

# Agenda Item

## C-1

### Technology – Issues and Task Force Preliminary Views

#### How the Project Serves the Public Interest

The public interest will be served by modernizing the Code and enhancing the contextual relevance of its various provisions in light of the major trends and developments in technology, thereby supporting its effective application in an evolving digital age.

#### I. PURPOSE OF THIS PAPER

1. This paper outlines the Task Force's preliminary views on the seven recommendations outlined in the March 2020 Approved Project Proposal and highlights areas of overlap between the recommendations. Representatives are asked to provide directional input on each of the following:

#### Summary of the Task Force's Preliminary Views

##### **Recommendation 1: Building Trust**

The Task Force considered whether it is appropriate to amend the Code to better reflect:

- A desire to draw attention to ethical values in developing and applying innovative and disruptive technology
- The potential negative impact of technology through a loss of trust
- The role of professional accountants (PAs) in promoting a positive ethical culture across organizations and among business partners and third parties, influencing others to act ethically as well as holding oneself and others accountable for upholding ethical principles.

The Task Force is recommending adding additional application material in Section 120<sup>1</sup> in relation to building trust specific to technology, but that these matters largely be dealt with in non-authoritative material.

**Representatives are asked for indicative views as to a need for a direct reference to technology, with respect to building trust, in the introductory section of the Code (refer to paragraph 12), the suggestion to add material in Section 120 (refer to paragraph 13) and the recommendation that these matters largely be dealt with in non-authoritative material (refer to paragraph 16).**

##### **Recommendation 2: Complexity**

The Task Force explored the difference between matters and situations that are *complicated* versus *complex* and identified four non-mutually exclusive options to address threats to the Fundamental Principles (FPs) created by the complexity of the professional environment in which PAs perform their professional activities:

Option 2-1 – Permit additional threat categories<sup>2</sup> to exist, whether explicitly listed in the Code or not.

<sup>1</sup> Section 120 The Conceptual Framework

<sup>2</sup> For example, in paragraphs 120.6 A2-A3 and 120.12 A2

Option 2-2 – Amend the existing threat categories to build in missing elements of complexity.

Option 2-3 – Add one or more threat categories.

Option 2-4 – Highlight complexity as a pervasive factor in decision making while applying the conceptual framework.

**Representatives will be invited to comment on each of these options and on whether a distinction between complicated and complex is useful to focus in on the characteristics of technology, its disruptive nature and the rapid and exponential changes created by new tools or methods.**

### **Recommendation 3: Transparency**

The Technology Working Group (TWG) Phase 1 Final Report found that “Digital transformation in business and society has resulted in a greater call for, and public expectation that, businesses and organizations will be transparent in their dealings with customers and other stakeholders.”

The Task Force notes that elements of transparency are already implied within Subsection 111<sup>3</sup> and does not propose that the Code include a blanket requirement for PAs to be transparent. However, the Task Force considers that it would be valuable to clarify its inclusion in Subsection 111 and further encourage PAs to be transparent, as appropriate, as part of Subsection 113<sup>4</sup>, and in particular with reference to diligence.

**Representatives are asked for their thoughts on this approach to transparency by making the connection to Integrity clearer in paragraph R111.2 (c) and to explicitly encourage the PA to be transparent, as appropriate, by expanding what it means to be diligent in paragraph 113.1 A3 (Refer to paragraphs 57 and 63).**

### **Recommendation 4: Accountability**

In considering the appropriate accountability of PAs when operating in a technology-enabled professional environment, the TWG formed the view that PAs must (i) be willing to be held accountable for their work, regardless of whether other human or intelligent agents contribute to their conclusions and decision-making processes, and (ii) take the necessary steps to ensure that they properly discharge their duties.

The Task Force is exploring (i) a definitional approach to reflect accountability in the definition of networks and partnerships, (ii) a need to broaden Section 220,<sup>5</sup> and (iii) a close connection with recommendation 3 Transparency and a need to balance with Recommendation 5 Confidentiality.

### **Recommendation 5: Confidentiality**

The TWG Phase 1 Final Report formed the view that Subsection 114<sup>6</sup> should be enhanced and suggested several items for consideration. The Task Force is considering a more principles-based approach in Subsection 114 to ensure the FP continues to address emerging issues arising in a technology context.

### **Recommendation 6: Enabling Competencies and Skills**

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<sup>3</sup> Subsection 111, Integrity

<sup>4</sup> Subsection 113, Professional Competence and Due Care

<sup>5</sup> Section 220, Preparation and Presentation of Information

<sup>6</sup> Subsection 114, Confidentiality

The Task Force is exploring ways to incorporate additional application material to highlight the importance of professional (“soft” or enabling) skills and provide examples of the emergent technical and professional skills needed in the digital age, noting that the International Panel on Accountancy Education (IPAE) has already spent significant time exploring new and emerging skill requirements given advances in technology, and the International Education Standards (IESs) detail the skills required and at what level of proficiency.

The Task Force is exploring three options:

6-1 – Cross-reference the IESs within Subsection 113.

6-2 – Incorporate selected text from the IESs directly into the Code.

6-3 – Use a hybrid approach with some IES wording as well as a direct IES cross-reference.

**Representatives are invited to comment on the Task Force’s recommendation outlined in option 6-3, to use a hybrid approach to highlight the importance of professional skills and provide examples of the emergent technical and professional skills needed in the digital age (Refer to paragraph 80)?**

#### **Recommendation 7: Independence**

The Task Force’s preliminary view is that new types of engagements and the sale or licensing of new tools can best be incorporated in the Code as follows:

- For engagements that reflect “pure” services and fit within the existing subsections of Section 600,<sup>7</sup> adjustments to wording might be beneficial to ensure that their inclusion is apparent;
- The sale or licensing of a tool developed by a firm can be best addressed by expanding Section 520<sup>8</sup> to address the potential business relationship that might result; and
- To the extent that new engagement types are emerging that are not encapsulated within extant subsections 601 to 610, new subsections should be developed based on the nature or objective of the service (and not based on the specific technology being used).

The Task Force considers that a blanket prohibition of the sale of a product to an audit client would be overly restrictive and is of the view that when a technology/tool/system (“product”) is sold or licensed by a firm to an audit client, the independence threats resulting from that product sale or licensing arrangement should be evaluated based on two perspectives:

- The threats that might result based on the nature of the business relationship that is formed through the arrangement; and
- The threats that might result based on the underlying service or output performed by the product, making the assumption that it is the provision of a service that is relevant and not whether the service is performed by a technology product, by firm staff, or a combination thereof.

**Representatives are invited to comment on the Task Force’s views. (Refer to paragraphs 98 and 100.)**

The Task Force recommends amending the definition of “office” and is exploring whether to add additional application material by incorporating factors to consider in determining the office of the

<sup>7</sup> Section 600 Provision of Non-assurance Services to an Audit Client

<sup>8</sup> Section 520 Business Relationships

engagement partner to make it more prominent that the geographical office is neither the primary or only consideration.

The Task Force recommends retaining the term “routine and mechanical” to reduce the risk that, if taken literally, this term could be interpreted to be inclusive of judgmental services delivered through automation which gives the appearance of them being routine and mechanical.

**Representatives are invited to comment on the Task Force’s views. (Refer to paragraphs 114 and 126.)**

## II. BACKGROUND

2. The objective of the project is to enhance the Code’s provisions in response to the transformative effects of major trends and developments in technology in order to maintain the Code’s robustness and relevance as a cornerstone of public trust in the global accountancy profession.
3. The IESBA committed in its [Strategy and Work Plan, 2019-2023](#) to a major strategic initiative on Technology. Through this initiative, the IESBA aimed to gather an understanding of the transformative effects of trends and developments in technology on the assurance, accounting and finance functions, and explore their ethical implications for the [International Code of Ethics for Professional Accountants \(including International Independence Standards\)](#) (the Code).
4. In December 2018, the IESBA established a Working Group<sup>9</sup> with a mandate to:
  - (a) Identify potential ethical implications of technology developments on the robustness and relevance of the FPs and independence standards, in terms of both challenges to PA’s compliance with requirements under the Code and ways in which technologies could be used to support and enhance compliance;
  - (b) Develop proposed responses to address any identified ethical implications, whether through revisions to the Code or through developing non-authoritative material; and
  - (c) Identify specific outreach and partnership opportunities to share knowledge and to promote the Code as an effective tool for PAs to utilize in addressing ethics issues related to the use and effects of technology on their professional activities.
5. Following fact finding, including a significant program of outreach to stakeholders, the Working Group delivered its report of findings and recommendations to the IESBA in December 2019 (Phase 1 Report). At the March 2020 meeting, the IESBA approved a [project proposal](#) to consider enhancements to the Code.
6. This paper outlines the Task Force’s preliminary views on the recommendations outlined in the March 2020 Approved Project Proposal.

## III. TASK FORCE PRELIMINARY VIEW ON RECOMMENDATION 1: BUILDING TRUST

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<sup>9</sup> In view of the interoperability of the Code with the standards of the International Auditing and Assurance Standards Board (IAASB) and the strategic priority given by both Boards to addressing the developments in technology, the IESBA agreed to coordinate its work in this area with the IAASB. As a result, the IESBA’s Technology Task Force is linked to the IAASB’s Technology Working Group through the participation of a correspondent member from each Board on the other Board’s Working Group.

7. The Task Force considered the recommendation to add new application material in Part 1 of the Code to more clearly highlight a broader societal role for PAs in promoting ethical behavior as a critical, consistent foundation for businesses, firms and other organizations, particularly when developing and using technology.
8. Specifically, the Task Force considered whether there is a need to amend the Code to:
  - i. Provide appropriate attention to ethical values when both developing and applying technology;
  - ii. Highlight that the potential negative ramifications of the impact of technology, if not addressed early on, can result in a loss of confidence in the PAs involved (and, by extension, the profession); and/or
  - iii. Promote an ethical culture across their own organizations and among business partners and third parties, influencing others to act ethically as well as holding oneself and others accountable for upholding ethical principles.
9. As part of its work, the Task Force reviewed the responses to the [Role & Mindset](#) exposure draft as related to technology and considered stakeholder feedback.
10. The Task Force explored different locations, described in non-mutually exclusive options as follows.

#### **Option 1-1: Revise Section 100**

11. While the introductory paragraphs in Section 100 as amended by the Role & Mindset project neither specifically refer to “trust” nor “technology”, the Code does reference confidence in the accountancy profession.<sup>10</sup> The Task Force considered possible drafting to amend paragraph 100.2 to highlight the increasing use of technology, for example with the addition of possible wording, which could be expanded to include risks of reputational damage etc.
12. Whereas the Task Force did see advantages to adding a direct reference to technology in the introductory section to send a message to PAs as to the increasing importance of technology, both in their roles and in the wider business and societal contexts, on balance the Task Force considered that the work completed by the Role & Mindset project has sufficiently addressed confidence in the profession and does not recommend any further changes to the introductory section of the Code in this regard.

#### **Option 1-2: Revise Section 120**

13. The Task Force recommends adding application material in relation to building trust, specific to technology, by expanding paragraph 120.13 A3<sup>11</sup> to highlight the importance of ethical considerations when developing and using technology. For example:

*“Professional accountants are expected to encourage and promote an ethics-based culture in their organization, taking into account their position and seniority. Increasingly the role of the accountant, whether in business or in practice, involves the use of technology, either directly or in relation to outputs from technology driven processes. Promoting ethical behavior as a critical, consistent foundation for organizations is particularly relevant when developing and using technology given its potential impact.”*

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<sup>10</sup> Paragraph 100.2

<sup>11</sup> Referenced in respect to approved Role & Mindset text and paragraph numbering.

14. With respect to the broader role for PAs in society as champions of ethics in developing and applying technology, the Task Force considered the role of the PA in promoting an ethical culture not only within their own organizations, but also among business partners and third parties, influencing others to act ethically as well as holding others accountable for upholding ethical principles. The Task Force considered whether to expand paragraph 120.13 A2 (d).<sup>12</sup>
15. The Task Force recommends caution against assigning PAs more responsibility beyond their own organizations to include business partners and third parties. Consistent with discussions from the Role & Mindset project, the IESBA stopped short of requiring the promotion of an ethical culture in third parties, and rather believes that highlighting the need for adhering to ethical values in one's dealings with third parties is more appropriate within the Code.

#### **Option 1-3: Developing non-authoritative material**

16. The Task Force nonetheless recommends developing non-authoritative material to address the broader role of PAs with respect to technology given that many PAs are recognized as influential leaders in both their organizations and in society. As a result, PAs – much as other professionals – have a part to play in influencing the ethical development and use of disruptive technologies within the scope of their competence.

#### **Additional Feedback from Role & Mindset ED Responses**

17. A respondent to the Role & Mindset ED suggested that “technology” be a defined term in the Glossary of the Code to include software applications, hardware systems and artificial intelligence. The Task Force will continue to explore whether there is a need to define the term “technology” in the Code, and if so, how this might be achieved.

#### **Matters for CAG consideration**

Representatives are asked for indicative views as to:

- a. A need for a direct reference to technology, with respect to building trust, in the introductory section of the Code? (see paragraph 12)
- b. The suggestion to add additional application material in Section 120 in relation to building trust specific to technology? (Refer to paragraph 13)
- c. The Task Force's recommendation that these matters largely be dealt with in non-authoritative material. (Refer to paragraph 16)

#### **IV. TASK FORCE PRELIMINARY VIEW ON RECOMMENDATION 2: COMPLEXITY**

##### **How does “complexity” manifest for PAs and what impact does this have?**

18. The Task Force identified a number of examples of circumstances that PAs face as a result of technology developments or how technology is being used in an increasingly complex world and the impacts that these uses are having:

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<sup>12</sup> “The promotion of an ethical culture within an organization is most effective when: [...] (d) The organization adheres to ethical values in its dealings with third parties.”

- Developing and working with disruptive technology is not necessarily a core competence of a PA; however, PAs are increasingly taking on responsibility in developing and using such technology in order to meet employer, client, and market expectations and needs. Taking on such increased responsibility with insufficient professional capacity threatens PAs' compliance with the FPs of Professional Competence and Due Care (PC&DC), as well as Integrity, Objectivity and Professional Behavior.
- Some AI applications and underlying algorithms have become or are becoming autonomous and deep learning allows them to adapt without it being easy or even possible for humans to fully understand the adaptations taking place.
- Rapid but constant change in standards, regulation, and legislation, including technology-related legislation such as data privacy acts, creates significant compliance challenges, particularly for PAs exposed to such change – and at times competing or varying requirements – across a broad range of different jurisdictions and professional activities.
- Despite the pace of standards, regulatory, and legislative change, this continues to be outpaced by the exponential rate of change in the development and use of many disruptive technologies. Such lag in standards and regulations results in PAs needing to operate in periods of increased uncertainty and increased reliance on principles-based approaches (for example, the emergence of cryptocurrencies and the lag time as to how to regulate, account for, and audit such activity).

### **Complicated versus Complex**

19. Dealing with some level of complexity is clearly not new for PAs. For example, the perception of “standards overload” has been observed for many years. In order to address the question of “why does complexity warrant changes to the Code now?” the Task Force reflected on the characteristics of technology, its disruptive nature, and the rapid and exponential changes created by new tools and methods. This focus is based directly on the input of numerous stakeholders as documented in the Phase 1 Final Report.
20. PAs have long been expected to deal with *complicated* matters and situations, and to seek additional training or get an expert involved in cases where the matter is more complicated than their own expertise can manage. But stakeholders have expressed a strong view that today’s environment is not “business as usual” and that the decision-making processes involving advanced technology are increasingly moving beyond the realm of complicated and into the *complex*. Although the words “complicated” and “complex” are often used interchangeably, they are not the same. In fact, a large body of academic work, known as “complexity theory”, supports this differentiation and dates back to the 1960s. Consider the following “simple” to “complex” continuum:

	Simple	Complicated	Complex <sup>13</sup>
Characterized by	<ul style="list-style-type: none"> <li>• Known knows</li> <li>• General stability and clear cause-and-effect relationships that are easily discernible by everyone</li> <li>• A formula can be followed and repeated with relatively little expertise and be expected to produce roughly uniform results</li> <li>• Competent professional can manage this easily without consulting experts</li> </ul>	<ul style="list-style-type: none"> <li>• Known unknowns</li> <li>• Following a tried and true formula is insufficient</li> <li>• Expertise is necessary and generally sufficient, though there might be a need to involve multiple disciplines</li> <li>• Once a problem is solved it tends to stay solved; generally linear, even if multifaceted</li> <li>• Different professionals arrive at similar solutions (within a reasonable range).</li> </ul>	<ul style="list-style-type: none"> <li>• Unknown unknowns</li> <li>• Interactions are nonlinear, and minor changes can produce disproportionately major consequences</li> <li>• Expertise necessary, but not sufficient; multidisciplinary approaches valuable, but not sufficient</li> <li>• Obvious interventions produce non-obvious outcomes</li> <li>• Constant flux and unpredictability (particularly both emergent and long-term behavior)</li> <li>• Typically involve very large, dynamic data sets</li> <li>• Solutions can't be imposed, they arise from the circumstances</li> <li>• Experts will have differing opinions, range might not be definable</li> <li>• Impossible or impractical to know all relevant facts; rather, there is a need to be informed of best practices and understand what they mean and how to implement them</li> </ul>
Threatens	n/a	Objectivity, PC&DC	Objectivity, PC&DC, and perhaps Confidentiality and Professional Behavior

<sup>13</sup> The characteristics of complexity summarized in the table are drawn from academic research. See, for example: Moses J (2010) "Flexibility and Its Relation to Complexity and Architecture"; Senge, P (1990) "The Fifth Discipline: The Art and Practice of the Learning Organization"; Sussman, J (2005) "The New Transportation Faculty"; Rehtin, E & Maier, M (1997) "The Art of System Architecting"; Coveney, P & Highfield, R (1995) "Frontiers of Complexity"; Levy, D (2000) "Applications and Limitations of Complexity Theory in Organization Theory and Strategy"; Ferreira, P (2001) "Tracing Complexity Theory".



Competence focus	Technical	Principally technical, with a mix of professional and enabling skills as needed	Technical still necessary, but principal focus is on professional and enabling skills (growth mindset, critical thinking, innovation, collaboration)
Mitigations	n/a	<ul style="list-style-type: none"> <li>• Research and get training</li> <li>• Engage an expert or get a mentor to oversee</li> </ul>	<ul style="list-style-type: none"> <li>• Assess reasonableness of outputs based on inputs</li> <li>• Collaborative consultation</li> <li>• Iteration</li> <li>• Experimentation and simulation</li> <li>• Develop and implement an AI system to assist</li> <li>• Develop a growth mindset – innovation and adaptation</li> <li>• Ongoing management, rather than determining “a” solution</li> </ul>

21. Based on the comments received from the PIOB observer at the June 2020 IESBA meeting, the Task Force reflected on the role that complexity has played in numerous accounting, auditing, and financial failures. The Task Force began by evaluating the Global Financial Crisis of 2008.
22. In this crisis, by distinguishing carefully between the terms “complicated” and “complex”, one might say that one of the key causes of the crisis was how *complicated* and opaque financial instruments had become. In its April 2010 Report for Congress, the US Congressional Research Service noted that “(1) investors were unable to make independent judgments on the merits of investments, (2) risks of market transactions were obscured, and (3) regulators were baffled.”<sup>14</sup>
23. At the same time, systems, behaviors and circumstances became more *complex*, and computer models did not address this. Performance forecasts for complicated products linked to mortgages were based on only a few decades worth of data, or in the case of subprime loans, only a few years of data. “[C]omplex systems are not confined to historical experience. Events of any size are possible, and limited only by the scale of the system itself.”<sup>15</sup>
24. UC Berkeley researchers also found that *complexity* threatened the Federal Reserve’s ability to anticipate the crash. They found that the US Federal Reserve’s decision-making body, the Federal Open Market Committee (FOMC), “tried to explain the rise and fall of housing prices in terms of

<sup>14</sup> Excerpt from [Causes of the Financial Crisis](#) - Report for Congress (April 2010) prepared by Congressional Research Service.

<sup>15</sup> [Causes of the Financial Crisis](#) - Report for Congress (April 2010) prepared by Congressional Research Service. quoting James G. Rickards, “A Mountain, Overlooked: How Risk Models Failed Wall St. and Washington,” Washington Post, Oct. 2, 2008, p. A23

fundamental issues of supply and demand, which was an inadequate frame to recognize the complexity of the changes taking place throughout the entire economy.”<sup>16</sup>

25. Additional examples of “scandals” or “crises” where criticism was later directed at PAs raise the question “Was there an underlying threat to the FPs?”. In many situations, although there might have been an element of self-review, intimidation or one of the other types of threats, the Task Force remains of the view that that is not the whole story. The existing threat categories seem to relate more clearly to the audit context and are not so easy to apply to other PAs. The Task Force requests Representatives to consider what threats to the FPs arose, from different perspectives, in the following examples:
- Barings Bank collapsed after suffering losses resulting from unauthorized futures contracts conducted by its employee Nick Leeson working at its office in Singapore.
    - Leeson was concurrently the general manager for trading, and the head of settlement operations, enabling the authorized futures contracts to occur without detection.
    - Funds were regularly requested from London to cover up losses arising from the unauthorized investments. Staff wired funds across without question, despite not being able to reconcile the payments.<sup>17</sup>
  - The Madoff scandal, whereby Bernard Madoff’s firm perpetrated securities fraud on its advisory clients through a multi-billion dollar Ponzi scheme over a number years.
    - Questions had been raised to the SEC about Madoff’s operations prior to the securities fraud being discovered. However, SEC staff found no evidence of fraud after investigation.<sup>18</sup>
    - The auditor of Madoff’s firm consisted of two principals and had withdrawn millions from the Madoff account over the years.<sup>19</sup>
  - The Greek debt crisis, triggered when it was announced that Greece’s budget deficit was nearly double original estimates, causing its borrowing costs to spike as credit agencies downgraded the country’s sovereign debt to junk status.
    - Allegations that the Greek government had attempted to obscure debt levels to enter the Eurozone through complex derivative arrangements led to a further drop in investor confidence.<sup>20</sup>
    - EU-IMF bailout deal approved a 53.5%<sup>21</sup> write-down of Greek debt, contrasting with UK bank RBS’s write-off of 79%<sup>22</sup> Greek debt.

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<sup>16</sup> [What Really Caused the Great Recession?](#) Institute for Research on Labor and Employment, UC Berkeley

<sup>17</sup> Report of the Board of Banking Supervision inquiry into the circumstances of the collapse of Barings: <https://www.gov.uk/government/publications/report-into-the-collapse-of-barings-bank>

<sup>18</sup> The Madoff Scandal, Market Regulatory Failure and the Business Education of Lawyers: <https://scholarship.law.ufl.edu/cgi/viewcontent.cgi?article=1500&context=facultypub>

<sup>19</sup> SEC complaint: <https://www.sec.gov/litigation/complaints/2009/comp20959.pdf>

<sup>20</sup> [Greece’s Debt Crisis: Overview, Policy Responses, and Implications](#)

<sup>21</sup> Greece’s Debt timeline: <https://www.cfr.org/timeline/greeces-debt-crisis-timeline>

<sup>22</sup> UK Bank RBS write-off of Greek debt: <https://www.reuters.com/article/us-europe-banks/europes-banks-bleed-from-greek-debt-crisis->

- UK banking crises, whereby the growth of new risky and complex products (for example, CDOs) was identified as one of the factors triggering the UK banking sector collapse. The Report<sup>23</sup> of the Housing of Commons Treasury Committee on the Banking Crisis noted that:
    - Institutions had a shaky grasp on these products, what they comprised and what their value was. Judgment was clouded by the strong correlation between complexity and profitability.
    - Standard and Poor's, according to one report, admitted that it could take a whole weekend for computers to perform the calculations needed to assess the risks of complex CDOs.
  - Major stock exchanges suspending trading after technical glitches, for example:
    - On May 6, 2010, the prices of many U.S.-based equity products suddenly plummeted 5-6% in a matter of minutes before rebounding almost as quickly. This volatility was induced by an automated execution algorithm.<sup>24</sup>
    - A report<sup>25</sup> issued by the SEC and CFTC noted that in this new dynamic electronic trading environment, market structures and regulation have to be more forward looking, with rules and regulations designed on an ex ante basis rather than an ex post basis.
26. It is seen in the above examples that the relationship between the underlying transactions/products and their profits was not fully understood by PAs. Yet PAs had gravitated towards accepting that relationship without further question (Barings: funds wired with no question; Madoff: SEC staff closed the fraud investigation case with no issue; UK banks: invested in complex layered products they did not fully grasp).
27. The Task Force is of the view that in these cases, the PAs were unaware of the extent to which unknown unknowns might impact outcomes. That is, the incorporation of algorithms into the financial market, complex investment products and layered transaction structures introduced dynamic datasets with non-linear interactions and outcomes, leading to unpredictability and constant fluctuations. This meant that PAs could no longer rely on the traditional sources of decision making in those cases (for example, based on historical trends and experience) and quickly ceased to be able to know all the relevant facts in their decision making.
28. However, this also begs the question of how inherent human behavior interacts with situations one does not know or understand. For example, to the extent that the PA was aware of not understanding a situation, why did they not ask further questions? Was it driven by 'ego'/not wanting to look 'incompetent'; or was it easier to take the path of least resistance (no one questions profitability); or other combinations of factors?
29. Stakeholders indicate that the need to address complex issues is becoming more prevalent, i.e., there are increasingly more unknown unknowns and systems that rely on vast, intricately interconnected and dynamic data sets. PAs have regularly dealt with complicated situations in the past, but are now increasingly dealing with complex situations. Disruptive technologies have led to

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<sup>23</sup> House of Commons Treasury Committee: <http://rse.hi.is/wp-content/uploads/2017/11/House-of-Commons.BankingCrisis.Britishbanks.pdf>

<sup>24</sup> Report from Joint CFTC-SEC: <https://www.sec.gov/news/studies/2010/marketevents-report.pdf>

<sup>25</sup> Recommendations regarding Regulatory Responses: <https://www.sec.gov/spotlight/sec-cftcjointcommittee/021811-report.pdf>

new, highly complex systems and also enabled PAs to realize that there are many unknown unknowns in some existing systems.

### **Elements of “complexity”**

30. The Task Force identified the following elements that are commonly inherent in circumstances where complexity is present:
- Exponential pace of change
  - Lack of transparency/explainability in technology being adopted
  - Uncertainty/ambiguity/contradictory forces, regulations/legislation, and guidance
  - Overwhelming nature and level of intensity
  - Resource constraints, including intensified time pressure (“do more with less”)
  - Capability constraints, including both ability and capacity to perform competently (e.g., unfamiliarity).

### **To what extent is complexity missing from the Conceptual Framework?**

31. The Task Force is of the view that it is important for PAs to consider complexity when applying the conceptual framework.
32. The Task Force considered whether the Code already leads a PA to specifically consider the impact of complexity, either related to technology or, more broadly, on compliance with the FPs to identify whether a gap in the Code is coming to light as the business environment and technology (often interrelated) have become materially more complex.
33. Complexity has the potential of threatening compliance with multiple FPs, including:
- Objectivity (e.g., bias of believing a matter is complicated rather than complex, and so looking for the "solution" rather than ongoing management of the issue; risk of automation and over-reliance bias)
  - Professional competence and due care (e.g., facing too many unknowns and/or too many interrelated factors stretches both competence and the ability to effectively apply due care)
  - Confidentiality (e.g., systems or structures that are overly complex might lead to inadvertent disclosure of information to parties not entitled to receive it)
  - Professional behavior (e.g., improper management of organizational risk that leads to project or business failure can adversely affect the good reputation of the PA, the organization, and the profession; decision-making in environments with interrelated, conflicting laws and regulations that are also impacted by societal expectations are inherently complex).
34. In many instances, the identified elements of complexity highlight ever increasing pressure being placed on a PA. As noted in the Role and Mindset ED, part of the scope of that project was to address threats to compliance with the FPs arising from bias and pressure. The IESBA considered adding application material on bias in the Code to highlight that bias is a potential threat to compliance with each of the FPs. However, given the significance of bias, the IESBA determined that it would be more appropriate to include new text in Section 120.

35. The Task Force considered whether it was necessary to explicitly address threats to compliance with each of the FPs from complexity and all its elements, including the element of pressure. Based on its deliberations to date, the Task Force reached the preliminary view that the Code does not adequately address the impact of “complexity.” Within the existing threat categories laid out in paragraph 120.6 A3, there is no clean fit or clear trigger to prompt a PA to consider how complexity and its multiple facets might threaten their compliance with the FPs. The Task Force considers this to be a risk. If a PA cannot easily identify their situation as falling into one or more of the listed threat categories, they might incorrectly assume that an otherwise valid threat does not need to be evaluated and, if necessary, addressed through the application of appropriate safeguards.
36. The Task Force is of the view that there is significant value in signaling to PAs a need to reflect on the impact of increasing complexity on compliance with the FPs, for example, to identify threats in situations that are overwhelming or where unrealistic expectations to be an expert in all things threaten compliance with one or more of the FPs or with Independence.

**Options to address complexity**

37. The Task Force has identified four, non-mutually exclusive, options to resolve the identified gaps:

<b>Option 2-1</b>	Modify paragraphs 120.6 A2-A3 and 120.12 A2 (the lead-in paragraphs) to recognize the potential for additional threat categories
<b>Option 2-2</b>	Amending the existing five threat categories, as appropriate, in paragraph 120.6 A3 to build in missing elements of complexity
<b>Option 2-3</b>	Add one or more threat categories to paragraph 120.6 A3
<b>Option 2-4</b>	Highlight complexity as a pervasive factor in decision making while applying the conceptual framework

38. The Task Force sees merit in all of these options.

**OPTION 2-1:**

39. In addition to one or more of the other options, the Task Force recommends pursuing Option 2-1 given the following:
- The Code states that “Threats to compliance with the FPs might be created by a broad range of facts and circumstances. It is not possible to define every situation that creates threats. In addition, the nature of engagements and work assignments might differ and, consequently, different types of threats might be created.”<sup>26</sup> Given this, it appears internally inconsistent to pre-suppose that all threats to compliance with the FPs may be categorized into one of five threat categories.
  - There are a number of threats that do not readily fit into the existing categories, such as the various elements of complexity and resulting pressures, over-reliance on technology due to lack of explainability, inherent biases, etc. Not all of these are new, of course; however, many

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<sup>26</sup> Paragraph 120.6 A2

of them were identified by the Technology Working Group to exist in a disruptive technology context through both desk research and direct discussions with stakeholders.

- Opening up the threat categories beyond those specifically identified in the Code better aligns with PAs’ actual experience when assessing a situation to identify potential threats to compliance with one or more FPs. Allowing for threats that do not fall into the existing five categories also better supports a principles-based Code, particularly as such threats might arise from an unlimited number of possible behaviors and contexts. Although providing some pre-defined, more common categories offers a helpful starting point as guidance, they are not definitive when identifying threats and ought not to constrain a PA from evaluating and addressing a threat that they have identified just because it is not on the pre-defined list.
- The Task Force reflected on possible concerns that opening up the threat categories in paragraph 120.6 A3 might make it more difficult to assert compliance with the Code. However, this concern was dismissed as the paragraph is application material and not a requirement (i.e., it assists the PA in applying the requirements, rather than being prescriptive in nature).
- Opening the lead-in paragraph 120.6 A3 to allow for still other threat categories based on a PA’s own assessment and description will future-proof the Code and is more principles-based. The Conceptual Framework specifies an approach to identifying threats to compliance with the FPs and to Independence, and then evaluating and addressing the threats identified. Whereas application material is useful to assist in this process, it should not require a PA to have to artificially “shoe-horn” their specific experience into existing categories in order to apply the Conceptual Framework. Tweaking the wording of existing threat categories and adding new ones might well benefit users, but will almost certainly still not present a complete picture.
- There is some precedent in other organizations that take a more open approach to identifying threats as well, for example:
  - The AICPA Code<sup>27</sup> has seven threat categories and acknowledges that there might be more.
  - CPA Canada only applies the pre-defined five threat categories to compliance with the Independence standards. No specific categories are defined for the remainder of the CPA Canada Code.
  - The International Valuation Standards Council has six threat categories, including a “client conflict threat” (the threat that two or more clients may have opposing or conflicting interests in the outcome of a valuation, which would not neatly fit into the IESBA Code’s five threat categories).
  - The Chartered Body Alliance (a joint initiative by the Chartered Insurance Institute, Chartered Institute for Securities & Investment and the Chartered Banker Institute) is developing a Code of Ethics which does not describe specific threats.
- An important PA competence involves exercising professional judgment. Acknowledging the potential for threats that do not fall into any of the five categories, such as the large variation of different elements of a complexity threat identified above, supports and encourages PAs to

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<sup>27</sup> See AICPA Code of Conduct 1.000.010.08-.16, which begins: “*Many threats* fall into one or more of the following seven broad categories: adverse interest, advocacy, [...]”

use their professional judgment in an ethics context to determine whether there are additional threats to compliance with the FPs and to Independence that they need to evaluate and address.

40. As noted above, the Task Force recognizes that Option 2-1 on its own is unlikely to be sufficient as it does not draw out the elements of complexity identified and therefore recommends that Option 2-1 be considered in conjunction with one or more of the other options.

**OPTION 2-2:**

41. From the Task Force’s initial review of the five threat categories in paragraph 120.6 A3, the closest ties for the elements of complexity were made to the self-interest and intimidation threats, although arguably neither the descriptions nor the common application of these threat categories intuitively lands one to classify “complexity-related” situations in this way. For example:

- Self-interest:
  - Wanting to protect one’s job by not admitting to being overwhelmed or simply not having the capacity to understand or fully recognize the issue at hand.
  - Not being able or willing to commit, or not prioritizing, the time and other resources to develop additional competence or seek out others with the required competence.
- Intimidation:
  - Feeling pressure that the PA needs to be an all-around business expert, such as being conversant with a particular technology.
  - Pressure of being overwhelmed and incapable or not having the capacity or support to take on a new responsibility.

42. For Option 2-2, the Task Force has identified possible ways to incorporate some of these complexity elements within the existing five threat categories to address gaps by broadening the existing threat categories and recognizing the impact of technology and the elements of complexity more directly. For example, by broadening the “intimidation threat” to include pressure from constraints and unrealistic expectations that may deter a PA from acting appropriately. The Task Force is exploring ways to message a greater range of pressures in this category than simply “intimidation”<sup>28</sup> and to add relevant examples at appropriate locations in the Code.

43. The benefit of amending the existing threat categories would be to explicitly prompt a PA to identify how the pressure elements related to complexity may threaten compliance with the FPs.

44. The Task Force is, however, cognizant of potentially moving too far away from the existing threat category descriptions and thereby diluting the threat categories or confusing users who are deeply familiar with them, as the existing categories have been in use (both academically and in practice) for many years.

**OPTION 2-3:**

45. In addition to, or as an alternative to, Option 2-2, the Task Force identified new threat categories that could reasonably be added to the existing five categories in paragraph 120.6 A3. Within the context

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<sup>28</sup> Oxford Dictionary definition: “to frighten or threaten somebody so that they will do what you want”

of the observations noted in the Phase 1 Final Report, the Task Force identified “complexity,” “over-reliance,” or even “bias” as potential new threats that are related – but not limited – to technology.

46. The benefit of capturing the missing elements in new threat categories is to avoid diluting existing concepts and create an even more explicit prompt for PAs to identify how complexity, for instance, might threaten their compliance with FPs or their independence.
47. Arguments against introducing one or more additional threat categories include:
  - The difficulty in drafting a description that effectively incorporates the various elements currently identified as subcomponents of a “complexity” threat. If Option 1 were also adopted, this challenge would be mitigated, however, as the defined threat categories would not need to be exhaustive. Additionally, other relevant examples could be included in other parts of the Code.
  - Complexity is pervasive. The difficulty in defining a “complexity threat” is that it may appear too “ordinary” as PAs face at least some complexity in an increasing number of scenarios. For example, it might be onerous to require PAs to identify and evaluate all complexity threats. A contrary perspective is that this is no different from a self-interest threat in that a PA is commonly faced with interests that have the potential to inappropriately influence their behavior, but in normal circumstances these do not rise to the level of needing attention – the same is true of complexity.
  - Complexity and/or over-reliance might not be threats in and of themselves, but rather factors that need to be considered within the context of applying professional judgment, similar to the Role & Mindset Task Force’s implementation of the concept of bias in the Code, which led to Option 4 being considered. An opposing view is that there is an argument for a PA to consider bias as a threat category to compliance with one or more FPs and to independence, as several forms or manifestations of bias also do not fall into the existing threat categories.

#### **OPTION 2-4:**

48. Option 2-4 would take a different approach, not linked to threats, but more broadly to the circumstances that impact on the application of the conceptual framework and/or application of professional judgment as it relates to complexity and all of its elements. Follow-on work would include adding further prompts for the PA to consider how complexity relates to each FP within Section 120. This approach might follow a similar approach to the Role & Mindset’s approach to bias.
49. This option avoids the challenges identified by amending the threat categories and/or adding new categories. The risk is that this approach will not be as effective in drawing PAs’ attention to the need to consider the elements of complexity as would be adding one or more new threat categories. Also, if it is accepted that complexity, and perhaps over-reliance and bias, are genuine threat categories – and cannot logically be differentiated from the existing threat categories – then it would be more consistent to include one or more of these as guidance in paragraph 120.6 A3.

#### **Next steps**

50. At the June 2020 IESBA meeting, IESBA members were informally polled as to which option(s) they preferred for the Task Force to pursue. The straw poll of IESBA members did not provide a clear preferred path forward on the four options identified, although results reflected the least support for Option 2-3. Feedback from the IAASB Technology Working Group was also mixed (there was an



even split between preference for Options 2-1 and 2-4, and some caution noted around Option 2-2). In mid-July, the Task Force Chair presented to the International Panel on Accountancy Education who expressed a preference for Option 2-1, in addition to one or more of the other options.

51. The Task Force recommends that outreach continue on each of the four options (not mutually exclusive) to respond to ever increasing complexity as a threat to compliance with the FPs (as distinct from complicated circumstances).

**Matters for CAG consideration**

Representatives are asked for high-level thoughts on whether a distinction between complicated and complex is useful to focus in on the characteristics of technology, its disruptive nature, and the rapid and exponential changes created by new tools or methods.

Representatives will be asked to comment on each of the four options in paragraph 37.

**V. TASK FORCE PRELIMINARY VIEW ON RECOMMENDATION 3: TRANSPARENCY**

52. The TWG Phase 1 Final Report emphasized the inter-related nature of the impact of technology on compliance with the FPs. Recommendations 3 (Transparency), 4 (Accountability) and 5 (Confidentiality) are closely inter-related in considering the suitability of the FPs for the digital age. The Task Force continues to explore the close link between transparency and accountability and how this is balanced with the FP of confidentiality and is therefore considering Recommendation 3 in conjunction with Recommendations 4 and 5.
53. The TWG Phase 1 Final Report found that “Digital transformation in business and society has resulted in a greater call for, and public expectation that, businesses and organizations will be transparent in their dealings with customers and other stakeholders.” The TWG recommended considering revisions to Subsection 113<sup>29</sup> by expanding a PA’s responsibility to be transparent.
54. In the context of technology, the following are some examples of where potential impacts of technology on the ethical behavior of PAs can be addressed by transparency:
  - Being forthcoming about how decisions are reached, the processes applied, and how the information the PA relied on has been derived.
  - Disclosing the criteria and processes used by algorithms and autonomous systems and their limitations.
  - Setting appropriate expectations as to the competence and capability of the PA to both work with and challenge the technology.
  - For auditors, how AI is used in audit work.
55. The Task Force considered a review of academic studies that highlighted potential overlap with Recommendation 1. For example, transparency has been found to lead to enhanced trust and credibility.<sup>30</sup>

<sup>29</sup> Subsection 113, Professional Competence and Due Care

<sup>30</sup> See, for example, Rawlins, B. (2008) “Give the emperor a mirror: Toward developing a stakeholder measurement of organizational transparency.” *J Publ Rel Res* 21(1) 71-99; Jahansoozi, J (2006) “Organization-stakeholder relationships:

56. The Task Force framed the concept of transparency in two broad contexts, which include but also extend beyond the FP of Professional Competence and Due Care.
57. The first context is the notion of not withholding information in a manner that would be deceptive. The FP of Integrity requires the PA to be “straightforward and honest”<sup>31</sup> and prevents the PA from known association with materially false or misleading statements or from omitting or obscuring required information so as to be misleading.<sup>32</sup> Thus, there is a level of transparency inherent in the FP of Integrity and the Task Force believes that this context should more explicitly reference to transparency in the Code. A possible amendment in Subsection 111 would further clarify this connection, as follows:
- “R111.2 A professional accountant shall not knowingly be associated with reports, returns, communications or other information where the accountant believes that the information:...*
- (c) *Lacks transparency in that it omits or obscures required information where such omission or obscurity would be misleading.*”
58. In the second context, transparency is not limited to avoiding misleading or false information, but also incorporates the idea of “shedding enough light”, as is appropriate in the circumstances, to inform the decision making of others.
59. This concept of providing sufficient information for stakeholder decision-making is captured in part in R113.3, which requires the PA to ensure clients, the employing organization, or other users of the PA’s professional services or activities are aware of any limitations inherent in those services or activities. This provides a logical tie between this element of transparency and the concept of due care or diligence.
60. The Task Force reflected on how to scope this component of transparency, and also explored other areas where transparency is required or encouraged by:
- i. Firm or organizational policies and procedures (e.g., transparency reporting)
  - ii. Engagement-level requirements (e.g. disclosure of fees and non-assurance services to those charged with governance, information in the auditor’s report)
  - iii. Individual PA requirements (e.g. responsibilities of PAs if they encounter non-compliance or suspected non-compliance with laws and regulations; disclosure requirements related to conflicts of interest; disclosure requirements related to regulatory investigations).
61. The Task Force does not propose that the Code include a blanket requirement to be transparent. As noted in the TWG Phase 1 Final Report, there are “[c]ircumstances that impact the extent of transparency that may be appropriate.” For example, in some circumstances there are valid and important reasons not to be transparent about planned audit procedures, or certain proprietary processes in commercial settings.
62. The Task Force does, however, consider that it would be useful to promote or encourage PAs to be transparent, as appropriate, as part of the FPs.

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Exploring trust and transparency” *J Mgmt Dev* 25(10); and Richards, V (2020) “Accountants create trust through transparency” *ACCA Accounting and Business*

<sup>31</sup> Paragraph R111.1

<sup>32</sup> Paragraph R111.2

63. The Task Force recommends that an appropriate location to encourage transparency of this nature would be to include application material in Subsection 113, and in particular with reference to diligence.<sup>33</sup> The dictionary definition of diligence is “careful and persistent work or effort.”<sup>34</sup> Consideration of how decisions are reached seems to provide further context as to what it looks like to act diligently, acting carefully and thoroughly. Possible drafting to consider:

*113.1 A3 Diligence encompasses the responsibility to act in accordance with the requirements of an assignment, carefully, thoroughly and on a timely basis, with consideration of the level of transparency appropriate to support decision-making by relevant stakeholders given the nature of the assignment.*

64. This addition would provide a useful hook or lead-in to later, more specific references to transparency requirements later in the Code (e.g., conflicts of interest, NOCLAR, audit fees and so on).
65. The Task Force recommends that in addition to including such a reference to transparency in Subsection 113, it would be useful to develop non-authoritative material to provide additional examples of circumstances where the PA is encouraged or required to be transparent.

**Matter for CAG consideration**

Representatives are asked for thoughts on this approach to transparency by making the connection to Integrity clearer in paragraph R111.2 (c) and to explicitly encourage the PA to be transparent, as appropriate, by expanding what it means to be diligent in paragraph 113.1 A3.

**VI. TASK FORCE PRELIMINARY VIEW ON RECOMMENDATION 4: ACCOUNTABILITY**

66. The preliminary recommendation from the TWG was that there is a public expectation, and therefore it is in the public interest, for a PA to be accountable for the decisions, actions or outcomes for which the PA is responsible.
67. As discharging professional activities becomes more complex and services become more integrated, PAs are becoming more reliant on the work of subject matter experts as well as the outputs from technologies such as AI systems. Reliance on the work produced by such an agent is in many ways no different than reliance on the work of a human subject matter expert. Similarly, as more tasks become automated, PAs are also placing more reliance on systems that are performing work that would traditionally be performed by staff members.
68. In considering the appropriate accountability of PAs when operating in a technology-enabled professional environment, the TWG formed the view that PAs must (i) be willing to be held accountable for their work, regardless of whether other human or intelligent agents contribute to their conclusions and decision-making processes, and (ii) take the necessary steps to ensure that they properly discharge their duties. In reaching its view, the TWG also acknowledged that in today’s complex work environment whereby PAs are relying more and more on decisions by machines, responsibility might need to be shared with other human agents.
69. The Task Force is exploring, amongst other matters:

<sup>33</sup> The Task Force is also considering diligence in Recommendations 4 and 6 on professional competence, and further co-ordination and the overlap between the seven recommendations is currently under consideration.

<sup>34</sup> Per Oxford Languages

- i. A definitional approach to reflect accountability in the definition of Networks and partnerships.
- ii. A need to broaden Section 220<sup>35</sup>.
- iii. A close connection between Recommendation 3 Transparency and accountability.

#### **VII. TASK FORCE PRELIMINARY VIEW ON RECOMMENDATION 5: CONFIDENTIALITY**

70. The TWG Phase 1 Final Report formed the view that Subsection 114<sup>36</sup> should be enhanced and suggested several items for consideration. The Task Force is considering whether the material in Subsection 114 could be more principles-based to ensure it continues to address emerging issues arising in a technology context, noting that several of the sub-paragraphs within R114.1 appear to be subsumed by other sub-paragraphs of R114.1.
71. To ensure that technology issues impacting confidentiality are adequately addressed, the Task Force is considering the need to structure application material to lay out key issues across the data governance process and guide PAs to consider confidentiality requirements when designing such processes and setting policies (e.g., by referring to the need for maintaining confidentiality of information throughout data/information collection, use, storage, dissemination, and destruction).
72. The Task Force will be delving deeper into specific options during the 4<sup>th</sup> quarter of 2020.

#### **VIII. TASK FORCE PRELIMINARY VIEW ON RECOMMENDATION 6: ENABLING COMPETENCIES AND SKILLS**

73. The Task Force is considering new application material for potential addition in Subsection 113,<sup>37</sup> to highlight the importance of professional (“soft” or enabling) skills and provide examples of the emergent technical and professional skills needed in the digital age. The Task Force identified that the extant Code might inadvertently imply a focus on technical skills when referring to competence, but that there is a growing need to incorporate both technical and professional skills – as was identified by numerous stakeholders in Phase 1. The Task Force recommends that the distinction between technical and professional skills be clarified and that there is a need to integrate both appropriately when undertaking professional activities.
74. The Task Force is exploring several options to incorporate and provide examples of professional skills, noting that the International Panel on Accountancy Education (IPAE), and its predecessor the International Accounting Education Standards Board (IAESB), has already spent significant time exploring new and emerging skill requirements given advances in technology, and the International Education Standards (IESs) detail the skills required and at what level of proficiency. The three options being considered follow, with additional commentary below:
  - i. Cross-reference the IESs within Subsection 113.
  - ii. Incorporate selected text from the IESs into the Code.
  - iii. Use a hybrid approach with some IES wording as well as direct IES cross-referencing.

#### **Option 6-1 – Cross-reference the IESs within Subsection 113**

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<sup>35</sup> Section 220, Preparation and Presentation of Information

<sup>36</sup> Subsection 114, Confidentiality

<sup>37</sup> Subsection 113, Professional Competence and Due Care

75. The IESs were, and continue to be, rigorously developed by a standard-setting body having considerable domain-specific expertise. The IESs draw out three areas of professional competence in separate standards: technical competence; professional skills; and professional values, ethics and attitudes. Technical competence appears well captured in the Code and the professional values, ethics, and attitudes standard also receives considerable attention, in addition to the underlying elements being a significant focus of the recently completed Role & Mindset project. This leaves the identified gap of professional skills and distinguishing these specific requirements within the Code under the umbrella of professional competence.
76. The Task Force is of the view that cross-referencing to the IESs directly is valuable because the standards are lengthy and quite detailed, and the IPAE is actively responsible for maintaining and developing the currency of the standards. In discussions with the IPAE, it was confirmed that this work remains an important element of the Panel's mandate.
77. One argument against direct referencing that the Task Force considered is that the wording of the IESs is addressed to IFAC member bodies, rather than to individual PAs. This issue was discussed with the IPAE who noted that each standard's "Objective" paragraph recognizes the need for individual PAs to develop and demonstrate these skills in order to perform their roles. The Task Force concurs and does not see the wording issue as a major impediment. If a national standard setter (NSS), professional accountancy organization (PAO), regulator, firm, or individual PA were now to consider what the IESBA Code means by "professional competence", the IESs are the natural destination to make this determination. Cross-referencing simply codifies this reality and clarifies the path. Also, as many stakeholders (notably PAOs and NSSs) reference both the IESs and the Code, cross-referencing helps harmonize between standards and eliminates the same term being used or interpreted in different ways between them.

#### **Option 6-2 – Incorporate selected text from the IESs into the Code**

78. Rather than cross-referencing, this approach involves including selected content from the IESs deemed to be the most relevant to close the gap that stakeholders and the Task Force identified with respect to professional skills and their integration. On its own, this option would carry forward the Code's current approach as it relates to the IESs – there is no reference to the IESs at this time, but rather some of the concepts are simply included inline. Note, of course, that this varies from how the IAASB's standards are addressed in the Code through extensive cross-referencing where appropriate.
79. If the option to incorporate selected IES text were pursued, the Task Force is aware of the need to avoid overly technical language and would prefer words that demonstrate what professional skills are most salient in the context of innovative and disruptive technologies, without limiting those skills in any way. Arguably, however, and as noted under Option 6-1, trying to scope selected text directly into the Code that incorporates the elements identified as requiring emphasis in an ever more technologically dependent work environment would result in too many new additions. Also, although the Task Force could select a variety of IES text to address IESBA's needs now, these additions would be a moving target. If the IPAE made changes to one or more standards, it could cause the Code to become dated.

### Option 6-3 – Hybrid approach

80. This option involves incorporating a limited amount of IES wording at a high level in the Code to establish context and enhance understanding and promoting the concepts, but then directing users to the relevant IES cross-references for the detail. The selected wording from the IESs would be carefully chosen such that it would be extremely unlikely to change, even as technologies advance and the profession responds.
81. For all the practical reasons noted above, the Task Force recommends adopting the hybrid approach. During its outreach with the IPAE, the Panel also expressed a strong preference for this option, with a heavy emphasis on including cross-referencing.
82. One mechanism of implementing this option might be to include in the Code: (a) application material that emphasizes the importance of professional skills and their integration with technical competence and professional values, ethics, and attitudes, and (b) a definition of professional competence that is based on, and references, how this is defined in the IESs. The IESs define and describe professional competence as follows: *“the ability to perform a role to a defined standard. Professional competence goes beyond knowledge of principles, standards, concepts, facts, and procedures; it is the integration and application of (a) technical competence, (b) professional skills, and (c) professional values, ethics, and attitudes.”*<sup>38</sup>

### Ongoing collaboration between the Technology Task Force and the IPAE

83. As the IPAE also sees the technology initiative as important and overlapping with its own work, with this Recommendation providing the most obvious link, the Task Force and the IPAE discussed collaborating in this area through a more formalized approach.
84. A collaborative approach is consistent with the IESBA’s Strategy and Work Plan 2019-2023 to seek cooperative avenues with the IPAE. Given the areas of overlap on specific topics, it is in the public interest to work together as closely as possible. Such an approach is also consistent with the public interest characteristic of “coherence with the overall body of standards” as referenced in the Monitoring Group’s Public Interest Framework.<sup>39</sup> Planning is actively underway to facilitate such closer interaction.

#### **Matter for CAG consideration**

Representatives are invited to comment on the Task Force’s recommendation outlined in option 6-3, to use a hybrid approach to highlight the importance of professional skills and provide examples of the emergent technical and professional skills needed in the digital age.

## IX. TASK FORCE PRELIMINARY VIEW ON RECOMMENDATION 7: INDEPENDENCE

### New technology-enabled tools and related types of NAS engagements

85. With respect to this recommendation, Task Force discussions were given structure by looking at new tools and NAS engagements that are emerging and being marketed by firms and reported by

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<sup>38</sup> IFAC (2019). *Handbook of International Education Pronouncements*. Framework for International Education Standards for Professional Accountants and Aspiring Professional Accountants, para 18.

<sup>39</sup> Monitoring Group (2020) Strengthening the International Audit and Ethics Standard-Setting System

regulators and other stakeholders (including members of the IESBA CAG). Examples include, but are not limited to:

- Hosting, storing or synchronizing client data
- Data analysis or modelling, including: data mining, data visualization and data integration
- Developing intelligent agents for risk assessment or forensic services
- Developing platforms for presenting and promulgating content
- Developing blockchain-based business applications, including e-commerce
- Cybersecurity penetration testing of systems
- Using technology to test business continuity or disaster recovery provisions.

86. The Task Force intends to continue canvassing stakeholders to identify additional emerging tools and services, which will continue to inform the directional approach under consideration.

87. In order to categorize the identified evolving tools and NAS engagements, the diagram (included as Appendix A) was developed to determine the extent to which these:

- i. Fit within Section 600 (and its sub-sections; as currently reflected in the NAS exposure draft). A fundamental question is whether these new tools and engagements, in fact, constitute “services” (at least in part) such that they fit intuitively into the NAS provisions.
- ii. Are engagements where the firm designs or implements a system for a client, which falls into Subsection 606.<sup>40</sup> Even though the system being designed or implemented could be considered a “product”, the engagement is for the design or implementation of the client’s system, which reflects a service.
- iii. Are new engagement types that are enabled by new technologies that do not fit within the current NAS subsections 601 to 610.
- iv. Would result from a firm developing and maintaining ownership of a tool and licensing it to clients with or without further customization. This could result in a licensing of a product arrangement if a generic version of the tool is licensed to a client. If there is no “service” attached, this arrangement does not fit neatly in the NAS provisions.

#### **Where do these new tools and service engagements fit within the Code?**

88. The Task Force formed the preliminary view that some new technology-related engagements reflect or involve a pure service and are already covered by the subsections in Section 600. In addition, many of the new types of engagements contemplated likely already fit within the extant intent (and potentially also wording) of subsections 601 to 605 or 607 to 610:

- 601 Accounting and bookkeeping services (e.g., automated transaction processing)
- 602 Administrative services (e.g., intelligent document management or data aggregation)
- 603 Valuation services (e.g., valuations based on AI-enabled predictive models)
- 604 Tax services (e.g., AI-enabled tax minimization tools)

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<sup>40</sup> Subsection 606, Information and Technology Systems Services

- 605 Internal audit services (e.g., cybersecurity penetration testing)
- 607 Litigation support services (e.g., AI-enabled prediction of success at trial)
- 608 Legal services (e.g., AI-enabled legal document scanning or predictive analytics)
- 609 Recruiting services (e.g., AI-enabled résumé screening)
- 610 Corporate finance services (e.g., blockchain-based data visualization to provide information in real-time for better decision making)

The only difference is that in many instances, advanced technology is being employed to provide or augment the services traditionally offered in a less technologically enabled manner. At the extreme, the technology is (or will be) operating fairly autonomously. This is akin to the firm providing technology to replace some or all of the tasks normally performed by a PA staff member.

89. There are also situations where the firm designs or implements a system for a client, which falls into Subsection 606. Even though the system being designed or implemented could be considered a “product,” the firm’s role is limited to designing and/or implementing the client’s system, which reflects a service and hence is included within subsection 606.<sup>41</sup>
90. There might be other NAS engagement types that are now enabled by new technologies that do not fit within the current NAS subsections 601 to 610. In other words, disruptive technologies might have given rise to new types of services that were not possible, contemplated, or economically feasible before. For such new services, the Task Force is of the view that a new subsection would be drafted, but that it – importantly – be defined by the type or objective of the new service being offered, and not by the technology being used to perform the service (e.g., “autonomous decision support services,” as opposed to “using AI or intelligent agents”).
91. Another option is for a firm to develop and maintain ownership of a technology tool or application and license it to clients, either with or without client-specific customization. The Task Force’s view is that this is most similar to a software product licensing arrangement for the underlying (“base”) version of the tool or application and that a new form of business relationship is created. This form of business relationship could be included in Section 520<sup>42</sup> (particularly as there might be instances where a firm and client seek to collaborate and jointly develop a new tool or application to market to third parties, something already considered within Section 520). Any customization being performed for an individual client would be viewed as a design or implementation NAS and is thereby also captured by subsection 606. Finally, if the tool or application performs a service that is contemplated within subsections 601 through 610, then it also gives rise to the need to consider those provisions. For example, where a client inputs data into tax return preparation software developed by the firm and licensed or sold to the client, subsection 604 would be applicable.
92. Any maintenance agreement related to the base version of the tool or application could be viewed as an extension of the business relationship because there is no specific engagement with any given client to perform normal updates to the tool or application. Where additional customization is required for a particular client’s update, normally as a result of initial customization that was performed for that client, this would again be expected to fall under subsection 606 of the Code.

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<sup>41</sup> Information Technology Systems Services

<sup>42</sup> Section 520, *Business Relationships*



### Additional thoughts on drafting geography

93. The “product versus service” classification question is challenging, as Section 600 and its subsections purposefully reference non-assurance *services*. In addition, the non-assurance services (NAS) proposals continue to refer to an “engagement”.<sup>43</sup> A firm selling or licensing a technology product/tool or intelligent agent to a client does not necessarily require an existing engagement. For this reason, a firm (or PA) is unlikely to consider the requirements of Section 600 and its sub-sections to the sale or licensing of a product. However, as technology can increasingly perform the services currently detailed in principle or more specifically in Section 600 and its sub-sections, the requirements and application material to evaluate threats to independence nonetheless seem to apply equally regardless of whether the output is developed by a firm’s technology or intelligent agent or by the firm’s staff.
94. Conceptually, it may be useful to fully separate a product from a service, but this might be more difficult in practice. A number of examples highlighted that in practice there is a product-to-service continuum, with relatively few examples of a pure product or a pure service; rather, there are more examples of “products” that are a combination of products and services, as well as new products that take on the role of delivering services traditionally performed by PAs more directly (e.g., tax return preparation software that optimizes client decisions around minimizing tax).
95. The product/service distinction will have relevance outside of the Code as well, in a way that might impact interpretation and behavior. For example, the U.S. SEC’s independence rules<sup>44</sup> prohibit business relationships between the auditor and their audit client. Such prohibited business relationships, however, specifically do not include providing professional services to the audit client. A “professional service” is not defined, and this distinction might evolve over time, raising questions as to where the sale or licensing of a firm’s technology product fits.
96. The Task Force identified the following factors that might be useful to determine whether the NAS sections or an amended Section 520 apply:
  - i. The output that is created, whether a person or technology is generating the output, and the extent to which the technology is replacing an activity that would otherwise be performed by a person (audit firm staff).
  - ii. The need for any ongoing contractual relationship.
  - iii. The extent to which the output incorporates the PA’s professional competence or is balanced against a need for the client to apply its own expertise.
  - iv. Variation in revenue stream may come from repackaging the same output – either “lend staff” to do task (charge per hour) or replace with the firm’s technology tool that performs that task – payment up front versus payment spread? Technology may make the service more efficient and more accurate and consistent.
  - v. Ownership, licensing, and/or location of the technology (e.g., firm or client owned, cloud-based or hosted on the firm’s, client’s, or a third party’s server).
  - vi. Who operates the technology (e.g., firm staff or client staff).

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<sup>43</sup> Non-Assurance Services Exposure Draft, paragraph R600.8

<sup>44</sup> [SEC Rule 17 CFR 210.2-01\(c\)3](#)

- vii. The extent of customization for a specific client’s needs.
  - viii. The extent of the client’s engagement in understanding what the technology is doing and ensuring that it meets its business needs.
  - ix. Any ongoing responsibility for the firm to maintain the technology over time.
  - x. Any joint development (by firm and client) and marketing or use of the technology tool to third parties.
97. The following locations and exploratory questions are under consideration to address any threats arising from the sale of new tools or engagement types:

Location identified	Description or considerations
Definition of “professional activity”	Amend the definition to include a product that performs activities
Expand Section 600 (or its sub-sections) and/or add a new sub-section	Are there identified emerging services that are not covered by the existing NAS sections?  Is Subsection 606 limited to <i>designing and implementing</i> services?
Amend Section 520	Amend Section 520 to recognize the sell side (not just the buy side)? An example in Section 520 covers the “mutuality of interest” concept <sup>45</sup>

**Preliminary view**

98. The Task Force’s preliminary view is that new types of engagements and the sale or licensing of new tools can best be incorporated in the Code as follows:
- Engagements that reflect “pure” services fit within the existing subsections of section 600; adjustments to wording might be beneficial to ensure that their inclusion is apparent;
  - The sale or licensing of a tool developed by a firm can be best addressed by expanding section 520 to address the potential business relationship that might result; and
  - To the extent that new engagement types are emerging that are not encapsulated within extant subsections 601 to 610, new subsections should be developed based on the nature or objective of the service (and not based on the specific technology being used).

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<sup>45</sup> Paragraph 520.3 A2

**Matter for CAG consideration**

The Task Force explored various locations in the Code in which to address threats arising from new types of engagements and from the sale or licensing of new technology tools.

Representatives are specifically invited to comment on the Task Force's preliminary view presented in paragraph 98 as well as on the illustrative diagram included as Appendix A.

**Business Relationships**

99. The Task Force specifically considered whether the sale or licensing of a technology/tool/system (“product”) to a client should be prohibited in the Code, when applying the requirement that the firm shall not have a close business relationship with an audit client or its management, unless any financial interest is immaterial and the business relationship is insignificant.<sup>46</sup>
100. The Task Force is of the opinion that when a product is sold/licensed by a firm to an audit client, the independence threats resulting from that product sale/licensing should be evaluated based on two perspectives:
- i. The threats that might result based on the nature of the business relationship that is formed through the arrangement; and
  - ii. The threats that might result based on the underlying service or output performed by the product, making the assumption that it is the provision of a service that is relevant and not whether the service is performed by a technology product, by firm staff or a combination thereof.
101. The Task Force does not recommend introducing a blanket prohibition on the sale of a product. Such an approach will differ from the current the US SEC's independence rules that prohibit business relationships between the auditor and their audit client, with the exception of providing professional services to the audit client.
102. The Task Force considers that although the sale/licensing of a product creates a business relationship, it does not consider that the transaction necessarily results in a close business relationship, which would be prohibited by R520.4.
103. The Task Force is still evaluating whether additional application material is needed to describe circumstances or factors for the PA to consider in determining when such a transaction would result in a close business relationship. This will be further informed through additional outreach.
104. Applying the principle that threats to independence based on any underlying service are consistent regardless of whether the output to the client is developed by the firm's product or by the firm's staff, the Task Force is considering adding application material to Section 520 to cross-reference to:
- Section 600 for the general requirements, if the output of the product sold/licensed is the same as the output of a non-assurance service not covered by any of the specific sub-sections of Section 600.
  - The relevant subsection, 601-610, if the output of the product sold/licensed is the same as one of these specific services (e.g. bookkeeping, preparation of tax returns, etc.); and

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<sup>46</sup> Paragraph R520.4

- Subsection 606 if the product sold/licensed has been customized for the client.
105. Adopting a principles-based approach that is consistent regardless of whether the firm is selling/licensing a product or engaged to perform a service will promote consistency in practice, and generally avoid the need to separate out the product from the service.
106. The Task Force is coordinating with the NAS Task Force to consider feedback received on the NAS exposure draft in relation to technology to inform its recommendations. The Task Force continues to explore additional references within Section 600 to emphasize that the service might be performed by an individual or a machine.

**Matter for CAG consideration**

Representatives are invited to comment on the Task Force's view that a blanket prohibition of the sale or licensing of a product to an audit client is overly restrictive.

Representatives are invited to comment on the Task Force's view that when a technology/tool/system ("product") is sold/licensed by a firm to an audit client, the independence threats resulting from that product sale/licensing should be evaluated based on two perspectives:

- a. The threats that might result based on the nature of the business relationship that is formed through the arrangement; and
- b. The threats that might result based on the underlying service or output performed by the product, making the assumption that it is the provision of a service that is relevant and not whether the service is performed by a technology product, by firm staff, or a combination thereof.

**Definition of "office"**

107. The Task Force deliberated on the use of the term "office" in Section 510,<sup>47</sup> and the notion of an engagement partner's physical office location being a determining factor in whether an engagement partner can unduly influence another partner in that same office, given the increasing use of modern technology and remote working practices. The Task Force notes that the AICPA also has a current project on reviewing the definition of office and the Task Force will continue to monitor that project.
108. It continues to be a valid premise that partners outside of the audit team and partners providing non-audit services to an audit client could be perceived to reasonably be in a position to influence the engagement team. Of particular interest is what characteristics would drive such perception. Is it most notably linked to the physical office or something else? Characteristics identified include:
- i. Physical office is dependent on the size of the physical office, and might increasingly become less impactful if remote working practices remain; however, such practices do not completely eliminate it.
  - ii. Partners in similar practice lines could also be dependent on the size and organization of such practice groups. Use of technology would seem to enable the interactions of a practice line

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<sup>47</sup> Paragraph 510.4(c); Note that the Task Force is mindful that the term "office" is also used in Section 410, in the context of the fee dependency provisions. The Task Force believes that use of the term in this context does not require any further revision as the aggregation and measurement of revenue by geographic or practice lines is generally not impacted by whether a PAPP is able to work virtually.

beyond physical limitations, potentially heightening the probability of practice lines being able to influence the engagement partner.

- iii. Personal relationships, including informal mentors, past colleagues, former audit team members.
109. The Code defines “office” as “A distinct sub-group, whether organized on geographical or practice lines”.
  110. The Task Force explored whether the term “office” remains appropriate. Alternative terms considered include “practice”, “division”, “sub-group”, “line”, “function” but these terms were considered too general and not descriptive enough to justify amending the well-established application of the term “office”. Over time, practice has emerged where firms may refer to their internal divisions as offices even when they include practice divisions as opposed to geographic locations, such as certain national functions.
  111. While the term “office” might have more of a geographical connotation, which may overemphasize the factor of physical location, the Task Force did not identify a better term that would be worth changing the well known and established practice of applying the term “office”.
  112. The Task Force therefore considered if the definition of office remains appropriate. The definition in the Code is consistent with many other professional Codes, including the SEC definition. The AICPA Code definition appears more conceptual and geographically agnostic: “A reasonably distinct subgroup within a firm, whether constituted by formal organization or informal practice, in which personnel who make up the subgroup generally serve the same group of clients or work on the same categories of matters. Substance should govern the office classification. For example, the expected regular personnel interactions and assigned reporting channels of an individual may well be more important than an individual’s physical location.” The AICPA is currently re-evaluating this definition.
  113. The Task Force found the reference to “formal organization or informal practice” helpful and is exploring options to amend the definition of office and/or add additional application material by incorporating factors to consider in determining the office of the engagement partner to make it more prominent that the geographical office is neither the primary nor the only consideration.
  114. An indicative drafting suggestion to amend the definition is as follows:  
**Office** - *“A distinct sub-group, whether organized on geographical or practice lines, constituted by formal organization or informal practice.”*
  115. An alternative option identified was to remove the reference to office in R510.4(c) and redraft that part of the requirement with a focus on any partner that has the potential/ability to impact the outcome or the conduct of the audit.
  116. The Task Force is also considering amending language in the Code that subtly emphasizes a geographical location, such as “in the office”<sup>48</sup> and “located”<sup>49</sup>.

**Matters for CAG consideration**

<sup>48</sup> Paragraph R510.4(c)

<sup>49</sup> Paragraph 510.4 A1

Representatives are asked for suggestions to replace the term “office” and are invited to comment on the whether it is necessary to retain the reference to office and/or:

- Amend the definition in a way that downplays the importance of physical location, while not removing reference to geographical location?
- Add additional application material to incorporate factors to consider in determining the office?

### **Use of “Routine and Mechanical”**

117. The NAS proposals continue to use the term “routine and mechanical” to describe accounting and bookkeeping services that could be provided to non-PIE entities and to describe what constitute administrative services.
118. Concern expressed in the TWG Phase 1 Final Report is that with the increasing use of automated intelligence to deliver services, certain tasks performed by the AI may appear routine and mechanical and the level of professional judgment incorporated by the firm or a technology company in the programming of the AI tool or in the application of the tool’s learned intelligence may be obscured or not considered.
119. The TWG Phase 1 Final Report recommended that the term “routine and mechanical” be removed from Subsections 601 and 602 so that the focus of evaluating the service is on whether the service requires professional judgment.
120. The Task Force considered the advantages of removing the term “routine and mechanical” to reduce the risk that, if taken literally, it could be interpreted to include services delivered through automation, but incorporate judgement, that give the appearance of them being routine and mechanical:
  - i. AI can now process a large amount of data in a manner that may appear to be “routine and mechanical,” but may have inbuilt professional judgement (“PA smarts”).
  - ii. “Mechanical” means operated or produced by a machine, highlighting a need to overcome the risk of misinterpretation.
  - iii. New PAs without the history of the phrase “routine and mechanical” could easily misinterpret this terminology.
121. The Task Force also, however, reflected on the risks of replacing a long-established term, which has evolved with practice. Withdrawing the term could also unintentionally disrupt practice. The Technology Task Force will work with the NAS Task Force on this matter, especially with respect to feedback received in response to the NAS exposure draft.
122. Two options were identified:
  - i. Retain the phrase “routine and mechanical,” but layer additional application material to reduce the risk of misinterpretation; and
  - ii. Find another term to replace “routine and mechanical”.
123. The Task Force considered how these terms are used in the ISAs as well as references in other Codes of ethics and translation issues.

124. Words such as “mundane”, “perfunctory” or “unthinking” were discussed but no one alternative term was identified that would necessarily overcome the risks or is clearly more effective than use of “routine and mechanical”.
125. The Task Force recommends retaining the term, but developing additional application material in Subsections 601 and/or 602 with possible drafting as follows:

*“Accounting and bookkeeping services that are primarily provided through the use of an automated tool with little to no human intervention on the part of the firm may appear to be routine and mechanical because of the facility with which the task can be completed or the volume of data that can be processed as part of the service. However, the underlying nature of the service should be considered when determining whether the service is routine and mechanical. Such analysis should also consider whether a level of professional judgment is being exercised by the firm through the use of an automated tool, for example, through the tool’s algorithms and as modified by any machine learning.”*

126. The Task Force has also identified instances where “routine or mechanical”, rather than “routine and mechanical”, are used and recommends that these references be amended to use “and” consistently.

**Matter for CAG consideration**

Representatives are asked for any alternative suggestions to replace the term “routine and mechanical”.

Representatives are asked for their views on the need to develop additional application material in Subsections 601 and/or 602 to reduce the risk of misinterpretation that “routine and mechanical” includes any service delivered through automation, including those incorporating professional judgement.

**X. NEXT STEPS**

127. During the 4<sup>th</sup> quarter of 2020, the Task Force intends to focus its time on outreach with key stakeholders, including regulators, firms, NSS, and others, including Accountancy Europe, to receive additional directional input on the options identified and some of the preliminary drafting.
128. The Task Force anticipates presenting an update on all seven of the recommendations at the December 2020 IESBA meeting.

Appendix A

