional should not assume the terminal GR is appropriate after the forecasted period for capitalizing cash flow into perpetuity without performing additional analysis.*

6.2.2.5 The terminal GR assumption may also be further corroborated based on consideration of the reasonableness of implied return on invested capital (ROIC) indications, reconciliation with other valuation approaches, and/or reconciliation with other observable value indications, as applicable.

 *For example:*

- *If the implied ROIC resulting from the growth and investment rate assumptions implicit in the terminal value is unreasonably high relative to what the subject company has been able to historically generate and/or industry indications, then this may be an indication that the GR assumption does not contemplate sufficient investment (in net capex and debt-free net working capital) to generate this level of growth or that the projected terminal GR is too high.*
- *If the subject company operates in an industry that is already considered to be in a mature life-cycle stage (i.e., current growth, profitability, and required investment forecasts are reasonably similar to long-term growth forecasts) then comparison of the implied exit multiple of the subject company relative to the current valuation multiples of the guideline public companies may provide some level of corroborative support with respect to the terminal GR assumption.*

6.2.2.6 Certain terminal value models and/or simplifying assumptions subsume later portions of the discrete forecasts (typically reflecting higher growth than the more mature stage terminal GR) into the terminal GR assumption. While such an approach, model, or simplifying assumption may be reasonable under certain facts and circumstances, supporting the combined assumption would generally still require

assessment of the separate (or implied) discrete and terminal GR assumptions individually. Refer to paragraphs 6.2.2.4 and 6.2.2.5 above.

Documentation Guidance

6.2.2.7 The valuation professional should document the following within the work file, if applicable:

- a. The rationale, support, and reasonableness assessment for the selected GRs used in the analysis.
- b. The rationale for all inputs and assumptions utilized to support the terminal or long-term GR assumption.
- c. The rationale for selection of the terminal period when cash flows are capitalized into perpetuity.
- d. Rationale for the use of multi-stage terminal value models (e.g., the H-model) when growth at the end of the projection period is not expected to be sustainable.

6.2.3 Terminal Value

TOPIC OVERVIEW

6.2.3.1 When using the income approach, the valuation professional can select and use several terminal methods or models to estimate terminal value. The following is a non-exhaustive list of methods and models used by valuation professionals:

- a. Gordon growth model (also referred to as the constant growth model or perpetual growth model)
- b. H-model (also referred to as the fading growth model)
- c. Two-stage model
- d. Terminal exit multiples (e.g., revenue, EBITDA, or EBIT multiples)
- e. Key value driver formula (approach to terminal value computation based on cash flow, growth, and ROIC)
- f. Other methods (e.g., salvage value or disposal costs)

6.2.3.2 As the Gordon growth model and key value driver formula rely on terminal GR inputs and assumptions that do not change, the valuation professional should apply these income-based terminal-value formulas only when the subject company is assumed to have reached a steady state, with stable normalized growth and return on invested capital.

6.2.3.3 A potential challenge associated with proper application of the terminal exit multiple method is that this method requires the estimate of the “exit” valuation multiple that the subject company would command based on its projected growth and ROIC as of that future date.

! Take note: Observable guideline transaction multiples and guideline public company multiples generally reflect the expected growth and ROIC applicable to those companies as of the historical transaction dates and dates on which the GPC data is obtained, respectively. Accordingly, when using this terminal value method, the valuation professional should consider and adjust for potential differences in the expected growth and ROIC of (i) the subject company in the future

terminal value stage relative to (ii) the growth and ROIC expectations inherent in the GT and/or GPC multiples considered.

Documentation Guidance

6.2.3.4 The valuation professional should document the following within the work file, if applicable:

- a. The rationale for selecting the appropriate terminal value methods(s) or model(s)
- b. The rationale and support for each key assumption used in the terminal value method or model such as, as applicable
 - i. The discount rate,
 - ii. Terminal or perpetual GR,
 - iii. High-growth or second-stage GR for the H-model and two-stage model,
 - iv. High-growth stage duration or life for the H-model and two-stage model,
 - v. ROIC, or
 - vi. Terminal market multiple (exit multiple) including the factors discussed in paragraph 6.2.3.3.
- c. If more than one terminal value method or model is used, the rationale for the selected weighting assigned to each terminal value method or model and reconciliation of the various indications of terminal values.

6.2.4 Selection of Guideline Public Companies or Guideline Transactions

TOPIC OVERVIEW

6.2.4.1 The selection of GPCs and/or GTs may be necessary to support the selection of several inputs used under the valuation methods and models previously described. For instance, to estimate the discount rate under the income approach, valuation professionals frequently rely on a set of GPCs to select certain inputs such as beta and debt-to-capital ratios. GPCs and/or GTs are also frequently used to support valuation multiples selected under the market approach; exit multiples selected under the income approach; volatility assumptions; and distributor margins under the distributor method; among others.

6.2.4.2 GPCs and/or GTs may also be used for benchmarking purposes. For instance, the valuation professional may compare certain components of management's PFI (e.g., forecasted revenue growth rates and EBITDA margins) to the same metrics of the GPCs to assess management's PFI or benchmark the relative values allocated to certain assets of the selected GTs to the relative values implied from the valuation of the subject assets.

! Take note: Since GPCs and/or GTs can be used for different purposes within a valuation analysis, and the scope of an analysis may include multiple subject entities (e.g., reporting units, legal entities, asset groups), it is possible to have more than one set of GPCs and/or GTs. It is important for the valuation professional to consider how each set will be used

within the valuation analysis to ensure that the selected GPCs and/or GTs are appropriate given their purpose.

Documentation Guidance

6.2.4.3 The valuation professional should document the following within the work file, if applicable:

- a. A description of the subject entity, including identification of those characteristics that are relevant for the selection of GPCs and/or GTs.
- b. Sources used to identify the GPCs and/or GTs and, if applicable, the specific search criteria used in the search.
- c. The potential list of all GPCs or GTs that met the initial screening criteria, and the rationale for the inclusion or exclusion of specific GPCs or GTs, including any relevant information used to select the final set of GPCs and/or GTs (e.g., business description, relevant financial metrics, acquisition details, etc.).
- d. A list of the selected GPCs and/or GTs, indicating if any are particularly comparable to the subject entity.
- e. If several sets of GPCs or GTs were identified within the same valuation analysis, the valuation professional should apply the documentation guidelines in a. through d. as appropriate.
- f. If the set of GPCs has changed since the last measurement date of the subject interest, the reason for the difference.
- g. If the set of GTs has not changed since the last measurement date of the subject interest, whether an updated search was performed for potential new GTs in the interim. If not, the rationale for not performing an updated search.

6.2.5 Selection of, and Adjustments to, Valuation Multiples

TOPIC OVERVIEW

6.2.5.1 Market multiples are typically used to value a subject enterprise or equity under the market approach, including the GPCM and/or the GTM. Market multiples are sometimes also used to estimate the terminal value under the income approach, where the terminal value is based on an exit multiple. While all methods leverage publicly available information, valuation professionals should use professional judgment when assessing the relevance of this information for the development of supportable and reasonable conclusions of value.

6.2.5.2 Valuation professionals should identify and assess the key drivers of multiples observed for the GPCs and GTs (e.g., relative growth, profitability, ROIC, risks, and other quantitative and qualitative factors) and compare these key drivers against those of the subject entity to explain their multiple selections.

6.2.5.3 There are various types of multiples, including invested capital (or **business enterprise value**) multiples, equity multiples, and other. These multiple types may result in different levels of value indications (e.g., enterprise level vs. equity level). Therefore, the valuation professional should ensure that: (i) the adjustments made to derive the indication of value are consistent with the type of multiple

selected and that (ii) each selected multiple is calculated consistently, i.e., the numerator (e.g., invested capital or equity value) is consistent with the selected denominator (financial metric).

💡 *For example:*

- *When obtaining multiples for the GPCs, a best practice is to re-calculate enterprise value-to-EBITDA multiples for each of the GPCs to ensure that: (i) enterprise value consistently captures preferred stock, noncontrolling interest, and the same definition of debt (e.g. includes all finance lease liabilities and excludes operating lease liabilities), and that (b) EBITDA is on a normalized basis, excluding non-recurring and non-operating items, and includes expenses for operating leases.*
- *When calculating the enterprise value for the subject entity, the definition of value and financial metric should be consistent with those used to calculate the multiples of the GPCs. For example, if EBITDA excludes non-operating items, the fair value of non-operating items for the subject entity should be added separately; when estimating the equity value of the subject entity, the calculation of debt should be consistent with the calculation of debt assumed for the GPCs (e.g., includes all finance leases and excludes operating lease liabilities).*
- *For next-fiscal-year multiples, confirming that the reporting period of the GPCs align; in some instances, multiples or financial projections obtained from analyst forecasts might mix periods reporting next fiscal year financials for some GPCs and current fiscal year financials for other GPCs, depending on the reporting period of the GPCs and whether historical financials for the GPCs had already been published.*

6.2.5.4 The valuation professional should also consider any adjustments that are necessary (either in the calculation of the multiples or in the weighting selected for each respective multiple and/or the market approach), including those arising from differences in accounting standards among the selected GPCs, GTs, and the subject entity.

💡 *For example:*

- *When GPCs report under different accounting standards such as US GAAP and IFRS, lease expenses and lease liabilities are recognized differently in the income statement and balance sheet, respectively. As a result, enterprise value-to-EBITDA multiples may not be comparable between GPCs unless adjustments are made to reflect a consistent treatment of lease expenses and lease liabilities.*
- *Historical disclosed performance of the GPCs may include non-cash compensation expense as an operating expense to calculate EBITDA whereas analyst forecasts may not include this as a deduction to forward-looking EBITDA. If this is a key input to the valuation analysis, this discrepancy should be assessed, and historical or forecasted multiples should be adjusted.*
- *If the application of the DCF method includes a non-zero CSRP to account for the risk embedded in the PFI and the valuation professional includes forward-looking multiples in the application of the GPC method, projection risk should be contemplated when selecting the multiple given that forward-looking financials for the subject entity are used in the application of the GPC method.*

Documentation Guidance

6.2.5.5 The valuation professional should document the following within the work file, if applicable:

- a. The rationale for the types of multiples used in the market approach. This should include addressing (1) the rationale for using invested capital (or business enterprise value) or equity multiples; (2) the selection of the metric used to calculate the multiples (e.g., revenue, EBITDA, EBITDAR, EBIT, book value); and (3) the decision regarding the time frame of earnings or other metrics used in the denominator.
- b. The market multiples of the GPCs and/or GTs and the source of the data used. The exhibit should include the numerators and denominators used to calculate each multiple.
- c. The amounts and rationale for any adjustments applied to the numerator and/or denominator, if applicable (e.g., accounting adjustments considering different financial reporting standards), including a discussion of any assumptions necessary for calculating the GPC and/or GT multiples.
- d. The process used to select each multiple based on all the comparative analyses performed. This should include, but not be limited to, addressing: (1) the quantitative analysis of key drivers of GPC and GT multiples, how these drivers compare to those of the subject company or entity, and how this analysis (which includes assessing the risks in the subject entity's PFI) affected the selection of the multiples applied to the subject entity; (2) any qualitative analysis that affected the selection of the multiples applied to the subject entity; (3) the selection of the multiples based on the range observed; and, if applicable, (4) the rationale for any further adjustments.
- e. A reconciliation of the selected multiples, including, for example, the following: (1) For recurring valuation analyses, analyze market and multiple trends over time and assess their impact on the selected multiples and concluded fair value; (2) for analyses that also rely on the DCF method, a discussion of how projection risk was contemplated when selecting the corresponding multiples or weightings and how this reconciles to the analysis performed to support the selected CSRP to estimate the discount rate used in the application of the income approach; (3) if multiple entities or reporting units are being analyzed, include (3a) the rationale for differences in the multiples selected to value each of the subject entities; and, if the subject entities roll-up to a company that is publicly traded or was recently the subject of a transaction, (3b) a reconciliation to the multiple of the entire company explaining any differences between the multiples selected for each of the subject entities and the overall company's multiple.

6.2.6 Discounts and Premiums

TOPIC OVERVIEW

6.2.6.1 The value of an interest in an entity may be measured on a (1) controlling or noncontrolling basis and on a (2) marketable or nonmarketable (or illiquid basis), reflecting different attributes.

6.2.6.2 The valuation professional should determine if the application of discounts, such as a discount for lack of control (DLOC) or a discount for lack of marketability (DLOM), and premiums, such as a market participant acquisition premium (MPAP) are appropriate considering the purpose of the valuation, unit of account, valuation method applied, facts and circumstances, and other factors.

 *For example:*

- *If ASC 820 or IFRS 13, as applicable, require a subject interest to be measured at P*Q, no discount or premium would be considered.*
- *The application of discounts and premiums may depend on the appropriate level of value being estimated (i.e., controlling marketable, minority marketable, or minority non-marketable) in connection with the valuation of the subject interest.*
- *When using calibration to an initial transaction price that is determined to be fair value, the valuation professional should be careful not to double-count any discount or premium reflected in the transaction price, and to appropriately reflect the impact of any discounts or premiums at each subsequent measurement date.*
- *The application of the GTM may already contemplate the inclusion of a premium in the resulting indicated value, whereas the GPCM may necessitate the application of a premium to reach the same level of value, depending on the facts and circumstances.*

6.2.6.3 Certain types of analyses that conclude on controlling marketable levels of value may include consideration of a MPAP arising from enhancements in cash flows and reduction in risk for the subject entity from a market participant perspective. The valuation professional should be able to support the MPAP.

! Take note: The level of documentation should be commensurate with the magnitude of MPAP and/or whether the MPAP is significant to the valuation conclusion (e.g., pass/fail outcome in an impairment test).

 *For example, in performing goodwill impairment testing of multiple reporting units of a publicly traded company under US GAAP, a market capitalization reconciliation analysis is typically performed to support the concluded values whereby an implied MPAP is calculated comparing the sum of fair values estimated for the reporting units (business enterprise or equity level as appropriate) with the MVIC or market capitalization of the company, respectively. The magnitude of this implied MPAP should be quantitatively and qualitatively supported.*

Documentation Guidance

6.2.6.4 The valuation professional should document the following within the work file, if applicable:

- a. The understanding of the subject company's capital structure and associated rights and obligations of, and restrictions on, each class of capital in the case of complex capital structures.
- b. The rationale for why a premium or discount, if any, is appropriate in the circumstances, including consideration of unit of account, valuation method(s) used, etc., with proper references to supporting documentation (e.g., executed contracts, registration statements, corporate documents, local law, and so forth).
- c. The rationale for the selection of methodology used to determine the appropriate magnitude of premium or discount.
- d. Identification, and description where necessary, of each key input used to arrive at the premium or discount used in the analysis. This should include:
 - i. Sources used to determine the input (e.g., company-specific data, commercial or governmental databases, studies, and so forth).
 - ii. If a model was used, the rationale for using the model and a description of how the inputs into the model were estimated (e.g., inputs used to determine volatility, term to liquidity, adjustments made for survivorship bias, and so forth), and any other quantitative and qualitative considerations.
 - iii. Other estimation approaches and key inputs (e.g., foundation value; total invested capital (TIC); market value of invested capital (MVIC), in the case of MPAP, as appropriate).
- e. The base (e.g., the value indication resulting from employing a valuation method, or the foundation in the case of MPAP) to which the discount or premium is applied; as well as the level of value and/or value component (e.g., equity component of invested capital, or invested capital value indication).
- f. If appropriate in the circumstances, the valuation professional should provide support for the level of observed MPAP (in performing a comparison to market capitalization or to MVIC) or estimated MPAP (in the application of the market approach) by reference to enhanced cash flows, reduction in risk, and qualitative considerations.

6.2.7 Valuation Methods and Value Indications (Business Valuation)

TOPIC OVERVIEW

6.2.7.1 General considerations on valuation approach and method selection and reconciliation of indications of value are provided in section 6.1.2.

6.2.7.2 The valuation professional may apply multiple valuation approaches and methods to estimate the fair value of a business.

 *For example, in a business valuation of a profitable operating company, the valuation professional may apply one form of the income approach (such as the DCF method) and two methods of the market approach (GPCM and GTM).*

6.2.7.3 When the valuation professional uses multiple approaches and methods as part of the analysis, he or she should reconcile the indicated results into a supportable and reasonable conclusion of value. Usually, the results from each approach or method should provide indications of fair value that are reasonably consistent with each other. If the results are not reasonably consistent, further analysis is generally required as part of the reconciliation process to evaluate the factor(s) causing the inconsistencies.

 *For example, inconsistent indications of value may suggest that one method may be more appropriate than another method, given the facts and circumstances, or that certain of the valuation inputs and assumptions should be reassessed (e.g., multiples in the market approach may be revised or eliminated).*

! Take note: The Task Force believes that the rationale for the selected weighting of valuation approaches or methods is particularly important in circumstances with a more significant spread among individual value indications; when a significant weight is placed on the value indication of one approach or method; or when a value indication is eliminated (0% weight). In this process, the valuation professional should also assess if the existence of a significant spread is an indication of contrary evidence with respect to one or more valuation assumptions.

6.2.7.4 Through the reconciliation process, the valuation professional evaluates and resolves differences in value indications and, where applicable, addresses significant disparities to arrive at a valuation conclusion.

 *For example, instances in which significant disparities continue to exist among individual value indications, or when a significant weight (including 100%) is placed on the indication of one approach or method, call for an explanation for the rationale used by the valuation professional.*

6.2.7.5 In certain valuations, significant disparities between value indications may not be unusual. This situation may be encountered in the application of the probability-weighted expected return method (“PWERM”) when valuing an early-stage entity where there is a high degree of valuation uncertainty. Scenarios might include success scenarios such as an initial public offering or sale of the enterprise at a relatively high valuation to failure scenarios such as bankruptcy with little, if any, proceeds available to investors. In contrast, for a stable, mature entity with limited valuation uncertainty, significant valuation disparities would be less likely.

Documentation Guidance

6.2.7.6 The valuation professional should document the following within the work file, if applicable:

- a. The rationale for selecting the valuation method(s) (or excluding potentially relevant valuation methods) to estimate the fair value of the subject interest and an explanation of inputs and assumptions. *(For further documentation guidance on inputs and assumptions, see relevant portions of section 6, as appropriate.)*

- b.* The thought process for reconciling the results from using multiple valuation approaches, methods, or value indications into a conclusion of value – or an assessment of the results of a single approach or method, if applicable – including, among other considerations:
 - i.* An assessment of the reliability of the results obtained and whether any of the results used to reach a conclusion of value are deemed more or less indicative of fair value based on information gathered throughout the engagement
 - ii.* The rationale for the selected weighting (or emphasis) on each approach, method or value indication and the reasoning used in reconciling various indications into a conclusion of value.
- c.* The rationale for any changes in the valuation approaches or methods applied from any prior relevant fair value measurements of the subject interest, and/or any significant changes in their weighting, if applicable.
- d.* An explanation of any contrary evidence (e.g., with respect to issues such as method selection; weighting or reconciliation process; contrary value indications from relevant transactions) and how it was resolved.

6.3 IDENTIFIABLE INTANGIBLE ASSETS, INVENTORY AND CONTRACT LIABILITIES – DOCUMENTATION GUIDANCE

Section 6.3 focuses on certain topics in fair value measurement relevant to estimating the fair value of intangible assets (excluding digital or crypto assets, and environmental credits); inventory; and contract liabilities.

This section outlines documentation guidance related to the identification of the assets and liabilities to be measured at fair value, as follows:

- Identification of Assets and Liabilities Subject to Measurement (section 6.3.1)

The guidance in this section also addresses minimum scope of work and documentation thresholds related to the application of several valuation approaches and related key inputs and assumptions in the fair value measurement of the above subject interests, as follows:

- In connection with the application of various income methods
 - MPEEM and variations thereof (section 6.3.2)
 - Economic life (section 6.3.3)
 - Attrition rates (section 6.3.4)
 - Relief-from-royalty method (section 6.3.5)
- In connection with conducting the fair value measurement process, various reconciliation matters, and arriving at a conclusion of value
 - WARA and asset rates of return/discount rates (section 6.3.6)
 - Valuation methods and value indications (intangible assets) (section 6.3.7)
- In connection with the application of top-down/ bottom-up methods
 - Inventory (section 6.3.8)
 - Contract liabilities (section 6.3.9)

! Take note: Section 6.3 is not intended to provide a comprehensive discussion of all relevant matters a valuation professional might encounter. To the extent various topics, methods, or key inputs used in the fair value measurement of intangible assets, inventory, or contract liabilities are not addressed in this section, the valuation professional should apply the core principles outlined in VPF sections 3 and 5 in setting the appropriate scope of work and meeting a minimum documentation threshold for engagements to estimate fair value.

6.3.1 Identification of Assets and Liabilities Subject to Measurement

TOPIC OVERVIEW

6.3.1.1 A key component of an engagement to estimate fair value – and particularly in the context of transactions accounted for under ASC 805 and IFRS 3 – is management’s identification of the assets and liabilities to be measured at fair value.

6.3.1.2 FASB ASC 805 and IFRS 3 require that, in a business combination, the acquirer separately recognize and measure at the acquisition date (i.e., the measurement date), apart from goodwill, the fair value (with limited exceptions) of identifiable assets acquired and liabilities assumed. Additionally, identifiable assets and liabilities are recognized and measured at fair value, or at an amount that is based on fair value, in acquisitions of asset groups that do not meet the definition of a business.

6.3.1.3 An item must meet the accounting definition of an asset or a liability under the respective financial reporting framework to be recognized for financial reporting purposes. Further, for an intangible asset to be identifiable, it must meet either the contractual/legal or the separability criterion under US GAAP or IFRS.

6.3.1.4 All potential assets and liabilities meeting the recognition criteria for financial reporting purposes should be evaluated, discussed, and agreed upon between the valuation professional and client as to their inclusion in the valuation scope. The valuation professional and client should also agree upon whether a fair value measurement is required.

6.3.1.5 The identification of assets and liabilities and their inclusion in the scope of work is the responsibility of management, even if the valuation analysis is performed, in whole or in part, by external valuation professionals retained by management.

6.3.1.6 The valuation professional may provide input into management’s process of identifying the assets, liabilities, or entities that are appropriate for inclusion in a valuation for financial reporting purposes, but ultimately, this remains management’s responsibility and is based on management’s judgment (which may be arrived at in consultation with their auditors). Factors that can influence the valuation professional’s input on this matter may include, but are not limited to:

- a. Professional judgment based on experience with similar businesses;
- b. Industry conventions;
- c. Discussions with management;
- d. External sources of information (e.g., management’s public comments about factors that contributed to the decision to buy a business or an asset group); and,
- e. Internal sources of information (e.g., board minutes identifying management’s rationale for an acquisition and the purchase price paid, and the assets that were considered significant in determining the purchase price)

Documentation Guidance

6.3.1.7 The valuation professional should document the following in the work file, if applicable:

- a. Discussions with management to identify key value drivers and related assets associated with those value drivers, including the rationale for the transaction (e.g., strategic, financial), and other relevant factors, including whether the acquisition was made in a competitive bid environment.
- b. The description in sufficient detail of the assets and liabilities included in the scope of work, including support from management, as appropriate.
- c. The rationale for the inclusion in the valuation analysis of the subject assets and liabilities (e.g., assets that meet the separability, legal and contractual criteria in FASB ASC 805 and IFRS 3, if applicable), as provided by management.
- d. Where relevant to the engagement, the accounting or other groupings that the assets are associated with should also be indicated (e.g., reporting units, CGUs, segment).
- e. The rationale, as provided by management and/or the company's auditors, for excluding from the scope of the valuation analysis certain assets and liabilities that might otherwise be considered reasonable for inclusion under the circumstances, and/or any discussions held with management or the auditors in this regard.
- f. The valuation professional's assessment of whether the exclusion of certain assets and liabilities from the scope of work (per e. above) is expected to significantly impact the valuation conclusions for other assets and liabilities and the overall integrity of the analysis.
- g. The extent to which the valuation professional used information from valuation reports with prior measurement dates (e.g., for benchmarking; including valuation reports prepared by other external or internal valuation professionals, and/or external or internal subject matter specialists) and related documentation.
- h. The description of the identified principal (or most advantageous) market, valuation premise, market participant assumptions, and highest and best use (for nonfinancial assets).

For further documentation guidance on the valuation of identifiable intangible assets, inventory, or contract liabilities, see sections 6.3.2 – 6.3.9, as appropriate.

6.3.2 Multi-Period Excess Earnings Method and Variations Thereof

TOPIC OVERVIEW

6.3.2.1. On many occasions, the most significant and value-driving acquired assets (a.k.a., pivotal or enabling assets) are measured using one of several variations of the MPEEM. Addressed below are certain common considerations and key assumptions and inputs in connection with the application of such methods, which influence the nature and extent of documentation in the work file.

MPEEM

6.3.2.2 The MPEEM is a valuation method under the income approach that is commonly used to value intangible assets that can generate excess economic returns for the entity using them. The MPEEM is

often (though not exclusively) applied when valuing a pivotal intangible asset. Examples of assets commonly valued using the MPEEM include relationship-based intangibles (such as customer relationships) and owned or licensed IP-based intangible assets, though this could vary with the facts and circumstances. Notably, it is not the form of the valuation method (e.g., MPEEM) but the substance of the inputs used with the selected method that capture the routine or pivotal nature of the asset and impact the fair value measurement.

6.3.2.3 In the MPEEM, the subject asset is part of a collection of assets that generates an identifiable stream of prospective cash flows when operated together. The collection of assets associated with the PFI used in the MPEEM may align with a business unit, which in some cases may coincide with the acquiree, whereas in other cases, an acquiree may comprise multiple business units such as operating segments and reporting units. Depending on the circumstances, to consider the expected term and growth of the projected cash flows for the subject intangible asset, PFI may need to be split by business unit on a geographic, functional or operating unit basis, and may further need to be split into PFI related to a collection of assets (e.g. product line; or, asset class split between technology vs. marketing IP assets), and/or individual assets (e.g. manufacturing technology IP). An additional step would further bifurcate the PFI for an individual asset type between existing vs. future assets (such as through analysis of technology migration curves for technology IP; customer attrition rates for customer relationships; or probability of phase-out for marketing IP). The objective is to allocate the PFI to an appropriate level consistent with the unit of account and asset recognition criteria under the relevant financial reporting framework. Thus, PFI used in the valuation of the subject asset and the length of the projection period are key inputs and assumptions in the MPEEM, among others.

6.3.2.4 In the MPEEM, assets that are used in conjunction with, and contribute to, the generation of prospective cash flows associated with the subject asset are referred to as “contributory assets.” Contributory asset charges (CACs) are subtracted to isolate the “excess earnings” ascribed solely to the subject asset. The contributory assets for which a CAC should be taken need to include all assets, at the appropriate levels, that would be required by market participants to generate the overall cash flows of the collection of assets regardless of whether the entity already owns, or has acquired such assets, or would need to purchase them. A CAC represents the amount, from a market participant perspective, that an entity would pay to “rent” or “lease” the subject contributory asset in a hypothetical transaction (also referred to as “economic rents”). CACs are based on the concept that the owner of a contributory asset reasonably expects to get a return *on* and *of* (if appropriate) the fair value of the asset that is commensurate with the risk of that asset and the returns earned by market participants on similar assets. Another common form of CACs is a profit split applied by deducting royalty charges, which shift value from the assets valued with the MPEEM to the assets valued with the RFRM. CACs are also instrumental in the splitting of excess profit between multiple pivotal intangibles. CACs are key inputs into the MPEEM method.

6.3.2.5 The valuation professional should also consider any adjustments to the PFI for expenses not directly related to the subject intangible asset (e.g., add-backs for expenses unrelated to the subject asset such as sales and marketing, or non-operating expenses) or already captured in the CACs (e.g., research & development expenses removed to avoid double counting the cost of future technology represented in the form of a royalty rate CAC.) Ultimately, the PFI should include revenue and expenses associated with the subject asset over its economic life.

Disaggregated (Distributor) Method

6.3.2.6 A variation of the MPEEM which may be used to value customer relationships is the distributor method (a.k.a. the disaggregated method or a functional split analysis). The premise of this method is that the nature of the relationship between the entity and its customers is similar to that of a distributor and its customers and customers contribute to the value of the business in proportion to the value added by the function of a distributor. While recognizing that distributors may perform varying functions, they typically hold limited or no technology and do not have valuable trade names. Valuation of customer relationships using the distributor method may be generally appropriate when the pivotal (primary) asset of the business is another intangible asset such as technology or a very strong and recognizable trade name. Also, efforts to acquire customers need not be extensive because of the strength of technology and/or trade names and other possible intangibles. In these cases, excess earnings are driven primarily or exclusively by the technology or trade name. This valuation method should only be used when the relationships the subject company has with its customers are reasonably similar to those of a distributor with its respective customers.

6.3.2.7 Therefore, a key assumption in this method, among others, is the selection of a market-based operating margin which is consistent with that of a distributor. Distributor margins can be obtained from companies that are primarily or exclusively engaged in distribution (e.g., physical distributors with trucks, product warehouses, inventory). Value-added services provided to customers beyond pure distribution may warrant selecting reseller margins, if appropriate in the facts and circumstances. In summary, the CACs used in this variation of the MPEEM are based on the types and levels of assets a distributor would typically use rather than the types and levels of assets used by the aggregate business.

Greenfield Method

6.3.2.8 The Greenfield method is a variation of the MPEEM that is most often used to value operating rights (e.g., broadcasting licenses, cable franchises, and certificates of need). However, unlike the MPEEM, which accounts for contributory assets by subtracting CACs from the projected cash flows to isolate only those cash flows attributable to the subject asset, the Greenfield method assumes that the subject asset is the only asset of the operation as of the measurement date and subtracts the investment cash outflows required to build, buy, or lease the contributory assets from the cash inflows that the business generates. The Greenfield method also excludes the value associated with the assemblage of the acquired business (also referred to as going concern value), since the business needs to be assembled around the subject asset. Therefore, in theory, the Greenfield method would produce the same value as the MPEEM if the MPEEM included a CAC for going concern value.

6.3.2.9 The Greenfield method typically considers two general stages in the PFI: (1) the “ramp-up period” – the time required to build the operational infrastructure necessary to begin commercializing the business, as well as the time required to gain customers and reach a stabilized level of market share; and (2) the normalization point – when the start-up business achieves operating results that are consistent with those of the acquired business, corresponding to terminal value. The ramp-up period and normalization point are key assumptions in the Greenfield method, among others.

Documentation Guidance

6.3.2.10 The valuation professional should document the following within the work file, if applicable:

PFI

- a. Documentation items for the PFI used in the MPEEM:
 - i. Explanation and support for the asset-level PFI, including any bifurcation of entity-level cash flows, margins, and growth assumptions.
 - ii. Support for selected attrition rates, technology migration curves, or product life-cycle analysis used to develop the economic life of the subject asset.
 - iii. Support for any adjustments made to (1) remove cash flows unrelated to the subject intangible asset; (2) avoid duplication of expenses assumed in the CACs; and (3) other adjustments, as appropriate.
 - iv. If applicable, the rationale for the point in time where the valuation professional selected to truncate the cash flows. (Also see documentation guidance in paragraphs 6.3.3.9 c. and 6.3.4.17 h., as appropriate).

CACs

- b. Documentation items for the CACs used in the MPEEM
 - i. The identification of all the contributory assets required to support the subject intangible asset valued using the MPEEM.
 - ii. The rationale for not including as a contributory asset any intangible or tangible asset valued in a business combination analysis.
 - iii. Support for the following inputs and assumptions relating to CACs on tangible assets (e.g., working capital, land, and fixed assets)
 - (1) The appropriate market participant level of the subject asset
 - (2) The required rate of return
 - (3) The CAC for the subject asset, the basis used to assign the overall CAC to the subject asset (e.g., revenue, expenses) and an explanation as to how it is calculated for each projected period
 - (4) For fixed assets (not including land),
 - The economic life for each fixed asset category
 - The return *on* fixed asset charge and an explanation as to how it was calculated for each projected period
 - The return *of* fixed asset charge and an explanation as to how it was calculated for each projected period
 - Any other method used (e.g., level payment combining both a return on and a return of the fair value of the asset), or any practical expedient method used (for example, “smoothed” percent of revenues) and rationale for using

- iv. Support for the following inputs and assumptions related to CACs on intangible assets valued using the relief-from-royalty method:
 - (1) The appropriate royalty rate
 - (2) An explanation should be provided for instances such as,
 - when the royalty rate CAC is different from the royalty rate used to estimate the fair value of the intangible asset such as a trademark or trade name (e.g., when market participants would switch to using their own existing trademark after a transitional period of using an acquired trademark, and the market participant buyer's trademark is perceived to be of a different value proposition compared to the acquired one), or
 - when an intangible asset such as a trademark or trade name is not valued but a royalty rate CAC is still applied in the valuation analysis (e.g., when market participants would switch to using their own existing trademark without delay rather than using the trademark acquired in a business combination)
- v. Support for the following inputs and assumptions related to CACs on assembled workforce and other intangible assets:
 - (1) The assumptions used to estimate the fair value of the assembled workforce and other intangible assets
 - (2) An exhibit showing the calculation of the value of the assembled workforce or other intangible assets
 - (3) The required rate of return
 - (4) The CAC and an explanation as to how it was calculated
- vi. An explanation addressing the internal consistency between the CAC applied and any expense adjustments in the PFI (e.g., a royalty rate CAC for technology should have an accompanying add back of developmental R&D expense for future technology to avoid double-counting of the expense).

Disaggregated (Distributor) Method

- c. *In addition to the relevant items from a. and b. above, incremental documentation items applicable to the distributor method variation of the MPEEM include:*
 - i. The rationale as to why the relationship the subject company has with its customers is similar to that of a distributor
 - ii. Support for the assumed distributor margin and identification of any companies or business units of companies (public or private) used to benchmark the selected margin
 - iii. If performed, support for the functional split of PFI into the portion deemed to be associated with the distribution function of the business.
 - iv. Support for the CACs applicable to a distributor business model and the types and levels of such assets

Greenfield Method

- d. Documentation items applicable to the Greenfield method variation of the MPEEM:
 - i. Length of the ramp-up period.
 - ii. Normalization point.
 - iii. Operating costs and capital expenditures during the ramp-up period.
 - iv. Assumptions about leased contributory assets, where appropriate.
 - v. Support for any royalty rate assumptions (such as for assumed tradenames used by the business during the ramp-up period and in the steady-state thereafter).
 - vi. Operating tax assumptions, including consideration of net operating losses (NOLs) during the ramp-up period.

Discount Rate

- e. The rationale for the selected discount rate used in the variation of the MPEEM applied, ensuring that the selected discount rate is consistent with the level of risk inherent in the PFI for the subject asset, also considering the results of the WARA diagnostic (section 6.3.6).

6.3.3 Economic Life

TOPIC OVERVIEW

6.3.3.1 The economic life of an asset determines the period over which cash flows are projected and considered in the valuation analysis in applying valuation methods under the income approach.

! Take note: Assumptions about selected attrition rates, technology migration curves, or product life cycles used to develop the economic life of the subject asset can be among the most sensitive in the valuation analysis and are generally not directly observable, thus the level of support for these key inputs should be commensurate with their level of significance to the valuation estimate. In addition to impacting the fair value measurement, these assumptions are also important in developing the pattern of economic benefit of the PFI.

6.3.3.2 In estimating an intangible asset's economic life, valuation professionals should generally consider legal, technological, functional, and economic factors affecting the subject asset; the financial projections of the subject asset and subject entity; the relevant industry; and the economies of the geographic regions in which the subject entity operates. Further, depending on the nature of the subject asset, the valuation professional should consider additional factors, including, but not limited to contractual terms; historical and projected renewal or attrition; technological migration or obsolescence; and other market participant assumptions, as applicable.

 For example, while the remaining legal life of a patent is an important factor in determining its economic life, it is not the sole factor to evaluate, as competing products, usage trends, efficacy or safety concerns, or other specific considerations can drive the economic life of the patent to be

shorter than its legal life. A market participant would consider these factors in estimating the period over which economic benefits are expected to be generated from using the patent.

6.3.3.3 When using the income approach, the fair value of an asset is equal to the sum of the present value of cash flows expected to be generated by the subject asset over its economic life. As such, some form of PFI, isolated or derived from the entity's overall PFI, is used in the application of the valuation method selected for the subject asset. The PFI used should be at the lowest possible level and usually involves splitting the business unit PFI by one or more of several methods: operating unit split; geographic split; functional split; operating asset group split; asset class split; or individual asset split. In addition to isolating the appropriate PFI for the subject asset or relevant collection of assets, the valuation professional is responsible for selecting the appropriate point in time to truncate the projected cash flows based on the economic life of the subject asset, determined from a market participant perspective.

6.3.3.4 In addition to isolating the appropriate PFI for the subject asset or relevant collection of assets, the valuation professional is responsible for selecting the appropriate point in time to truncate the projected cash flows (i.e., end the projection period) based on the economic life of the subject asset, determined from a market participant perspective. When estimating the economic life for finite-lived intangible assets:

- a. In some cases, the economic life may be directly estimated based on consideration of the facts and circumstances attributable to the subject intangible asset or external evidence. In these circumstances the economic life assumption is used *directly* to determine the period of the projected cash flows.

 *For example, such indications may be based on the planned phase out period of an acquired tradename from a market participant perspective; for a backlog-type asset, the remaining term of the contract; or, for a customer contract, the contractual life specified in a legal agreement, plus expected renewals.*

- b. In other cases, key assumptions such as an attrition rate or obsolescence curve in the valuation may yield an exponential decay curve where cash flows will approach but never reach zero. Economic life would then be determined *indirectly* based on growth, attrition, and the method used to truncate the cash flows. In these circumstances, the valuation professional should select a point in time where future cash flows are truncated.

 *For example, this consideration is typically most readily apparent in the valuation of an existing group of customer relationships not subject to contracts with a defined length. Under an MPEEM method, attrition is typically applied in a multiplicative manner such that undiscounted cash flows approach but never go to zero. Given this circumstance, the cash flow forecasts from existing customers may resemble that of an indefinite-lived intangible. However, since customer-related assets are generally deemed to have finite life for accounting purposes, the valuation professional needs to terminate the cash flows at a supportable truncation point in the PFI.*

The method used to truncate the cash flows in applying the MPEEM has a direct impact on the economic life assumption for the customer asset. Section 6.3.4 further addresses documentation guidance on attrition rates as a key assumption in a valuation analysis.

- c. Occasionally, the determination of economic life may be further challenged by facts and circumstances, requiring additional supporting documentation.

 *For example, when an acquired trade name is deemed to not meet the attributes of an indefinite-lived asset, but specific discontinuation plans are unclear, the life for the discrete projection period cannot be arbitrary. The valuation professional should consider relevant data and factors in supporting an economic life, which may include the economic lives of related assets to the trade name such as formulas or technology; prior product lives; benchmarking to publicly disclosed transactions and information; and other factors.*

6.3.2.5 Certain intangible assets, including FCC licenses and tradenames with specific attributes, may be considered indefinite-lived assets. When there is no foreseeable limit to the period over which the asset is expected to contribute to cash flows, from the perspective of market participants, an intangible asset may be deemed to have an indefinite life. Indefinite does not mean indeterminate or infinite. Indefinite economic lives should be properly supported, as economic life is a key input in the valuation analysis of a subject intangible asset.

 *For example, to support indefinite life for a trade name, the valuation professional should consider legal, regulatory, contractual, competitive, economic, and other factors that may affect the life attributes of the subject asset. Additional considerations may include its relationship to product life cycles (i.e., whether associated with specific products); customer demand (i.e., if sustainable); renewal costs (i.e., if costs to renew trademark registration are minimal); maintenance costs; and other pertinent factors.*

6.3.3.6 In the case of indefinite-lived intangibles, a terminal value component captures the future value of cash flows that are expected beyond the discrete projection period for the subject intangible asset.

! Take note: There should be internal consistency, or a reasonable reconciliation, among the assumptions used in the same valuation analysis. This includes, for example, the terminal GRs used in the valuation of indefinite-lived intangible assets and the operating value of the associated business unit, discount rates, and other key assumptions.

6.3.3.7 An economic life is estimated solely for purpose of valuing the subject asset. Although the economic life of the asset may help management in its determination of useful life, depending on the method used to select the latter, it may differ significantly from the economic life of the subject asset.

! Take note: There is a conceptual distinction between an asset's economic and useful life. From a valuation standpoint, an asset's economic life is the period over which an asset is expected to generate economic benefits, and for fair value measurement purposes, it is determined from a market participant perspective. In contrast, useful life relates to the asset's amortization life for accounting purposes. Useful life is described in US GAAP and IFRS, respectively, as the "period over which an asset is expected to contribute directly or indirectly to future cash flows" and "the period over which an asset is expected to be available for use by an entity" and reflects entity-specific assumptions regarding the asset's use.

6.3.3.8 It is not the valuation professional's responsibility to conclude on a useful life for amortization purposes, or the pattern of amortization, which is an accounting policy determination.

Documentation Guidance

6.3.3.9 The valuation professional should document the following within the work file, if applicable:

- a. The revenue, cash flow, or profit-splitting method(s) used to arrive at a PFI to be used in the valuation of the subject intangible asset, and rationale.
- b. The method, process, and factors considered in selecting the economic life of the intangible asset, including consideration of market participant assumptions.
- c. Support for the selected attrition rates, technology migration curves, or product life cycles used to develop the economic life assumption. (Also see relevant documentation guidance in paragraph 6.3.4.17.)
- d. The assumptions underlying the terminal value calculation for an indefinite-lived subject asset, and rationale, as well as internal consistency or reconciliation with the terminal value assumptions for the related business unit. (Also see relevant documentation guidance in paragraph 6.2.3.4 and section 6.4.3.)

6.3.4 Attrition and Growth Rate Assumptions – Existing Customers

TOPIC OVERVIEW

6.3.4.1 Relationship-based intangible assets (including customer-related assets) that are not associated with contracts with a defined length call for additional analysis in the estimation of their economic life. In the case of non-governmental (commercial) customer-related assets, the economic life is typically driven by the expected growth of existing customer revenue net of attrition. An attrition rate measures the rate of loss of existing customers over time and is used in projecting future cash flows related to the existing customer-related intangible assets. The addition of new customer relationships in the future is excluded from the analysis, as the new customers are attributes of goodwill, given that they do not meet the definition of an asset under current financial reporting standards.

6.3.4.2 An attrition rate assumption may also be relevant in estimating an economic life for customer relationships valued on a cost approach: Management may leverage the attrition indication to determine the useful life of the subject intangible asset for financial reporting purposes.

6.3.4.3 When estimating a reasonable attrition rate for customer-related intangible assets, factors that should generally be considered include:

- a. Historical customer attrition data and/or industry information on competitor customer attrition (if available)
- b. Projected attrition based on discussions with management and/or corroborated by industry and competitor studies (if available)

- c. Revenue-based attrition and/or unit-based (i.e., customer count) attrition analysis, as appropriate, based on subject company data.
- d. Disaggregation of attrition data of the subject entity into smaller subsets by similar characteristics, which may be referred to as a cohort analysis, or analysis by vintage (where data is available/typically meaningful for large acquired customer populations).
- e. Other unit of account considerations.

! Take note: Valuation professionals should corroborate unsupported representations by management as they relate to attrition assumptions, using best practices to attrition analysis.

6.3.4.4 While an attrition analysis is typically based on available historical data, the objective of the analysis is to estimate future attrition and, thus, the economic life of the subject intangible asset for the purpose of determining fair value. Accordingly, valuation professionals should not assume that the future will resemble the past and should analyze historical data (when available), evaluate the type and quality of data, and assess the relevance of the results as it relates to future expected revenues for the subject intangible asset. There may also be circumstances in which market participants would assume that projected growth or attrition in existing customers may deviate from historical results.

 *For example, in early-stage growth businesses, significant historical incremental revenue generated by the same customers each year as part of the growth strategy may not be sustainable. In this case, the forecasted growth in existing customer revenue may be less than the calculated implied historical growth in existing customers. This difference should be quantified and adequately supported.*

6.3.4.5 Typically, an attrition analysis can be performed based on historical revenue or customer count data for customers with similar characteristics from a representative population of customer revenue or customer count data. Where historical customer data is not available, the analysis may need to be conducted on comparable data sets of the company (e.g., from previous acquisitions by the subject company or the acquiring company's own customer data). In the absence of company-specific attrition information, valuation professionals may look to substitute data for similar businesses, industry data, and so forth, as available and relevant.

Approaches to Calculating Attrition and Growth Rate Assumptions – Existing Customers

6.3.4.6 There are two primary approaches for measuring and applying growth and attrition of existing customers in a customer valuation analysis:

1. Disaggregated approach: Estimate and apply separate assumptions for (a) growth (prior to attrition) in existing customers and (b) gross attrition in existing customers. The attrition rate used in this application is typically referred to as a “disaggregated,” “gross,” or “capped” (for growth) attrition rate because this attrition rate is not reduced by the growth of existing customers, which is reflected in a separate assumption.
2. Aggregated approach: Estimate and apply an “aggregated” attrition rate which captures both the (b) gross attrition in existing customers reduced by the (a) growth in existing customers in a single (aggregate) net attrition assumption. The attrition rate applied in this application is typically

referred to as an “aggregated,” “net,” or “un-capped” attrition rate because this attrition rate is reduced by the growth of existing customers.

Reasonableness Assessment of Attrition and Growth Rate Assumptions – Existing Customers

6.3.4.7 When the forecasted (a) growth and (b) attrition assumptions attributable to the acquiree’s (i.e., the subject company’s) existing customers are based on the same historical data-set, there should be reasonable reconciliation between the results implied by the disaggregated and aggregated approaches.

 For example, if the calculated aggregated attrition (i.e., the observed CAGR revenue loss of the existing customers over a four-year historical period observed) rate is 12.1% and the calculated disaggregated (gross) attrition rate over this same four-year historical period is 14.0% then this would imply that growth in existing customers, prior to gross attrition, is 2.2% [calculated as $(1 - .14) / (1 - .121) - 1 = .022$].

6.3.4.8 The existing customer growth and attrition assumptions should also reasonably reconcile to, or be able to predict, the existing customer sales patterns reflected in the historical data-set that these assumptions were derived from. If both (a) the existing customer growth rate and (b) existing customer gross attrition (or alternatively, the aggregated attrition rate reflecting both assumptions) were developed from analysis of historical data, then a valuation professional should be able to back-test these assumptions with the data used to develop them. If these assumptions do not reasonably predict what happened historically, then this is contrary evidence with respect to the assumptions that should be assessed and resolved.

6.3.4.9 Another reasonableness assessment that can be performed is the inverse, whereby the valuation professional calculates and assesses the long-term implied new customer additions and/or future customer revenue as the difference between (i) the overall acquiree business level revenue forecasts and (ii) the revenue forecasted for the acquiree’s existing customers. The reasonableness of the reconciliation between the implied future customer revenue forecasts and the levels of revenue acquiree historically achieved from new customer additions may represent confirmatory or contrary evidence to be assessed with respect to the assumptions for existing customer growth, existing customer attrition, or both.

6.3.4.10. The valuation professional should not presume that the acquiree’s overall historical revenue growth rate or the projected overall revenue growth rate in the IRR analysis is an appropriate assumption for growth in existing customers under the disaggregated method without performing supporting quantitative analysis. This is because the acquiree’s overall revenue growth reflects the net impact of growth and attrition in both existing customers and future/added customers, rather than exclusively pre-existing customers.

Other Considerations in Developing Attrition and Growth Rate Assumptions

6.3.4.11 A supporting assumption that may be utilized in practice in the calculation of historical attrition is the notion of a “loss threshold.” This assumption is a valuation professional-defined threshold for decline in sales from a customer in order for “loss” or “attrition” to be counted and reflected within the historical disaggregated attrition calculation.

💡 For example, in using revenue-based attrition, if the valuation professional sets the “loss threshold” at:

- 100%, then revenue attrition would not be counted for a customer until / unless revenue decreased all the way to \$0.
- 80%, then the customer’s revenue must decline by 80% of the baseline-year revenue before revenue loss is recognized as attrition.
- 0.0%, then all reductions in customer revenue relative to the base-year level would be considered as revenue attrition.

6.3.4.12 The Task Force believes that the corresponding growth in existing customer revenue assumption in the disaggregated method should be quantified and estimated in an internally consistent manner with the attrition assumption, including, but not limited to the defined “loss threshold.” Implied growth in existing customer revenue under the disaggregated method should be calculated over the same periods as the attrition calculations considering the differential in (i) aggregated attrition and (ii) disaggregated attrition per paragraph 6.3.4.7.

6.3.4.13 The resulting projected existing customer revenue should be the same regardless of the “loss threshold” that is defined if the corresponding growth in existing customer assumption is also calculated in an internally consistent manner. Said another way, existing customer revenue loss less than the user defined “loss threshold” should be reflected in the existing customer growth assumption.

💡 For example, in a simplified illustration that isolates attrition indication differences driven by the defined “loss threshold”, assume that the base-year existing customer revenue started at \$1M and declined by a CAGR of 10% each year for four years, as the customer steadily diversified its supplier base. This ending customer revenue would be \$656.1K after four years [$\$1M \times (1 - .1)^4$]:

- With a 0.0% “loss threshold”, the annual loss of customer revenue would be fully reflected in the 10% gross attrition assumption as all revenue loss relative to base year revenue is considered attrition; growth in existing customer revenue prior to this attrition rate would be 0.0%.
- Alternatively, if a 100% “loss threshold” were set, then none of the annual revenue loss would be reflected in the attrition assumption; however, the existing customer growth rate would reflect the annual 10% decline in annual spend.

Both sets of interconnected growth and attrition assumptions, if properly calculated, should produce results that reconcile to the historical data from which they were derived.

Truncation of Cash Flows in Application of Attrition Rates

6.3.4.14 The application of an annual attrition rate typically results in an exponential decay curve, whereby cash flows approach, but never converge to zero. This calls for using one of several methods to truncate the cash flows, which may include, but are not limited to:

- a. Extending the valuation model to include more periods such that effectively 100% of the total present value of the cash flows is identified, utilizing a (materiality) threshold provided by management.

- b. Extending the valuation model such that that effectively 100% of the cash flows are identified and truncating the value at 1) a threshold which captures most of the present value of total cash flows (e.g., 90%, 95%, 99%), or, 2) a threshold beyond which the present value of the cash flows in the final year(s) is deemed insignificant to the overall value (e.g., 3%, 2%, 1%).

In all cases, the truncation point should be assessed relative to its impact on the value conclusion.

Grouping and Unit of Account Issues for Customer-related Intangible Assets

6.3.4.15 When customers are non-homogeneous and exhibit differences in product type, purchasing behavior, geography, size, profitability, or retention characteristics, such customers may need to be disaggregated into subsets to derive more relevant data sets and to determine a supportable level of groupings/cohorts/unit of account. Quantitative analysis and qualitative assessment should be performed to inform management's and the valuation professional's professional judgment as to this determination.

! Take note: The Task Force observes that, in practice, the attrition patterns and/or lives, or characteristics associated with the acquiree's different types of customer-related intangibles are often a primary factor considered in the determination of appropriate groupings.

 *For example, a key distinction in customer characteristics that is associated with different economics, unit of account, and valuation considerations pertains to an acquiree's commercial customers vs. government contracts.*

- For many types of government contracts with required approval processes, industry practice and guidance has evolved to generally value the existing contracts or programs that the acquiree has incumbency on, which are expected to generate revenue in the future either through the existing contract vehicle, or through follow-ons/extensions or high-probability re-competes. New business or highly competitive re-competes with government entities are generally considered a component of goodwill, given that a "relationship" is not key factor in winning this work.*
- In practice, the traditional government contract valuation would generally require a detailed bottom-up analysis of the terms of the underlying significant contract(s) to develop the PFI. In contrast, the traditional commercial customer relationships valuation typically considers all future cash flows expected to be generated from the commercial customer(s), using higher-level assumptions of baseline existing customer revenue and higher-level attrition rate assumptions.*

Thus, the nature and magnitude of an acquiree's relationships with government entities may need to be evaluated to determine if they should be valued separately from commercial customers.

6.3.4.16 An additional unit of account issue that may arise in valuing customer-related intangibles pertains to situations in which the acquired customer assets encompass two or more of the following types: customer lists; backlog; customer contracts; and customer relationships. This situation calls for a determination as to whether these assets should be valued as a single-unit or multiple units of account. The determination as to unit of account would be made by management, and the valuation professional should reflect it accordingly in the valuation analysis.

Documentation Guidance

6.3.4.17 The valuation professional should document the following within the work file, if applicable:

- a. The rationale for the selection of the unit of account and grouping(s) of the existing customer relationships and the qualitative considerations and quantitative analyses performed to support why different types of customers have been aggregated for accounting and valuation purposes.
- b. The process and rationale for the methods used to determine historical and expected future attrition patterns, including an explanation for any differences between historical and future attrition patterns.
- c. The source and description of the data used to determine historical and future attrition estimates.
- d. Rationale for the selection of the growth rate(s) attributable to the existing customers and how this was considered as aggregated within or disaggregated from the attrition rate assumption in measurement and application.
- e. The quantitative and qualitative impact of any relevant macro- or micro-economic influences, or both, incorporated into the attrition analysis.
- f. The extent of independent analysis performed by the valuation professional.
- g. The extent of reliance upon data provided by management, and the scope of the procedures performed related to the data provided. Procedures may include, but are not limited to:
 - i. Reconciling the sum of the individual customer sales each year to the reported amounts of the total company
 - ii. Consolidating or eliminating duplicate customers, where applicable
 - iii. Searching for and removing non-customer accounts (e.g., foreign currency adjustments, intercompany sales, eliminations)
 - iv. Confirming that each year considered is a full-year period
 - v. Other procedures performed to assess the integrity of the data.
- h. The methods, assumptions, and rationale used to determine the truncation point in the projections in connection with estimating the economic life of the customer-related intangible asset.

6.3.5 Relief-from-Royalty Method

TOPIC OVERVIEW

6.3.5.1 The RFRM, also known as the “royalty savings” method, is a valuation method under the income approach commonly used to value IP-based intangible assets such as trademarks and trade names, patents, developed product technology, and IPR&D. The premise of this method is that ownership of the intangible asset relieves the owner of the need to license the asset from a third party. It is not the form of the valuation method (e.g., MPEEM vs. RFRM) but the substance of the inputs used with the selected method that capture the routine or pivotal nature of the asset and impact the fair value measurement. For example, royalty rates may be estimated based on market rates or simulated to capture excess profits in the same manner as the MPEEM (in other words, a simulated royalty represents the profit attributable to

an intangible asset presented in the form of a royalty, whereby the method and assumptions used to develop the royalty rate correlate to the nature of the subject intangible asset).

6.3.5.2 Key inputs and assumptions in the application of this method include projected revenue related to the subject intangible asset (though at times, royalties are applied on a per unit basis or as a fixed periodic amount); the economic life of the asset; a hypothetical royalty rate for the use of the subject intangible asset; an appropriate discount rate; and tax amortization benefit, if applicable.

- a. *Projected revenue.* The application of the RFRM calls for identifying the projected revenue applicable to the intangible asset being valued under this method over the assumed economic life; the royalty rate is applied to this revenue stream to calculate the RFRM cash flows. When determining the market participant projected revenue for the asset, valuation professionals should consider factors such as distribution of revenue among different asset classes, proportion of revenue attributable to each asset identified, expected migration or obsolescence of technology (when valuing developed technology), and other relevant considerations.
- b. *Royalty rate.* A hypothetical royalty rate, which represents the royalty rate that would be paid in the hypothetical scenario in which the intangible asset is licensed rather than owned, is a key assumption in the RFRM. This royalty rate can represent a market royalty rate or a simulated royalty rate. The attributes of the intangible asset being valued under this method will determine the type of royalty rate that is selected:
 - i. While a routine asset is typically valued based on a market royalty rate, a pivotal asset is typically valued based on a simulated royalty rate. This is because a routine intangible asset, by nature, does not create a significant portion of the excess profit of the business and the royalty rate selected should be limited to the underlying intellectual property (“IP”) and not capture commercial value. Pivotal assets, on the other hand, create a significant amount of the excess profit, and the selected royalty rate should reflect that. Many pivotal assets may not have market comparability to licensing transactions (e.g., limited transfer of rights, geographic restrictions), and it would be difficult to support the selected royalty rate with a market royalty rate since market royalty rates would be lower. In these circumstances a simulated royalty rate can be used to support the selected royalty rate.
 - ii. Regardless of their type or source, selected royalty rates should have quantitative support. This could be achieved either with observed market data, such as observed royalty rates in actual arm’s-length negotiated licenses, or with quantitative support behind the estimation of simulated royalty rates. Observable inputs are preferable to more subjective unobservable inputs; however, the relevance of the observable inputs to the subject interest should also be considered.

! Take note: When assessing market royalty rates for comparability, valuation professionals should understand the terms of observed or disclosed royalty rates when available, including but not limited to, the comparability of the bundle of rights transferred in terms of geography and exclusivity, commercial rights transferred, the economic terms of the agreements (e.g., if the royalty rate is gross or net of certain expenses; whether it includes upfront payments;

graduated royalty rates; whether it is based on a percentage of revenue versus royalty per unit sold, and in the latter case, the per-unit price upon which the royalty is calculated), and other terms of the agreements (e.g., perpetual or limited period; agreement date). Understanding the terms of the market royalty rates and how those compare to the subject intangible asset is important to determine whether adjustments are necessary either to the royalty rate or to the revenue stream.

- c. Other key inputs and assumptions that would be relevant to the application of the RFRM, including minimum documentation guidance, are covered elsewhere in section 6.

6.3.5.3. Additional adjustments that should be considered to the RFRM cash flows include those for inventory step-up (or, any fair value adjustment, which may also be a step-down) and contract liabilities, if applicable.

6.3.5.4 Additional analyses that may be leveraged to support the selected royalty rate include a functional split/ROIC analysis and/or a simulated royalty rate calculation.

Documentation Guidance

6.3.5.5 The valuation professional should document the following within the work, if applicable:

- a. Description of the attributes of the subject intangible asset (IP).
- b. Documentation for the revenue stream used in the RFRM:
 - i. Explanation of revenue attributable to intangible assets, including any bifurcation of entity-level revenue.
 - ii. Support for the assumed economic life.
- b. Support for any migration curve or obsolescence curve applied to value the IP-based asset, or the assumption for (or probability of) discontinuing use of the asset, if applicable.
- c. Documentation for the selected market royalty rate, if applicable:
 - i. The criteria used to search for third-party licensing agreements and the rationale for using or excluding an initial list of data in the analysis.
 - ii. The lists and data produced during the search (e.g. (1) year of the licensing agreement; (2) licensor and Licensee; (3) description of licensed IP; (4) royalty rates and the earnings metric that the market royalty rate is applied to (i.e., gross revenue, net revenue, other) along with any agreement-specific terms impacting the rate to be paid; and (5) other relevant attributes.
 - iii. The process used in analyzing the third-party licensing agreements and their terms, and a description of how comparable these are to the subject intangible asset.
 - iv. The rationale for using or excluding licensing arrangements (if any) of the subject entity when determining a reasonable royalty rate.

- v. Support for the selected royalty rate, including identification of sufficient excess earnings or cash flow to provide economic support for the selected royalty rate, and a description of why a certain point-estimate was selected within the observed market royalty rate range.
 - vi. Additional support for the selected royalty rate, if applicable, e.g., ROIC analysis.
- d. Documentation for the simulated royalty rate, or other supporting analyses performed to support a selected royalty rate, if applicable:
 - i. Identification of sufficient excess earnings or cash flow to provide economic support for the selected royalty rate
 - ii. The calculation of a simulated royalty rate with an explanation of all supporting assumptions used in the analysis, including the asset-class split, asset-specific split, and/or investment return analysis performed to derive the simulated royalty rate, and
- e. The reasonableness of, and qualitative and quantitative support for, any rules-of-thumb methods applied in estimating or supporting a royalty rate to value the subject asset in the rare circumstances where rules of thumb were considered.
- f. Other assumptions:
 - i. An explanation of all adjustments applied to the cash flows, including but not limited to adjustments for gross versus net royalty rates, inventory step-up (or fair value adjustment in general), and contract liabilities, and
 - ii. In the rare circumstances where applicable, a reconciliation of the CACs assumed for the IP-based intangible asset with the selected royalty rate.

6.3.6 WARA and Asset Rates of Return/Discount Rates

TOPIC OVERVIEW

WARA

6.3.6.1 The WARA analysis is a diagnostic tool used in assessing the relative reasonableness of the rates of return for the identifiable intangible assets, tangible assets, and the implied or selected return on goodwill (depending upon whether a top-down or bottom-up approach is used to calculate the WARA). The WARA is estimated by calculating the weighted average of the required rates of return on the individual assets of a business, where the weights are based on the fair values estimated for those assets. The WARA analysis is based on normalized levels of the operating assets in an business unit and uses market participant assumptions.

6.3.6.2 The discount rates applied in valuing the assets (where an income approach is used), as well as the rates of return used to develop CACs should be consistent with the rates used in the WARA analysis of the business unit). On a fair-value-weighted basis, the rates of return selected and applied to the normalized levels of assets and liabilities should align to the operating value of the business unit and to the WACC (or to the transaction IRR, i.e., WACC inclusive of a CSR, where appropriate – refer to paragraphs 6.1.3.18 i., 6.1.3.20 d. and section 6.2.1).

6.3.6.3 Conceptually, WARA and WACC should be equal. The WACC is a weighted average return on the invested capital, and the WARA is essentially the asset-side mirror of the WACC. When the market participant perspective is reflected in the valuation by using conditional cash flows in conjunction with a commensurate risk-adjusted rate of return (see paragraph 6.1.3.4), theoretically, the WARA and the WACC inclusive of a properly supported CSRP (see paragraphs 6.2.1.3 to 6.2.1.5) should reconcile.

6.3.6.4 Even in the limited cases where the transaction price does not represent fair value (e.g., in a bargain purchase), a WARA diagnostic should still be performed based upon the operating value of the business unit.

6.3.6.5 Given the iterative nature of the WARA diagnostic analysis, it may lead the valuation professional to re-assess assumed asset rates of return and other market participant assumptions, as well as asset value indications.

Asset Rates of Return (including Discount Rates)

6.3.6.6 In general, rates of return are selected for the various tangible and intangible assets commensurate with their risk characteristics from the perspective of market participants. Thus, asset rates of return are stratified in the context of a business unit. The selection of asset rates of return often involves significant informed judgment due to lack of market data, uncertainty of the financing mix, and other factors.

6.3.6.7 In selecting discount rates for intangible assets, the valuation professional should typically consider a number of factors, including but not limited to, the WACC (or WACC range); cost of equity; cost of debt; the way in which market participants would finance the intangible assets; the nature and composition of operating assets of the subject entity; the nature, risk, and economic lives of the identifiable intangibles relative to goodwill and its elements; the existence of any CSRP (and when appropriate, the source of/ contributing risk factors to such CSRP); and in the context of a transaction, the IRR and WARA.

WARA Under a Nontaxable Transaction

6.3.6.8 An internal inconsistency is created between the purchase price (and PFI) in a nontaxable transaction and the fair value measurement of the acquired assets, which is not impacted by the form of the transaction (i.e., the fair value of the intangible assets is determined from a market participant perspective and includes a TAB where appropriate in the tax jurisdiction, regardless of transaction structure). To resolve this inconsistency, and solely for the purpose of the WARA diagnostic, typically an adjustment is made to the transaction operating value to reflect the incremental value of the TAB related to the acquired intangible assets and goodwill (to the extent the respective tax jurisdiction allows it) and the incremental tax depreciation related to the fair value of the tangible assets. Omitting this step may distort economic goodwill. Alternatively, where appropriate in the circumstances, the TAB can be removed from the intangible assets to ensure consistency with the price in a nontaxable transaction.

 *For example, the latter approach may be more intuitive in cases where insignificant PP&E was acquired or the difference between tax basis and fair value of PP&E is small, and significant intangible assets are valued under an income approach such that the TAB is separately calculated.*

Financial Overlay

6.3.6.9 A financial overlay may be used as a diagnostic analysis to evaluate the value contribution of the existing assets (recognized as of the measurement date) and future assets (comprising goodwill as of the measurement date) to the business unit PFI. The financial overlay process assigns a business unit's cash flows to both recognized and future assets such that the sum of all cash flows, discounted at the IRR, reconcile to the business unit value (all adjusted to reflect a taxable transaction, if appropriate in the circumstances).

6.3.6.10 The financial overlay can supplement the WARA analysis by providing insight into the components of economic goodwill, and the timing and risk of prospective cash flows underlying goodwill. It can also promote model integrity by accounting for all asset-level cash flows, whether presently recognized or subsumed in goodwill.

! Take note: The Task Force observes that while a financial overlay may not be widely considered a minimum procedure and documentation baseline, it constitutes good practice.

Documentation Guidance

6.3.6.11 The valuation professional should document the following within the work file, if applicable:

- a. The rationale for the after-tax rates of return for each tangible and intangible asset included in the WARA diagnostic, and whether a non-zero CSRP was considered in selecting the discount rate for intangible assets.
- b. The rationale for the applicable market participant tax rate used to estimate rates of return for each asset.
- c. The rationale for the stratification of rates of return, relative to each other and relative to the WACC (or the WACC inclusive of a CSRP), including an assessment of the reasonableness of the implied or selected rate for goodwill.
- d. Documentation of the assessment of the WARA diagnostic vis-à-vis the WACC, if the analysis is based on expected cash flows; or vis-à-vis the IRR (WACC inclusive of a CSRP) if the analysis is based on conditional cash flows.
- e. Adjustments in the WARA calculation in the event of a nontaxable transaction to ensure consistency between the tax basis inherent in the transaction value and the fair value measurement of the acquired assets.
- f. Items excluded from the WARA diagnostic analysis (e.g., one-time purchase accounting adjustments; other non-recurring items; and nonoperating assets).

6.3.7 Valuation Methods and Value Indications (Intangible Assets)

TOPIC OVERVIEW

6.3.7.1 General considerations on valuation approach and method selection and reconciliation of indications of value are provided in section 6.1.2.

Selection of Valuation Approaches and Methods

6.3.7.2 In selecting a valuation approach or method to measure the fair value of an identifiable intangible asset, the valuation professional should consider various factors including the nature and economic attributes of the asset; how the asset is used in the value creation process; methods being applied to other intangible assets; the availability of relevant data; and industry conventions.

6.3.7.3 The authoritative financial reporting guidance categorizes intangible assets into several types: marketing-related; customer-related; artistic-related; contract-based; and technology-based. Notwithstanding this categorization, from a valuation standpoint, further analysis of the following attributes of an intangible asset can inform the selection of a valuation method:

- a. *Relationship-based vs. IP-based* – describes the nature of the asset and the source from which it derives value.
- b. *Pivotal vs. routine* – describes the ability of the asset to generate excess profits in the business unit (or collection of assets). Pivotal (a.k.a. enabling or scarce) assets, regardless of whether they are owned or licensed, give the user the ability to create profits in excess of the returns on non-unique routine assets utilized in the operations. In contrast, while routine intangible assets provide an economic benefit, they are not scarce but are readily accessible.
- c. *Owned vs. licensed* – describes how the IP-based intangible asset is accessed by the user (reacquired rights also fall into this category). The user of a pivotal asset can create commercial value over and above the underlying IP value regardless of whether the asset is owned or licensed, and these economics should be consistently reflected in the valuation method applied.

6.3.7.4 When valuing multiple intangible assets as part of a business unit or collection of assets, additional considerations in the selection of a valuation method should include the nature and interrelationship between assets and whether more than one pivotal asset is present in the business unit.

 *For example, if there are pivotal relationships assets and IP in a business unit, then the RFRM method may likely be applied to the IP while the MPEEM may be applied to the relationships with the royalty serving as a profit splitting CAC.*

6.3.7.5 The selection of valuation method(s) cannot be viewed in isolation from the economic substance of the inputs used with such methods. It is not the valuation method itself, but rather the inputs used in the application of the method that capture the substance of the intangible asset and drive the fair value conclusion.

 For example, the valuation of a pivotal IP-based asset does not necessarily call for the exclusive use of an MPEEM approach (especially when there is another pivotal asset within the same operating group sharing the same PFI). A relief-from-royalty method can also be applied so long as the selected (simulated) royalty rate input reflects the appropriate stage of commercial value creation of the asset (and thus exceeds the royalty rate for the use of the underlying IP alone).

6.3.7.6 The valuation approaches should be applied to the lowest level of available PFI, as appropriate for the intangible asset.

Assessment and Reconciliation of Value Indications

6.3.7.7 In the valuation of intangible assets, most often only one approach or method is used. Notwithstanding this, the valuation professional should evaluate if the selected method provides a reasonable indication of value considering information gathered throughout the engagement about the subject interest and the overall valuation analysis; or, whether the indicated outcome may suggest using another method, if possible; whether the inputs and assumptions should be re-evaluated.

6.3.7.8 In the event a valuation professional uses multiple approaches as part of the analysis, the valuation professional should reconcile the various indications of value into a supportable and reasonable conclusion of value.

6.3.7.9 In the context of a business combination engagement, the resulting tangible and intangible asset values and their total relative to other assets, including goodwill, should be evaluated for reasonableness. The valuation professional should assess if the asset values reflect the relative contribution of the assets to the business value, among other factors.

 For example, an entity with limited developed technology and strong customer relationships would likely have higher customer value and lower developed technology value.

6.3.7.10 The valuation professional should evaluate transactions within the industry, if information is available, to benchmark relative tangible and intangible asset values (including goodwill) when evaluating the reasonableness of the concluded asset values.

 **Take note:** While benchmarking to publicly disclosed results and/or assumptions from comparable transactions can be useful for corroboration as an overall reasonableness check and/or potentially a form of secondary support for certain assumptions (e.g., lives), the Task Force does not believe that this should represent the primary support for key assumptions in the valuation analysis.

Documentation Guidance

6.3.7.11 The valuation professional should document the following within the work file, if applicable:

- a. A description of the intangible asset, its economic attributes, and how it contributes to the value creation process.

- i. If the asset is valued in connection with an acquisition, whether it was significantly factored into the rationale for the transaction.
 - ii. The characterization of the subject intangible asset as either relationship-based vs. IP-based; pivotal vs. routine; owned vs. licensed (or reacquired), as appropriate.
- b. The rationale for selecting the valuation method (or excluding potentially relevant valuation methods) to estimate the fair value of the subject interest, including:
 - i. The rationale for using the method and an explanation of inputs and assumptions. (For further documentation guidance, see relevant portions of section 6 addressing methods or inputs, as appropriate.)
 - ii. If asset-specific PFI was used, the assessment of the asset-specific PFI relative to the business unit PFI. (Additionally, see paragraphs 6.1.3.18 and 6.1.3.20 for assessment of business unit PFI and related documentation guidance.)
 - iii. The business unit for which PFI is being used (e.g., geography; function), where applicable.
- c. An assessment of the reasonableness of the indicated value for the subject intangible asset considering relevant factors including:
 - i. The information gathered throughout the engagement.
 - ii. The attributes of the intangible asset.
 - iii. Comparison to business unit value (e.g., reporting unit or transaction operating value.)
 - iv. Comparison to indicated values for other intangibles in the business unit, where applicable.
 - v. Benchmarking, including sources used.
 - vi. WARA reconciliation (*for further documentation guidance, see section 6.3.8 on Reconciliation of Intangible Asset Values.*)
- d. An explanation of any contrary evidence (e.g., with respect to issues such as method selection, reconciliation, or assessment; value indications from other sources such as relevant transactions or general benchmarking information) and how it was resolved.

6.3.8 Inventory

TOPIC OVERVIEW

6.3.8.1 Inventory is subject to fair value measurement typically in the context of business combinations and asset acquisitions.

Cost Accumulation vs. Fair Value Model

6.3.8.2 The inventory book value reported on the balance sheet represents the accumulated cost of the inventory and is measured at the lower of cost or net realizable value ("NRV"). Inventory is generally comprised of several different categories, including inventory that is:

- a. To be sold in the normal course of business ("finished goods")

- b. In production for future sale (“work-in-process” or “WIP”)
- c. To be used in the production of goods to be sold (“raw materials”)

6.3.8.3 The objective of the fair value model is to capture elements of value that are not reflected in the cost accumulation model. Ongoing inventory accounting follows a cost-accumulation model, and only certain internal and external costs (i.e., cost of acquired goods, direct manufacturing costs, and allocable indirect costs) are capitalized into inventory. This ongoing inventory accounting will not take into consideration other costs incurred throughout the inventory lifecycle such as the value associated with IP and selling costs, nor will it include a profit. As a starting point in a valuation analysis, the valuation professional should take note of the company’s inventory accounting policies and capitalization methods, which may vary by company and industry, to understand the nature and amount of costs already captured in the inventory book value.

Company Business Model

6.3.8.4 In the valuation of inventory, it is also important to understand the business model of the subject company (i.e., acquiree), what portions of the inventory conversion process the subject company is involved with (from procurement to disposition), what value-added costs the subject company incurs in the manufacturing process, and what types of IP the subject company adds in the manufacturing process related to the subject inventory, as these factors may influence the inventory classification and whether or not a fair value step-up in excess of capitalized cost would be expected. In the inventory conversion process, one entity’s finished goods may become another entity’s raw materials.

 *For example, a metal bolt can represent the “finished goods” for a machining company which incurs value-added costs and may even apply IP in producing that bolt upstream in the inventory conversion process. This same metal bolt may then represent “raw materials” for a different machine manufacturing company more downstream in the inventory conversion process that subsequently purchases the bolt from the first machining company and then utilizes it in the production of a more complex machine representing their ultimate “finished goods.”*

6.3.8.5 Different business models also result in inventory with different capitalized cost characteristics. Manufacturing companies produce the goods they sell to wholesalers, retailers, or other manufacturers. Inventory for a manufacturer typically consists of (1) raw materials, (2) WIP, and (3) finished goods. Alternatively, merchandising companies typically purchase inventory from wholesale and/or retail companies primarily in finished goods form. These companies are often intermediaries in the process of moving goods from the manufacturer to the end-user and would typically not significantly enhance the value of their inventory via the application of capitalized IP or value-added manufacturing costs. There are also cases where a company contracts out the manufacturing of their inventory to a third-party contract manufacturer and has that contract manufacturer apply the subject company’s IP in the manufacturing process.

 *For example, a pharmaceuticals and life sciences company may contract out the production of one of their drugs to a contract manufacturer. In this case, the price paid for the contract manufactured finished goods may not include profit attributable to the pharmaceuticals and life sciences company’s contributed IP added in the manufacturing process, which may drive some level of fair value step-up relative to the subject company’s cost basis.*

Valuation Methods

6.3.8.6 For financial reporting purposes inventory is typically valued using the top-down and / or bottom-up methods. These two methods are effectively the inverse of each other and generally should produce the same value indication when properly applied.

- a. *Top-down method.* This method is generally aligned with the market approach and values the subject inventory at the selling price less market participant costs required to be incurred in the post-measurement date period, including:
 - i. Manufacturing costs remaining to complete the inventory (including applicable manufacturing IP)
 - ii. Disposal costs remaining to sell the inventory (including applicable disposal-related intangibles)
 - iii. Profit on the costs to complete manufacturing and dispose of the inventory
- b. *Bottom-up method.* This method is generally aligned with the replacement cost method under the cost approach and values the subject inventory as the adjusted book value plus additional non-capitalized costs contributed in the pre-measurement date period, including:
 - i. Incremental non-capitalized costs previously incurred to get the inventory in its form as of the measurement date (including applicable IP)
 - ii. Profit on the costs previously incurred through the measurement date

Raw Materials

6.3.8.7 The fair value of raw materials is often derived using the bottom-up method, where current replacement cost for a market participant is used. In practice, the book value of raw materials is frequently considered to be a reasonable proxy for fair value as of the measurement date if: costs attributable to the raw materials have not changed significantly from when they were incurred and capitalized through the measurement date; any added costs incurred with respect to the inventory or IP contributed by the subject company are minimal; and any applicable reserves applied fully account for obsolete and defective goods as well as shrinkage. The valuation professional should gain an understanding of surplus and obsolete inventory, stale raw materials pricing, and current market prices for commodities (e.g., metals, petroleum products).

6.3.8.8 Under US GAAP, another consideration is that last-in-first-out (“LIFO”) inventory accounting results in a relatively aged cost base relative to the cost base if first-in-first-out (“FIFO”) inventory accounting was used. Thus, adjustment of the LIFO basis book value by adding the LIFO reserve may result in the adjusted book value of raw materials being more representative of current replacement costs. Even the FIFO basis book value may need to be adjusted to reflect current replacement costs if the inventory consists of commodity-type items with significantly fluctuating prices. Additionally, contract manufactured goods may be presented as “raw materials” when they are in fact completed goods ready for sale due to the application of the subject company’s contributed IP. While the subject company likely paid a manufacturing profit to the contract manufacturer, this pricing typically does not account for any IP inherent in the product.

WIP and Finished Goods

6.3.8.9 The top-down method is the most frequently utilized method to estimate the fair value of finished goods and WIP for financial reporting purposes. The bottom-up method has historically been utilized less frequently; however, the fair value estimated under both methods should generally be the same. Further, the assumptions required for one method impact the assumptions in the other, and there should not be significant incremental effort required to perform both methods for finished goods and WIP. Therefore, a helpful overall reasonableness check is to value finished goods and WIP inventory under both the top-down and bottom-up methods and then confirm that both methods produce the same valuation results.

6.3.8.10 The Task Force believes that another useful reasonableness check for the fair value of finished goods and WIP inventory can be to compare the amount of profit left over for the remaining manufacturing and disposal activities in the inventory valuation to the amount of profit required for any intangibles utilized in the disposal process.

 For example, one may consider that the preliminary inventory valuation is stepped up to the level such that there is only 5% profit remaining to be allocated to disposal activities, but the existing customer relationship valuation analysis indicates that the customer relationships that the subject inventory will be sold to have an implied royalty rate (i.e., normalized excess earnings as a percentage of revenue, grossed up for tax) of 10%. This relationship would indicate that the finished goods may have been stepped up too much because there is not even sufficient profit available to allocate to the disposal intangibles without considering additional assets employed in the disposal efforts. This relationship may indicate the need to reconsider the intangible asset royalty rates utilized in the inventory valuation and/or the assumptions of where the intangible assets are contributed or used in the manufacturing or disposal process.

Additional Issues to Consider

6.3.8.11 In the top-down method, the selling price of the subject inventory may be estimated by grossing up its adjusted book value by the COGS (or inverse gross margin) assumption determined to be applicable for the period that the inventory is expected to be sold. Under this selling price estimation method, the COGS assumption utilized to determine selling price of the inventory should define capitalized costs in the same manner as the costs capitalized in the subject inventory to avoid unintentionally misstating the selling price.

 For example, ongoing inventory accounting may reflect manufacturing depreciation as (i) capitalized in the book value of inventory and (ii) included in COGS of the income statement in which the inventory is sold. Alternatively, transaction deal models deriving cash flows often present all (non-cash) depreciation separately from COGS in the PFI (below EBITDA). If an inventory book value inclusive of capitalized manufacturing depreciation were to be grossed up to a selling price based on a COGS assumption that excludes manufacturing depreciation, then the calculated selling price will be too high.

6.3.8.12 When an element of “step-up” is included in the valuation of inventory, this may overlap with the valuation of the intangible assets that have contributed to the inventory step-up, such as technology or

brand. The valuation professional should consider and apply appropriate adjustments to avoid “double-counting” the fair value step-up in multiple assets.

Documentation Guidance

! Take note: The assumptions and inputs listed in this section are illustrative only. Facts and circumstances of each individual situation should be considered when performing and documenting an actual valuation. The extent of analysis and documentation may vary based on the nature and significance of the inventory and any related step-up (or, any fair value adjustment, which may also be a step-down), given the parameters of the overall valuation.

6.3.8.13 The valuation professional should document the following within the work file, if applicable:

General Attributes of the Inventory

- a. The nature and characteristics of the subject inventory.
- b. The degree of homogeneity of the subject inventory and, if applicable, how inventory with different characteristics (such as profit margins, risk, and intangible asset contributions) were disaggregated into separate homogeneous groups for valuation purposes.
- c. As applicable, the nature and amounts of adjustments made to the book value of inventory for items including, but not limited to:
 - i. lower of cost or market (NRV) write downs
 - ii. obsolescence, discontinued product lines, operations to be sold, defective goods as well as shrinkage
 - iii. LIFO reserve
- d. If adjustments to book value were not made, then the rationale for why such adjustments were not considered necessary.

Raw Materials

- e. In cases where book value is considered a reasonable proxy for the fair value of raw materials, the valuation professional’s considerations as to whether:
 - i. costs attributable to the raw materials have not changed significantly from when they were incurred and capitalized through the measurement date
 - ii. any applicable reserves applied fully account for obsolete and defective goods as well as shrinkage
 - iii. any added costs incurred with respect to the inventory or IP contributed by the subject company are minimal

WIP and Finished Goods

- f. The process of, and rationale for, selecting the methods and assumptions used including, but not limited to:

- i. The specific amounts and nature of the costs capitalized in the subject finished goods and WIP inventory as of the measurement date
- ii. Whether the direct and indirect manufacturing costs are capitalized in inventory or expensed as incurred
- iii. The method and assumptions utilized to estimate the selling price of the finished goods and WIP inventory
- iv. Baseline PFI used in the finished goods and WIP inventory valuation reflecting market participant assumptions, and related support
- v. If applicable, the assumptions utilized to estimate what portion of baseline costs are considered future-benefit expenses (i.e., development R&D expenses related to new product development, marketing for a new product, etc.) unrelated to the subject inventory
- vi. The nature and amounts of all direct and indirect standard costs required to manufacture and/or dispose of the subject WIP and finished goods inventory, respectively, completed before the measurement date versus efforts that will be completed after the measurement date (i.e., functional apportionment)
- vii. The method and assumptions utilized to allocate overhead and/or other indirect costs to the inventory manufacturing and disposal activities
- viii. The method and assumptions utilized to estimate the percentage complete assumption for WIP inventory
- ix. The rationale for whether each cost is considered “value added” or “non-value added” for the purpose of the allocation of profit
- x. The assumptions utilized to estimate the market royalty rate(s) attributable to any IP and other intangible assets utilized in the manufacturing and disposal efforts of the subject inventory
- xi. The rationale for the assumptions related to what types and portions of the IP and other intangible assets have been contributed to the inventory existing as of the measurement date versus what is yet to be utilized/earned, as well as whether the various intangibles utilized are deemed to be part of the manufacturing or disposal effort.

Other Considerations

- g. If commonly used approaches and methods were not used in the valuation analysis(es), documentation of the reasons.
- h. Rationale for how the resulting inventory step-up (or fair value adjustment in general) is treated in the IRR given the tax structure of the transaction.
- i. If applicable, consideration of what separately valued IP contributed to inventory step-up (or fair value adjustment) and the adjustments made to avoid double-counting the value in both the inventory and the IP.
- j. The removal from the inventory balance of any assets such as “tooling” which may be included in M&E and valued by M&E valuation specialists.

6.3.9 Contract Liabilities

TOPIC OVERVIEW

6.3.9.1 A contract liability is an entity's obligation to transfer goods or services to a customer for which the entity has received consideration (or the amount is due) from the customer [FASB Master Glossary; IFRS 15.A]. A performance obligation recognized under the standard on revenue from customers, in either US GAAP or IFRS, may give rise to the recognition of a contract liability by the acquirer in a business combination. For example, a revenue arrangement of the acquiree (i.e., the subject company), whereby the customer has paid in advance for certain goods or services, may result in the assumption of an obligation by the acquirer to provide such goods or services (contract liability).

6.3.9.2 Common examples of contract liabilities of the acquiree that may be recognized in a business combination include advance payments for subscriptions; membership fees to gyms, clubs, or other organizations; customer support for licensed software; the license of a brand; software as a service (SaaS); or customer loyalty and similar programs.

6.3.9.3 Following the effective date of FASB's ASU 2021-08, *Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities From Contracts With Customers*, contract liabilities are no longer measured at fair value under US GAAP. Rather, they are an exception to the fair value measurement principle of ASC 805 and are measured in accordance with ASC 606 on revenue from contracts with customers. No such change has been made to IFRS as of the date of issuance of the VPF. Thus, the Task Force has provided the background below and related documentation guidance in connection with the valuation of contract liabilities for financial reporting purposes under IFRS.

6.3.9.4 Conceptually, at inception, the unrecognized revenue of a contract reflects compensation for all the expenses, assets to be utilized, and profits to be earned related to the contract. One would generally expect the *fair value* of the contract liability to be less than the book value recognized in the acquiree's pre-acquisition (pre-measurement date) financial statements since a portion of the effort related to the pre-acquisition contract liability balance has already been incurred (e.g., selling). Because fair value is estimated using market participant assumptions, the way the acquirer elects to discharge the liability (e.g., outsource the performance effort or fulfill it internally) would not change the fair value estimate.

6.3.9.5 The fair value of the contract liability acquired in a business combination is estimated as the value of the services remaining to be performed or goods remaining to be delivered to fulfill the performance obligation after the acquisition (measurement) date, based on market participant assumptions. The fair value of the contract liability is the price that a market participant would require to assume this liability.

6.3.9.6 The Task Force observes that there is conceptual similarity in the valuation of contract liabilities and inventory as both analyses involve the allocation of costs incurred and related profit earned – throughout the entire value-creation continuum for the contract or inventory item – between value created pre- vs. post-acquisition (measurement) date. In other words, a functional apportionment process is applied both in the valuation of contract liabilities as well as inventory.

Valuation Methods

6.3.9.7 There are generally two methods of measuring the fair value of contract liabilities, which are effectively the inverse of each other:

- a. *Bottom-up method.* Under this method, fair value is measured based on the fulfillment costs (which may include overhead costs and costs/charges for the use of intangible assets, where appropriate) that a market participant would incur to satisfy the performance obligation, plus a reasonable profit on such fulfillment costs.
- b. *Top-down method.* The application of this method is based on the premise that reliable price indications are available for the goods and services to be provided to the customer. However, this information is often not available. In some cases, a proxy for this amount may be the book value of the contract liability at contract inception, if the contract was prepaid in full by the customer, although further adjustments may be required. The amounts deducted from the market price are the costs and related profit representing the value created and earned prior to the measurement date, from the perspective of a market participant.

6.3.9.8 In theory, given that the functional apportionment is a closed-form analysis, the value indication derived under both methods should be the same. Where data is available, performing and reconciling the two methods could be helpful in ensuring that all expenses and profits have been properly allocated in the analysis. However, the Task Force recognizes that this may not always be possible or practical.

6.3.9.9 In practice, the selection of a methodology is primarily determined by the availability of information. The Task Force observes that the bottom-up method is used more frequently in practice because the market data needed for the top-down method is often not available.

Documentation Guidance

! Take note: The assumptions and inputs listed in this section are illustrative only. Facts and circumstances of each individual situation should be considered when performing and documenting an actual valuation. The extent of analysis and documentation may vary based on the nature and significance of the contract liability and any related fair value adjustment (typically a step-down), given the parameters of the overall valuation.

6.3.9.13 The valuation professional should document the following within the work file, if applicable:

- a. The nature and description of the contract liability.
- b. The rationale for selecting the top-down or bottom-up method to value the contract liability.
- c. Baseline PFI used in the contract liability valuation reflecting market participant assumptions and related support, including consideration of the value contribution of any entity-owned intangible assets utilized in the fulfillment of the contract in the total profit margin of the baseline PFI.
- d. The assumptions used to estimate the market royalty rate(s) attributable to any IP and other intangible assets that a market participant would utilize in fulfilling the performance obligation.
- e. Assumptions and rationale for adjustments to the baseline PFI to remove costs unrelated to the contract (e.g.: 1) a portion of direct operating expenses, including a portion of overhead, unrelated to the contract; 2) development R&D expense related to new product development, marketing for a new product.)

- f. The nature and amounts of all direct and indirect costs required to fulfill the performance obligation before the measurement date versus those related to efforts that will be completed after the measurement date, and rationale for the allocation (i.e., functional apportionment.)
- g. The market participant assumptions and rationale for the types and portions of IP and other intangible assets that have been utilized in efforts prior to the measurement date versus efforts remaining to be incurred to fulfill the performance obligation.
- h. The rationale for whether each cost is considered value-added or non-value added for the purpose of the allocation of profit (i.e., profit earned may not be proportional to expenses, and some costs may not earn a profit.)
- i. If discounting is applied, the term of the contract liability and the rationale for the discount rate used in estimating fair value.
- j. Whether the valuation was performed on a pre-tax or post-tax basis, and the related rationale.

6.4 INTERNAL CONSISTENCY AND RECONCILIATION MATTERS

TOPIC OVERVIEW

6.4.1 The Task Force believes that internal consistency and a process of reconciliation or corroboration, where appropriate, is an important step in ensuring the integrity of a valuation analysis. Certain of the items outlined below may already be highlighted in other parts of section 6 or may not necessarily be applicable to all valuation analyses.

! Take note: The considerations outlined in this section are not an exhaustive list. They are presented for illustration purposes to encourage the valuation professional to think through situations where internal consistency and a process of reconciliation are important in supporting the concluded fair value(s) and the integrity of the overall analysis and to highlight the need for related documentation.

6.4.2. Below is a *non-exhaustive list of illustrative issues* for consideration, as applicable:

Fair Value Measurement - General

- a. Reconciliation to observable indications of value; calibration (or back-solve) to observable indications of fair value, where relevant; and a comparison to market-based assumptions should be performed whenever possible. The fair value guidance calls for prioritizing observable market participant inputs in fair value measurement.
- b. Internal consistency between the currency denomination of the underlying cash flow forecasts and the discount rate assumptions.
- c. Internal consistency between the risks embedded in the PFI and the discount rate applied to it.
- d. Comparison to discount rates and CSRP assumptions (if relevant) from previous fair value measurements of the subject interest, where applicable and possible.
- e. Internal consistency (or reconciliation) of valuation assumptions within the same analysis including, but not limited to, terminal GRs, discount rates, etc.
- f. If multiple discount rates are developed and used in a valuation engagement, the valuation professional should explain and reconcile such inputs to ensure internal consistency.
- g. If multiple entities or business units are being analyzed, the rationale for differences in the multiples selected to value each of the subject entities, and, if the subject entities roll-up to a company that is publicly traded or was recently the subject of a transaction, a reconciliation to the multiple of the entire company explaining any differences between the multiples selected for each of the subject entities and the overall company's multiple.
- h. Reconciliation of the various indications of value into a supportable and reasonable conclusion of value when using multiple approaches or methods as part of the valuation analysis.
- i. Reconciliation of value estimates produced by applying a valuation approach (e.g., DCF) with transaction prices (including secondary transaction prices) for the same subject interest.
- j. If multiple indications of value are significantly divergent from one another, a simple average should not be used by default. A re-assessment of the inputs and assumptions may be called for to

converge the value indications, as the significant divergence constitutes contrary evidence, or the appropriateness of one or more of the methods used may be called into question.

- k. For recurring valuation analyses, consideration of trends in key assumptions and impact on concluded fair value(s).
- l. A comparison to previous fair value measurements of the subject interest, where applicable and possible.
- m. An explanation of any contrary evidence encountered in the valuation analysis process or in regard to the valuation conclusion and how it was resolved.

Impairment Testing

- n. When performing an impairment test for a publicly traded company, a reconciliation (comparison) to MVIC or to market capitalization, where appropriate, to support the implied market participant acquisition premium. This may entail, where possible or significant, a high-level estimation of values for certain business units (RUs; or CGUs, where appropriate) solely for the purpose of the comparison.
- o. A reasonable reconciliation of the PFI of the RUs/CGUs and that of the overall company, including the nature, magnitude, and rationale for significant unallocated revenues or costs (e.g., certain corporate expenses).
- p. Rationale for allocation of services provided among Corporate/RUs/CGUs, and treatment of any shared assets among RUs/CGUs/Corporate and the related rationale.
- q. Consistency or rationale for divergence in the valuation multiples for the business units (RUs; or CGUs, where appropriate) vs. the consolidated company.
- r. Consistency or rationale for divergence in the discount rates applied to the business units (RUs; or CGUs, where appropriate) vs. the consolidated company.
- s. Internal consistency, or a reasonable reconciliation, among terminal GRs used in the same valuation analysis (e.g., reporting units vs. overall business).

Business Combinations

- t. Reconciliation between IRR, WACC, and WARA.
- u. Internal consistency, or a reasonable reconciliation, among terminal GRs used in the same valuation analysis (e.g., indefinite-lived intangible assets vs. business unit).
- v. If attrition was estimated and applied for separate groups of customers on different revenue streams, a reasonable reconciliation of the aggregate revenue to that in the PFI of the relevant business unit for each year of the projection period.
- w. The rationale for the market participant tax rate assumptions for (i) the overall business; (ii) the identifiable intangible assets valued under the income approach; and (iii) the TABs associated with the foregoing identifiable intangible assets.
- x. While not a minimum scope of work or documentation baseline, the Task Force considers a financial overlay analysis performed in conjunction with a purchase price allocation to be a useful tool and good practice, ensuring internal consistency of the analysis.

Documentation Guidance

6.4.3 The valuation professional should document within the work file how the considerations in 6.4.2, and/or other similar matters significant to the integrity of the analysis and conclusion, were addressed in the valuation analysis.

7. USE OF AI AND OTHER TECHNOLOGY TOOLS IN VALUATION

The Task Force observes that the increasing use of artificial intelligence (AI) and technology tools in valuation is an emerging issue that can reshape the performance workflows in a valuation engagement. Various use cases for AI and technology tools currently explored in practice include research; data gathering, assistance with data selection based on user-defined parameters; data input; analysis; report writing; and others.

7.1 GENERAL CONSIDERATIONS

! Take note: The Task Force emphasizes that the valuation professional is ultimately responsible for the valuation conclusion and cannot relinquish any part of such responsibility on AI or technology tools used in a valuation engagement.

7.1.1 The valuation professional should conclude that he or she can employ AI and technology tools with professionalism prior to considering their use in a valuation engagement. Professionalism includes having the requisite level of professional competence, applying professional skepticism and acting in an ethical manner when performing an engagement to estimate fair value with input and assistance from AI and technology tools. To support this conclusion, the valuation professional should be able to demonstrate:

7.1.1.1 Professional Competence. The valuation professional should ensure he or she has the requisite level of competence to use AI and technology tools; have a conceptual understanding of the process employed; understand its limitations; recognize the need for human involvement, interaction, and professional judgment related to the inputs, processes, and outputs, as applicable.

! Take note: The valuation professional should take reasonable steps to keep current on AI and technology tools related to use cases considered in a valuation engagement.

7.1.1.2. Professional Skepticism. A questioning mind and a critical assessment of valuation evidence, as well as inputs, processes and outputs, as applicable, and the use of professional judgment are critical when using AI and technology tools.

7.1.1.3. Ethics. The valuation professional should ensure that any use of AI and technology tools in a valuation engagement complies with:

7.1.1.3.1. The laws, regulations, and norms in the relevant jurisdiction; client contractual terms and obligations; applicable VPO and other organizations' standards; best practices related to AI and technology tools use given the valuation purpose; and any firm-specific requirements. The foregoing also applies to any transparency, documentation, and reporting requirements regarding the use of AI and technology tools on a valuation engagement.

7.1.1.3.2. Contractual provisions and confidentiality obligations concerning client and other data utilized in conjunction with AI and technology tools, and appropriate security safeguards.

7.2 SCOPE OF WORK

7.2.1 The valuation professional should ensure that the use of AI and technology tools are appropriate for the scope of work, including the extent of research and analysis, given the nature of the engagement; the subject interest; and the intended use of the valuation, in line with the *Fit for Purpose Principle* in section 3.1.

7.2.2 The Task Force believes that the valuation professional should use AI and technology responsibly when their use is appropriate for the valuation engagement.

7.2.3 As the valuation professional remains responsible for the valuation conclusion, he or she may use various procedures to gauge the relevance and reliability of, as applicable, the source data, processes, or output of AI and technology tools when relying thereon in developing a conclusion of value. Such procedures may range from a reasonableness assessment to a verification while considering the weight of valuation evidence and applying professional judgment. The extent and nature of procedures applied may also depend on the nature of the technology and its use case.

! Take note: The extent and nature of assessment or verification of inputs, processes, or outputs, as applicable, related to the use of AI and technology tools should be commensurate with the degree of reliance on the output and the significance of its impact on the conclusion of value.

7.2.4 Best practices on the use of AI and technology in a valuation engagement are currently under development by VPOs, non-membership valuation professional organizations, and other valuation industry stakeholders, including valuation firms. Valuation professionals should keep current with such guidance.

7.3 DOCUMENTATION GUIDANCE

7.3.1 In accordance with the *Guiding Documentation Principle* preceding section 5.4, the documentation in the work file should be clear and comprehensive such that, conceptually, an experienced professional not involved in the valuation engagement can review and understand the extent of use of AI and technology tools in the valuation analysis, as well as the procedures undertaken and professional judgment applied to support reliance on its data, processes, or outputs in developing a valuation conclusion.

 *For example, dashboarding, which can be used to create visual and interactive user interfaces based on underlying data and analysis, should be supported and documented in accordance with the Guiding Documentation Principle of the VPF, regardless of whether the valuation professional performed the analysis with or without the assistance of AI and technology-based tools.*

7.3.2 The extent of documentation should generally increase with the level of subjectivity, and complexity, non-transparency of the technology and professional judgment required when addressing value-impacting assumptions and should be commensurate with how significant or uncommon an assertion or assumption appears to be.

7.4 DISCLOSURE AND REPORTING

7.4 The extent and nature of disclosure in the Engagement Agreement and Client Deliverable (including schedules and related footnotes) of the use of and/or reliance on AI and technology tools should be made in accordance with relevant regulatory requirements; VPO and non-membership valuation professional organizations' guidance; industry best practices; client contractual obligations; and firm policies. The Task Force observes that this is an evolving area as of the date of issuance of the VPF.

APPENDIX A – Engagement Agreement

A.A An executed EA between the valuation professional (or his or her firm) and the client should contain the following components, to the extent they are applicable:

A.A.1 Identification of the client (or clients) – that has (or have) contracted for the valuation services. If there are several clients, the EA should identify each client associated with the engagement.

A.A.2 Identification of the subject interest – the description of the subject interest should be specific enough for the intended users of the client deliverable to easily identify the subject interest being valued. This description should include any significant legal rights, restrictions, or obligations associated with the subject interest.

A.A.3 Measurement date – also known as the “valuation date,” “as of date,” or “effective date” for the valuation. If the measurement date is not known with certainty when the EA is to be signed by the client, the EA may state that the measurement date is to be determined.

A.A.4 Standard of value – the applicable standard of value (also known as the “basis of value”) and its definition should be included.

A.A.5 Premise of value – that will be used (if known) in the analysis and its definition.

A.A.6 Scope of Work – should clearly define the work to be completed by the valuation professional. The valuation professional should exercise professional judgment as it relates to inclusions and exclusions from the scope of work.

A.A.7 Client responsibilities – identifiable and actionable responsibilities when these have a significant impact on the valuation professional’s procedures and conclusion of value.

 *For example, client responsibilities may include providing complete and accurate financial records and data; appropriate and sufficient access to the client’s personnel and facilities, to the extent it is relevant for the valuation procedures; and well-documented and supported PFI.*

A.A.8 Purpose and intended use of the client deliverable – the valuation analysis and client deliverable that will be prepared by the valuation professional are valid only for that stated purpose or use.

 *For example, “estimate the fair value of the asset group for Step 2 of the ASC 360 long-lived assets impairment test as of the measurement date”*

A.A.9 Type of client deliverable – describes the type of client deliverable that will be prepared for the engagement. For specific client deliverable types, valuation professionals should refer to valuation standards, including VPO and non-membership valuation professional organization standards relevant to the valuation professional.

A.A.10 Identification of the intended users and expected recipients of the client deliverable – see Glossary (Appendix J) for definition of intended users and expected recipients.

A.A.11 Identification of the valuation professional – the valuation professional(s) who will take responsibility

for the reported analyses and conclusions of value.

A.A.12 Identification of specialist(s) with subject matter expertise, if applicable – the use and role of any specialist(s) as part of the valuation engagement should be addressed. For internal specialists, this applies to situations where the contribution of the specialist is expected to be significant to the engagement, unless otherwise called for by professional or other standards applicable to the specialist, or by firm policies.

A.A.13 Fee and timing of deliverable – this item includes the delivery of any interim or draft conclusions and client deliverable; the agreed fee or fee arrangement for the engagement; and any circumstances that may result in changes to fees due to changes in the scope of work or timing.

A.A.14 Limiting assumptions and/or conditions – to the extent that any limiting assumptions and/or conditions will be used in the valuation, they should be included in the EA to make the client aware of the potential impact on the engagement (e.g., conclusions that might otherwise be different). For any new limiting assumptions and/or conditions that are developed during the engagement, the valuation professional should obtain written confirmation of the new or modified information from management.

A.A.15 Any obligation to update the valuation, if applicable – a valuation may need to be updated as of a different measurement date. The valuation professional should state the update frequency and/or relevant measurement date(s), and reason to update the valuation, if applicable.

A.A.16 The valuation professional may also consider supplementing the EA with components that further improve the understanding with the client. Examples include the following:

A.A.16.1 Approaches and methods – a description of the valuation approach(es) and method(s) that will be considered and applied to each of the subject interests as part of the valuation engagement.

A.A.16.2 Firm-specific terms and conditions – firm-specific contractual terms and conditions that address various risk management matters such as indemnification, and so forth.

APPENDIX B – Documentation of Discussions With Management and Any Site Visits

A.B The valuation professional should carry out discussions or interviews with management to gather information relevant to various aspects of the valuation analysis and should conduct site visits whenever necessary and practicable.

A.B.1 *Site visits*. The valuation professional should document the following, in accordance with VPF paragraph 5.7.4.2:

A.B.1.1 The date, location (if applicable), and general purpose of the discussion

A.B.1.2 The valuation professional(s) who conducted the discussion or interview

A.B.1.3 A list of management members interviewed, including the role or responsibilities of each person

A.B.1.4 If applicable, a list of offices and facilities visited, including their locations

A.B.1.5 Questions asked and related responses

A.B.1.6 Any other relevant content discussed, and observations made during the visit.

A.B.2 *Virtual meetings*. Telephone discussions or virtual meetings (encompasses virtual platforms such as Zoom, Skype, Teams) should be used when in-person or on-site management interviews are not practicable. These discussions should be documented in accordance with the guidelines outlined above, as applicable (VPF section 5.7.2, paragraph 5.7.4.2, and section A.B.1).

APPENDIX C – Client Deliverable

A.C A client deliverable may encompass narrative and computational content and may take various forms (e.g., it may be a narrative report, a presentation deck, or a digital dashboard – with *schedules*). Valuation professionals should apply professional judgment to evaluate whether it is appropriate to provide these components in narrative form and/or in the form of schedules or exhibits (numerically outlining certain aspects of the analysis) with related narrative footnotes, to support the valuation conclusion. To the extent applicable, a client deliverable should address:

A.C.1. *Client identification*. See A.A.1.

A.C.2. *Client deliverable date* – a.k.a. “date of issuance of the client deliverable.” This is the date the client deliverable is signed and issued by the valuation professional or firm and delivered to the client.

A.C.3. *Purpose and intended use of the client deliverable*. See A.A.8.

A.C.4. *Identification of the intended users and expected recipients of the client deliverable*. See A.A.10.

A.C.5. *Measurement date*. See A.A.3

A.C.6. *Standard of value*. See A.A.4.

A.C.7. *Premise of value*. See A.A.5.

A.C.8. *Identification of the subject interest*. See A.A.2

A.C.9. *Sources of information* – should be described with sufficient detail to allow an experienced professional to independently identify all relevant sources of internal and external, client or non-client information used to estimate the fair value of the subject interest.

A.C.10. *Client-prepared information* – should describe information relied on and the rationale for reliance.

A.C.11. *Non-assured financial information* – should identify the source of any non-assured financial information (e.g., derived from certain client ERP); disclose that the financial information is client-prepared; disclose that the financial information was not subject to any form of assurance that the valuation professional is aware of; and state that the valuation professional is relying on the client for the completeness and accuracy of the information.

A.C.12. *Disclosure of limitations on the scope of work, including on the extent of research and analysis* – this includes the circumstances for the limitations. Additionally, where relevant, the valuation professional should include a statement indicating that these limitations might have affected the conclusion of value.

A.C.13. *Disclosure of scope changes* – this pertains to a reduced level of service as compared to what was agreed upon in the executed EA when the valuation professional’s conclusion of value will still be used to support management assertions made in financial statements issued for financial reporting purposes.

A.C.14. *Approaches and methods* – each valuation approach or method used in the analysis should be described, along with a rationale for its application. Where relevant, the rationale for deviating from common

practices within the valuation profession should be provided, and an explanation why commonly used approaches and methods were not applied in the circumstances.

A.C.15. *Valuation adjustments* – the valuation professional may need to make certain valuation adjustments to the PFI or to other financial information in connection with the application of valuation techniques in fair value measurement. The valuation professional should disclose the rationale for the adjustment or change, and the currency amount, proportional percentage, or both, of each adjustment or change.

A.C.16. *Key assumptions and estimates* – this item should identify (a) each key assumption; (b) the source, person(s), or firm (including management or the valuation professional's engagement team) responsible for developing the assumption; and (c) the rationale for using the assumption.

A.C.17. *Contrary evidence to the conclusion of value* – this item should be identified, to the extent applicable, along with the valuation professional's explanation of how this information was considered and resolved. Such contrary evidence should either be included in, or where this is not practicable, should be referenced in the client deliverable.

A.C.18. *External specialists retained by the valuation professional* – identify the external specialists' work and conclusions in the client deliverable. In addition, the client deliverable should indicate the level of responsibility, if any, being assumed by the valuation professional over the specialist's work and conclusions.

A.C.19. *Internal specialists used by the valuation professional* – the internal valuation specialist will be responsible for preparing their own client deliverable. This deliverable may either be integrated with the valuation professional client deliverable or presented as a stand-alone document.

A.C.20. *External specialists retained by the client* – when a client has retained a specialist to separately value certain assets (e.g., real property or fine art), the valuation professional may include the specialist's conclusion by reference. In addition, the client deliverable should indicate that the valuation professional has relied on the specialist's work but has not assumed any responsibility for the work and should provide the rationale for reliance.

A.C.21. *Currency(ies) used* – the currency or currencies used in the valuation as well as the exchange rates and source(s).

A.C.22. *Conclusion of value* – should be included, and the client deliverable should also include schedules or exhibits supporting the conclusion of value.

A.C.23 ***Subsequent events*** – see Glossary (Appendix J). While not typically identified in the valuation report, if the valuation professional believes that the nature and significance of such subsequent events are meaningful to the intended user(s) beyond the measurement date, such events should be disclosed in a separate section of the report, clearly stating that this is for informational purposes only and that the events do not affect the valuation as of the measurement date.

A.C.24 *Identification of the valuation professional(s)* – the client deliverable should contain the signature of at least one valuation professional who will take responsibility for the reported analyses and conclusions of value, and should also include the following:

A.C.24.1 A professional summary (e.g., academic background, professional experience, subject matter

expertise, credentials held) of valuation professionals who have undertaken or significantly contributed to the valuation engagement.

A.C.24.2 Signatures or names of all valuation professionals who have significantly contributed to elements of the analyses, conclusions of value, and client deliverable.

APPENDIX D – Interim Documentation Package

A.D In practice, valuation conclusions are often delivered to the client and other expected recipients (e.g., auditors) in the form of a set of schedules – prior to issuing the (final) client deliverable, which may include some form of a narrative report.

A.D.1. This ‘*interim deliverable*’ or ‘*interim documentation package*’ is an integral milestone in the valuation engagement. The interim documentation package assembles analysis documents and other key information supporting the valuation conclusion(s) so they can be evaluated by and discussed with the client and other expected recipients, including being subject to audit procedures by the company’s external auditors. The Task Force observes that a well-supported interim documentation package can greatly facilitate review and communication with intended and expected recipients of the analysis.

A.D.2. The Task Force believes that an effective interim documentation package should generally comprise the following items:

- A set of schedules (analysis documents) supporting the fair value measurement(s) / valuation conclusion(s), including *quantitative support* for the key assumptions used in the analysis. VPF section 6 may be helpful in guiding the valuation professional through this thought process and framing some of this support.

! Take note: The Task Force believes that it is best practice to include detailed footnotes to the valuation schedules that are as robust and as thorough as reasonably possible to enable an experienced professional reviewing the analysis to understand items 5.7.4.2.1 through 5.7.4.2.5 in VPF section 5.

- Any *qualitative support* for the key assumptions in the valuation analysis, to the extent not already addressed in the above schedules or in the footnotes thereto.
- Any contrary evidence to the conclusion of value, if applicable, and the valuation professional’s explanation of how this information was considered and resolved.
- Any limiting assumptions and/or conditions affecting the valuation analysis, unless already addressed in the schedules above, and the potential impact on the valuation analysis.
- Any relevant steps undertaken by the valuation professional, given the facts and circumstances of the engagement, demonstrating that he or she has considered the integrity and internal consistency of the valuation analysis (see VPF section 6.4), to the extent not already addressed in the above schedules or in the footnotes thereto.
- Any other significant relevant information, analysis, or documentation that, in the judgment of the valuation professional, should be communicated properly and clearly present the conclusion of value.
- A professional summary (e.g., academic background, professional experience, subject matter expertise, credentials held) of valuation professionals who have undertaken or significantly contributed to the valuation engagement.

APPENDIX E – Internal Valuation Professionals

A.E The Task Force believes that the Framework, including the guidance in section 6, should be applied by internal valuation professionals (i.e., internal to the entity, a.k.a. employed) as best practice. However, a few limited elements of the Framework related to engagement administration and reporting may differ in some respects in their application by internal valuation professionals.

A.E.1 The Task Force has identified the following elements of potential differences:

A.E.1.1 Engagement agreement guidance (including Appendix A) – an internal valuation professional may not be required to complete or obtain a signed EA letter due to their status as an employee of the entity. However, the internal valuation professional should still document the fundamental parameters of the internal valuation assignment. Additionally, for complex projects, regulatory compliance, or situations involving potential risks to objectivity, a more formalized agreement may be necessary to clearly define the scope, responsibilities, and expectations of the assignment.

A.E.1.2 Client deliverable guidance (including Appendix C) – while an employed valuation professional may not always be required to produce a formal deliverable, the need for one depends on factors such as the valuation's complexity, its intended use, regulatory requirements, and the organization's internal policies. The guidance in paragraph 5.7.4.2 should be adhered to in summarizing the results of the valuation (e.g., in an internal valuation memo).

A.E.2. The Task Force believes that all VPF principles apply to internal valuation professionals notwithstanding possible different internal conventions in applying the EA guidance and the client deliverable guidance.

APPENDIX F – Valuation Standards

The valuation standards below are intended to guide valuation professionals toward relevant professional resources; this list is not exhaustive. All references are current as of the Framework’s publication date. Because these standards may be amended or updated after publication of this Framework, valuation professionals should verify that they are using the most current version of any applicable standard through the appropriate standard-setting bodies or the professional organizations with which they are affiliated.

VPOs and Their Valuation Standards

- AICPA - <https://www.aicpa-cima.com>
Standard: *VS Section 100 - Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset*
Reference: [AICPA VS Section 100](#)
- ASA - <https://www.appraisers.org/>
Standard: *ASA Business Valuation Standards (ASA BV Standards)*
Reference: [ASA BV Standards](#)
- RICS - <https://www.rics.org/>
Standard: *RICS Valuation – Global Standards (Red Book)*
Reference: [RICS Red Book](#)

Non-Membership Valuation Standard Setters and Their Valuation Standards

- The Appraisal Foundation - <https://appraisalfoundation.org/>
Standard: *Uniform Standards of Professional Appraisal Practice (USPAP)*
Reference: [USPAP® – The Appraisal Foundation](#)
- IVSC - <https://ivsc.org/>
Standard: *International Valuation Standards (IVS)*
Reference: [IVSC - International Valuation Standards](#)

APPENDIX G – Valuation Technical Guidance and Other Resources

The list of publications below is intended to guide valuation professionals toward relevant technical and other resources depending on the nature of the subject interest being valued; this list is not exhaustive. All references are current as of the Framework's publication date; however, the valuation professional should not assume these references have been updated contemporaneously with any changes to the guidance and, thus, should verify all references using a proper resource.

The most recent year of publication has been indicated alongside each corresponding guidance and resource.

Valuation Technical Guidance:

- AICPA - <https://www.aicpa-cima.com>
 - Accounting and Valuation Guide - Business Combinations (2024)
Reference: [*Accounting and Valuation Guide - Business Combinations*](#)
 - Assets Acquired to Be Used in Research and Development Activities - Accounting and Valuation Guide (2013)
Reference: [*Assets Acquired to Be Used in Research and Development Activities - Accounting and Valuation Guide*](#)
 - Testing Goodwill for Impairment - Accounting and Valuation Guide (2013)
Reference: [*Testing Goodwill for Impairment - Accounting and Valuation Guide*](#)
 - Valuation of Portfolio Company Investments of Venture Capital and Private Equity Funds and Other Investment Companies - Accounting and Valuation Guide (2019)
Reference: [*Valuation of Portfolio Company Investments of Venture Capital and Private Equity Funds and Other Investment Companies - Accounting and Valuation Guide*](#)
 - Valuation of Privately Held Companies Equity Securities Issued as Compensation (2013, currently being updated)
Reference: [*Valuation of Privately Held Companies Equity Securities Issued as Compensation*](#)
- IPEV - <https://www.privateequityvaluation.com/Valuation-Guidelines>
 - Valuers Guide International Private Equity and Venture Capital Valuation Guidelines (2025)
Reference: [*2025 IPEV Valuation Guidelines*](#)
- IVSC - <https://ivsc.org/>
 - Valuers Guide to the Audit Process (2021)
Reference: [*Valuers Guide to the Audit Process*](#)
- The Appraisal Foundation - <https://appraisalfoundation.org/>
 - VFR Valuation Advisory #1: Identification of Contributory Assets and Calculation of Economic Rents (2010)
Reference: [*VFR Valuation Advisory #1: Identification of Contributory Assets and Calculation of Economic Rents*](#)

- VFR Valuation Advisory #1 (Toolkit): Identification of Contributory Assets and Calculation of Economic Rents (2010)
Reference: [VFR Valuation Advisory #1 \(Toolkit\): Identification of Contributory Assets and Calculation of Economic Rents](#)
- VFR Valuation Advisory #2: The Valuation of Customer-Related Assets (2016)
Reference: [VFR Valuation Advisory #2: The Valuation of Customer-Related Assets](#)
- VFR Valuation Advisory #3: The Measurement and Application of Market Participant Acquisition Premiums (2017)
Reference: [VFR Valuation Advisory #3: The Measurement and Application of Market Participant Acquisition Premiums](#)
- VFR Valuation Advisory #4: Valuation of Contingent Consideration (2019)
Reference: [VFR Valuation Advisory #4: Valuation of Contingent Consideration](#)

In development:

- Company Specific Risk Premiums
- Discount Rates on Intangible Assets

Other Resources:

- The Appraisal Foundation - <https://appraisalfoundation.org/>
 - Valuation Brief: Professional Interactions Unique to Fair Value for Financial Reporting (2025)
Reference: [Professional Interactions Unique to Fair Value for Financial Reporting](#)
 - Valuation Brief: Valuations in Financial Reporting: Company-Specific Risk Premium (2023)
Reference: [Company-Specific Risk Premium](#)

APPENDIX H – Cross-references to Valuation Technical Guidance

The Task Force has provided the following non-exhaustive list of cross-references to technical guidance relevant to the various VPF topics addressed in section 6.

Section	Technical Guidance
<i>6.1 General Fair Value Documentation Guidance</i>	
6.1.1 Fair Value Measurement – Initial Recognition & Calibration	AICPA PE/VC Guide; IVS
6.1.2 Selection of Valuation Methods and Reconciliation of Value Indications	AICPA Business Combination Guide; IVS
6.1.3 Prospective Financial Information (PFI)	AICPA Business Combination Guide; IVS
6.1.4 Tax Amortization Benefit (TAB)	AICPA Business Combination Guide; IVS
<i>6.2 Business Valuation Documentation Guidance</i>	
6.2.1 Discount Rate – Company-Specific Risk Premium (CSRP) – Calibration and DRAT Methodology	AICPA Business Combination Guide; TAF CSRP Guide (<i>in development</i>); TAF Intangible Asset Discount Rates (<i>in development</i>)
6.2.2 Growth Rate	IVS
6.2.3 Terminal Value	IVS
6.2.4 Selection of Guideline Public Companies or Guideline Transactions	IVS
6.2.5 Selection of, and Adjustments to, Valuation Multiples	IVS
6.2.6 Discounts and Premiums	TAF MPAP Guide; AICPA PE/VC Guide; IVS

6.2.7 Selection of Approaches and Methods / Assessment and Reconciliation of Value Indications (Business Valuation)	AICPA Business Combination Guide; IVS
<i>6.3 Identifiable Intangible Assets, Inventory, and Certain Liabilities – Documentation Guidance</i>	
6.3.1 Identification of Assets and Liabilities Subject to Measurement	AICPA Business Combination Guide; IVS
6.3.2 Multi-Period Excess Earnings Method and Variations – MPEEM – Distributor Method – Greenfield Method	TAF CAC Guide; TAF Customer Assets Guide; AICPA Business Combinations Guide; IVS
6.3.3 Economic Life	TAF Customer Assets Guide; IVS
6.3.4 Attrition Rates	TAF Customer Assets Guide; IVS
6.3.5 Relief-from-Royalty Method	AICPA Business Combination Guide; TAF CAC Guide; IVS
6.3.6 WARA and Asset Rates of Return / Discount Rates	AICPA Business Combination Guide; TAF CAC Guide (<i>in development</i>); TAF Intangible Assets Rates of Return Guide (<i>in development</i>); IVS
6.3.7 Selection of Approaches and Methods / Assessment and Reconciliation of Value Indications (Intangible Assets)	AICPA Business Combination Guide; IVS
6.3.8 Inventory	AICPA Business Combination Guide; IVS
6.3.9 Contract Liabilities	IVS
<i>6.4 Internal Consistency and Reconciliation Guidance</i> AICPA Business Combination Guide	

APPENDIX I – Historical Background of the VPF and MPF 2017

In 2011 and 2013, the U.S. Securities and Exchange Commission (SEC) publicly commented on the highly fragmented nature and variable maturity of the valuation profession. The SEC urged stakeholders in the profession to coordinate their efforts and establish rigorous and uniform qualifications, training, accreditation, and oversight of individuals conducting fair value measurements.

In response to these comments, a group of not-for-profit VPOs, non-membership valuation professional organizations, and other stakeholders collaborated on an initiative to address these concerns. Their efforts led to the development of the Certified in Entity and Intangible Valuations (CEIV) credential, MPF 2017 (the predecessor document to the VPF), as well as the development of a qualifications and quality monitoring framework, with the goal of improving the consistency and quality within the valuation profession. MPF 2017 was issued in January 2017 and was the first-of-its-kind document – a performance framework – providing guidance on ‘how much’ work should go into a valuation analysis and related minimum documentation requirements. Additional clarifications to MPF 2017 were issued via an FAQ document in 2019.

Adherence to the MPF 2017 was mandatory only for valuation professionals who had attained the CEIV credential. However, recognizing the benefits of preparing transparent and auditable valuations, MPF 2017 was also adopted by professionals conducting fair value measurements in connection with US GAAP financial reporting who did not acquire the credential.

Following the discontinuation of the CEIV credential in 2023, many of the original stakeholders as well as other firms and organizations that had implemented the guidance of the MPF 2017 were supportive of revisiting and updating the guidance. As a result, this updated performance framework, the VPF, has incorporated feedback from a broad range of stakeholders across the valuation profession, drawing on their years of experience in performing fair value measurements and applying the MPF 2017 to valuations.

APPENDIX J – Glossary

This glossary sets forth terms that may be unique to the Framework or are defined with a specific meaning in the context of the Framework, with the exception of several terms marked with an asterisk (*) which have been sourced from the AICPA Business Combinations guide as they were deemed important to highlight to ensure the clarity of the guidance in the VPF. Words or terms defined in the glossary are set in **bold** type the first time they are applied in proper context within this Framework.

Analysis documents. Documents that set forth the analysis that was performed by the valuation professional and generally comprise computational analyses and narrative-based documents.

Assured financial information. has been derived from financial statements that have been audited by a qualified auditor in accordance with the relevant audit standards in order to (1) obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud; and (2) issue an auditor's report that expresses an opinion about whether the financial statements, taken as a whole, are presented fairly, in all material respects, in conformity with the applicable financial reporting framework.

Benchmarking. The process of comparing a subject entity's historical, current or projected financial or valuation metrics, or a subject entity or subject asset's carrying values or other information to that of peer companies or industry data as part of a valuation analysis.

Best practice(s). A task, technique, procedure or method that would typically be performed by a valuation professional because experience has shown that it increases the reliability and quality of the work product.

Business enterprise value. Equals the *operating value* plus the fair value of nonoperating assets (for example, excess cash, marketable securities, prepaid pension assets, investments in unconsolidated subsidiaries and other long-term investments). It is also referred to as *total funds invested*, which may consist of interest-bearing debt, debt equivalents, hybrid securities, and equity. It also may be referred to as *enterprise value*.

Business unit. The lowest level or group of operating assets for which PFI is available and is consistent with their respective units of account. Business unit is also referred to as *collection of assets*. In some cases, business unit may coincide with the acquiree, whereas in other cases, an acquiree may consist of multiple business units (for example, operating segments and reporting units).

Calculation. An engagement to estimate value whereby the valuation professional and the client agree on the specific valuation approaches and methods to be applied and the extent of valuation procedures to be performed by the valuation professional in estimating the value of a subject interest. A calculation engagement generally does not include all the valuation procedures required for an engagement to estimate fair value, which might therefore yield different results. The result of a calculation engagement is a calculated value.

Client deliverable(s). The final deliverable provided to the client upon completion of the valuation process, which provides certain fundamental information about the engagement; the analysis performed; and the valuation conclusions reached. The client deliverable is tailored to meet the specific needs and preferences of the client and may take various formats.

Collection of assets. See Business unit.

Engagement to estimate fair value. Any engagement or part of an engagement that involves estimating the fair value of a subject interest to support management's assertions in their financial statements for financial reporting purposes.

Expected recipients. Individuals and/or entities, other than the client of record or other intended users, with whom the client deliverable may be shared. These recipients typically include the client's advisers (e.g., auditors or attorneys), as specified within the EA.

Experienced professional. A professional who possesses the appropriate qualifications, technical competence, and relevant experience in preparing, reviewing, or auditing client deliverables issued for financial reporting purposes (e.g., valuation professionals, management, auditors).

Financial reporting. See Financial reporting purposes.

Financial reporting purposes. Encompasses all financial statements that include fair value measurements and fair value disclosures for businesses, business interests, intangible assets, inventory, and contract liabilities.

Intended Users. Generally, the client of record (individuals and/or entities), but may include other parties specifically identified as addressees in the EA and the subsequent client deliverable. Additional non-client parties may subsequently be added as intended users based on a contractual agreement between the professional and the client.

Key Assumptions. Assumptions for which a minor or reasonably possible range of variation, either individually or when combined with others, would significantly affect the measurement of the valuation estimate(s).

Non-assured financial information. Financial information that is derived from sources other than the client's audited financial statements. Such information cannot be considered to have been subject to an assurance engagement even if it is from a period that was subject to an audit engagement.

Non-membership Valuation Professional Organization(s). Not-for-profit valuation professional organizations that do not have a membership base but that have been established to draft and issue valuation standards that are adopted by other valuation professional organizations. Examples of non-membership valuation professional organizations include The Appraisal Foundation and the International Valuation Standards Council.

Nontaxable transaction. A transaction in which the acquisition of a business is carried out through the purchase of the company's stock, whereby the existing tax basis of the acquired assets and assumed liabilities typically carry over to the acquirer, subject to the rules of the relevant tax jurisdiction. Further, the acquired stock tax basis may be adjusted based on the rules of the relevant tax jurisdiction (e.g., the acquired stock tax basis may be adjusted to the amount paid in the transaction, thus resulting in no difference between the acquirer's tax and book basis on the acquisition date).

Operating value. The fair value of the ongoing operations of a company (or business unit) consisting of operating assets less operating liabilities.

Professional judgment. The skill and process of making informed and reasonable decisions based on critical reasoning and the cumulative experience of the valuation professional.

Professional standards. Standards that define the requisite characteristics of individual professionals and their conduct. Typically, these are codes of ethics or conduct that: 1) require professional behavior and acting competently, independently, objectively, and transparently; and 2) define the qualities of a professional as ethical, independent, objective, having requisite skills, educated, experienced, tested, trained, and credentialed or licensed.

Projection risk. The divergence (if any) between the PFI for the subject interest, provided by management, and the expected cash flows from the perspective of market participants; specifically, the deviation in the assumptions in the PFI for the subject interest from the assumptions that would underlie expected cash

flows from the perspective of market participants, whether due to management optimism or other factors. The presence of projection risk indicates that the PFI provided by management is conditional or that it incorporates optimistic or pessimistic bias.

Prospective financial information (PFI). Any financial information about the future. The information may be presented as complete financial statements or limited to one or more elements, items, or accounts. Prospective financial information can be either a forecast or a projection (AICPA Guide, *Prospective Financial Information*).

Should. When used in conjunction with identified tasks, techniques, or procedures, the word *should* indicates actions that are recommended to meet the expected level of professionalism. Divergence from best practices may be appropriate when the valuation professional determines that alternative actions are appropriate for the given facts and circumstances.

Source documents. Documents, data and information collected from company sources and/or external third-party sources relevant to the valuation analysis.

Specialist(s). A professional or group of professionals with expertise and experience in a discipline or subject matter that a valuation professional is not professionally competent to perform, who may be engaged to either perform or support valuations for financial reporting purposes. A specialist may be either internally employed within a valuation professional's firm or externally engaged. Specialists may sometimes be referred to as subcontractors.

Subject interest(s). Refers collectively or individually to businesses, business interests, intangible assets, inventory, and contract liabilities valued for financial reporting purposes in an engagement to estimate fair value.

Subsequent events. Events occurring between the measurement date and the client deliverable date that were not known or knowable by market participants as of the measurement date, and as such are not reflected in the fair value analysis and conclusion.

Taxable transaction. A transaction in which the acquisition of a business is carried out through a direct purchase of assets and assumption of liabilities, whereby the tax basis of the acquired assets and assumed liabilities are adjusted based on the rules of the relevant tax jurisdiction (often to fair value).

Technical standards. Standards that address the method and technical correctness of valuation analyses by considering appropriate inputs, application of methods, and reporting guidelines.

Valuation Adjustments. Adjustments that the valuation professional may need to make to PFI and/or the purchase price (in a business combination) in connection with the application of valuation techniques in fair value measurement.

Valuation Performance Framework. Provides guidance on the minimum level of support, in terms of scope of work, extent of research and analysis, and documentation, that should be prepared or obtained when estimating fair value used for management's assertions in financial statements for financial reporting purposes. It promotes a thorough and rigorous approach, ensuring that professional judgment is supported by appropriate evidence and that analysis and conclusions are transparently communicated in both the client deliverable and supporting working papers.

Valuation professional(s). An individual who may be either engaged (contracted/external) or employed (internal), possessing the necessary qualifications, ability and experience to execute a valuation for financial reporting in an objective, unbiased, ethical, and competent manner.

Valuation professional organization(s) (VPO(s)). A not-for-profit membership organization that sponsors and supports valuation credentials with qualification requirements, quality controls, education, and codes of ethics.

Valuation services. Services to provide valuation analyses used to support management assertions made in financial statements issued for financial reporting purposes.

Work file. Documentation – which may include paper, electronic files, or other forms of recorded media – that comprises the working papers and the client deliverable and supports the conclusion of value.

Working papers. Documentation not included in the client deliverable but retained by the valuation professional to support the analysis performed and the conclusion of value.

APPENDIX K – Acronyms Used in the VPF

Acronym	Full Term
AICPA	American Institute of Certified Public Accountants
ASA	American Society of Appraisers
ASC	Accounting Standards Codification
AVPF	Application of the Valuation Performance Framework
CAC	Contributory Asset Charge
CAGR	Compound Annual Growth Rate
CEIV	Certified in Entity and Intangible Valuations Credential
CGU	Cash-Generating Unit
COGS	Cost of Goods Sold
CSRP	Company Specific Risk Premium
DFNWC	Debt-free Net Working Capital
DLOC	Discount for Lack of Control
DLOM	Discount for Lack of Marketability
DRAT	Discount Rate Adjustment Technique
EA	Engagement Agreement
EBIT	Earnings Before Interest and Taxes
EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortization
EBITDAR	Earnings Before Interest, Taxes, Depreciation, Amortization, and Rent
EPVT	Expected Present Value Technique
ERP	Enterprise Resource Planning
FASB	Financial Accounting Standards Board

Acronym	Full Term
FAQ	Frequently Asked Question
FIFO	First In, First Out
FIPF	Financial Instruments Performance Framework
FVLCD	Fair Value less Costs of Disposal
G&A	General and Administrative Expenses
GPC	Guideline Public Company
GPCM	Guideline Public Company Method
GR	Growth Rate
GT	Guideline Transaction
GTM	Guideline Transactions Method
IAS	International Accounting Standards
IFRS	International Financial Reporting Standards
IPR&D	In-Process Research and Development
IRR	Internal Rate of Return
IVS	International Valuation Standards
IVSC	International Valuation Standards Council
LIFO	Last In, First Out
M&E	Machinery and Equipment
MPAP	Market Participant Acquisition Premium
MPEEM	Multi-Period Excess Earnings Method
MPF	Mandatory Performance Framework
MVIC	Market Value of Invested Capital
NRV	Net Realizable Value

Acronym	Full Term
PFI	Prospective Financial Information
PP&E	Property, Plant, and Equipment
R&D	Research and Development
RFRM	Relief-from-Royalty Method
RICS	Royal Institution of Chartered Surveyors
ROIC	Return on Invested Capital
RU	Reporting Unit
SEC	Securities Exchange Commission
TAB	Tax Amortization Benefit
TAF	The Appraisal Foundation
TF	Task Force
TIC	Total Invested Capital
US GAAP	U.S. Generally Accepted Accounting Principles
USPAP	Uniform Standards of Professional Appraisal Practice
VIU	Value in Use
VPF	Valuation Performance Framework
VPOs	Valuation Professional Organizations
WACC	Weighted Average Cost of Capital
WARA	Weighted Average Return on Assets
WIP	Work in Process (US GAAP) or Work in Progress (IFRS)