Private and confidential

Mr. David McPeak
IAESB Principal
International Accounting Educations Standards Board
International Federation of Accountants
277 Wellington Street West, 4th Floor
Toronto, Ontario
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4 March 2019

Dear Mr. McPeak,

IFAC International Accounting Education Standards Board (IAESB) – Proposed Revisions to International Education Standards (IESs) 2, 3, 4, and 8 – Information and Communications Technologies and Professional Skepticism

We[1] appreciate the opportunity to respond to the IAESB December 2018 Exposure Draft on proposed revisions to IESs 2, 3, 4 and 8 – Information and Communications Technologies and Professional Skepticism (the "Exposure Draft").

We understand the objective of the proposed revisions to IESs 2, 3, 4 and 8 is to improve the consistency, quality, and relevance of Initial Professional Development and Continuing Professional Development undertaken by aspiring and professional accountants, and to account for changes in the marketplace. We are broadly supportive of the proposed revisions. However, we are mindful that the IAASB has also undertaken, or plans to undertake, one or more projects to revise International Standards on Auditing (ISAs) that may involve deliberation of the same or similar topics. Consensus in key concepts and terminology across the international standards is important and in the best interest of the profession.

We recommend that the international standard setting boards work collaboratively to achieve alignment on key concepts and terminology. For example, the proposed IES revisions offer a definition of Information and Communications Technologies (ICT) at the same time that the IAASB's proposed revisions to ISA 315 describe the use of information technology in an entity's system of internal control as the "information system and communication" component. While there may be good reasons for differences between these standards, there is a risk of confusion by those who have to implement the standards, which would be addressed if there was alignment of how standards define and contextualize such core concepts.

In this specific instance, it would be useful for the IAESB to collaborate with the IAASB during the Boards' respective further drafting processes; as such while we acknowledge the importance of making these changes, we recommend that the IAESB considers deferring the IES revisions so that their finalization can coincide with finalization of ISA 315 (Revised).

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[1] This response is being filed on behalf of the network of member firms of PricewaterhouseCoopers International Limited and references to "PwC", "we" and "our" refer to the PwC network of member firms.

Other IAASB standard setting projects are also likely to address information technology and professional skepticism (e.g., ISA 500, *Audit Evidence*). We also encourage both ongoing collaboration between the standard setting boards as those other projects progress and a willingness on the part of IAESB to view the definitions included in the proposed Exposure Draft as subject to further change as technology and auditing standards continue to evolve.

Further refinement of learning outcomes and/or implementation guidance

In some cases, we believe that further refinement and/or issuance of non-authoritative implementation guidance is warranted. We have provided our detailed recommendations in this respect in our responses to Questions 1 and 4 in the Appendix to this response letter.

Importance of timely and current implementation guidance

To consistently effect the change that the IAESB is seeking through these proposals, timely implementation guidance that remains relevant to current practice will be important. As such we recommend that the implementation guidance:

- Is made available at the same time as the revised IESs; and
- Is revisited, as necessary in the future as incremental skills become relevant.

Other general observations

The Appendix to this response letter sets out our general observations as well as responses to the specific questions posed in the Explanatory Memorandum.

We would be happy to discuss our views further with you. If you have any questions regarding this letter, please contact me at ralph.a.weinberger@pwc.com

Yours sincerely,
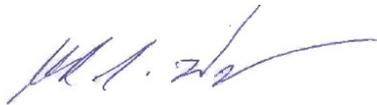
Ralph A. Weinberger
Leader of Global Assurance Methodology

General Comments

Alignment with other international standard setting Boards
As mentioned in the covering letter, we believe it is important and in the best interest of the profession that the international standard setting Boards work collaboratively to achieve alignment where projects involve deliberation of the same or similar topics and where standards define and contextualize common core concepts. There may be merit in deferring revision of the IESs to allow further time for collaboration ahead of the IAASB's finalization of the revisions to ISA 315.

Importance of timely and current implementation guidance
To consistently effect the change that the IAESB is seeking through these proposals, timely implementation guidance that remains relevant to current practice will be important. As such, we recommend that the implementation guidance is made available at the same time as the revised IESs; and is revisited, as necessary in the future as incremental skills become relevant.

Replacement of Information Technology ("IT") with Information and Communications Technologies ("ICT")
We believe that in some learning outcomes, replacing "IT" with "ICT" has had the unintended consequence of broadening the scope of the learning outcome. For example: IES 2 paragraph 7, competence area (h) "*Information and communications technologies*". In addition, learning outcome (h) (i) "*Analyze the adequacy of processes and controls*" replaces the extant learning outcome of "*Analyze the adequacy of general information technology controls and relevant application controls*". We believe the scope of "processes and controls" is much broader than "general information technology controls and relevant application controls". Therefore, we recommend the IAESB review each of the relevant learning outcomes to determine whether the proposed change from "IT" to "ICT" produces the intended result.

References to other standards
There are a number of references to standards promulgated by the IAASB and the IAESB that appear outdated or risk becoming outdated in the short term:

References	Risk of becoming outdated	Recommendation
ISA 220 and ISQC1	Will soon be replaced by ISQM 1 and ISQM 2 and ISA 220 (Revised).	We encourage the IAESB to consider the impact of these proposed standards and revisions on the proposed revisions to extant IES 8 (e.g. IES 8 paragraphs 3, A11 and A12).
IES 7, Continuing Professional Development (2020)	IES 7, Continuing Professional Development (Revised) was published after the Exposure Draft was released.	IES 8, paragraph 2 refers to "IES 7, Continuing Professional Development (2020) paragraph 12". We believe the appropriate reference is "IES 7, Continuing Professional Development (Revised) paragraph 9" and recommend the IAESB update the reference.

References	Risk of becoming outdated	Recommendation
IAASB Handbook of International Quality Control, Auditing, Review, Other Assurance and Related Services Pronouncements – 2016-2017 Edition Volume 1	There is a more recent version of the Handbook, IAASB Handbook of International Quality Control, Auditing, Review, Other Assurance and Related Services Pronouncements – 2018 Edition Volume 1	We recommend the IAESB update references in the IESs to the most recent version of this Handbook.

Responses to specific questions

Question 1. Do you support the proposed revisions to learning outcomes related to the areas of Information Communications & Technologies ("ICT") and Professional Skepticism provided in Appendices A, B, C, and D? If not, what changes would you suggest?

We are generally supportive of the proposed revisions to learning outcomes but have identified the following areas that we recommend be considered further.

Proposed new learning outcomes where we believe there may be overlap with extant learning outcomes

We believe the following proposed new learning outcomes may overlap with extant learning outcomes – we recommend the IAESB either remove the proposed new learning outcome or, further revise the proposed new learning outcome for the reasons indicated. There may also be benefit to providing further clarity in accompanying implementation guidance for these learning outcomes (see our response to Question 4 for recommendations related to implementation guidance):

New Learning Outcome	Extant Learning Outcome	Recommendation
IES 3 paragraph 7 (b) (ii) "Demonstrate collaboration skills".	IES 3 paragraph 7 (b) (i) "Display cooperation and teamwork when working towards organizational goals".	While we agree with the importance of collaboration, as noted in the Explanatory Memorandum, we are unclear as to: • how the new learning outcome relates to ICT or Professional Skepticism and, as such, why the learning outcome was proposed; and • why "collaboration skills" was not combined with those skills listed in extant IES 3 paragraph 7 (b) (i), as we believe the skills in 7(b) (i) are a subset of collaboration skills. We therefore recommend that the proposed new learning outcome is either removed or combined with the extant learning outcome. If the proposed new learning outcome is retained, we recommend development of supporting implementation guidance (refer to our response to Question 4 for additional details).

New Learning Outcome	Extant Learning Outcome	Recommendation
IES 3 paragraph 7 (c) (vii) "Reflect on experiences to improve future actions".	IES 3 paragraph 7 (c) (ii) "Set high personal standards of performance and monitor personal performance, through feedback from others and through reflection".	We believe the description in extant IES 3 paragraph 7 (c) (ii) encompasses "reflect on experiences and improve future action" and therefore recommend that the proposed new learning outcome is either removed or combined with the extant learning outcome. If the proposed new learning outcome is retained, we recommend development of supporting implementation guidance (refer to our response to Question 4 for additional details).

Learning outcomes where we recommend the IAESB consider retaining the extant learning outcomes or a portion of the extant learning outcomes

We believe the following extant learning outcomes, or a portion of them (as indicated), should be retained in place of or as part of the new/revised learning outcome for the reasons indicated.

Extant Paragraph	New/Revised Paragraph	Reason
IES 2 paragraph 7 (h) (i) "Analyze the adequacy of general information technology controls and relevant application controls".	IES 2 paragraph 7 (h) (i) (revised) "Analyze the adequacy of processes and controls".	We recommend the IAESB consider retaining the extant learning outcome given it differentiates between general IT controls and relevant application controls which we believe is an important distinction. Furthermore, we believe extant IES 2 paragraph 7 (h) (i) <u>read together with</u> the proposed new IES 2 paragraph 7 (f) (vi) *"Assess the adequacy of systems, processes and controls for capturing, transmitting, reporting and safeguarding data and information"* sufficiently encompasses the proposed revised learning outcome (IES 2 paragraph 7 (h) (i)).
IES 2 paragraph 7 (h) (iii) "Use information technology to support decision making through business analytics".	IES 2 paragraph 7 (h) (iv) "Explain how ICT supports data analysis and decision making".	We recommend the IAESB consider retaining the term "business analytics" because we believe business analytics remains a core competency for accountants to maintain. We recommend the following wording for the learning outcome: *"Explain how ICT supports data analysis and decision making through business analytics".*
IES 3 paragraph 7 (a) (ii) "Apply professional judgment, including identification and evaluation of alternatives, to reach well-reasoned conclusions based on all relevant facts and circumstances".	IES 3 paragraph 7 (a) (ii) "Apply critical thinking skills to solve problems".	We believe the extant learning outcome should be retained because it better conveys the expectation that an accountant should apply professional judgment in the context of all relevant facts and circumstances.

Extant Paragraph	New/Revised Paragraph	Reason
		We also believe critical thinking to solve problems is now sufficiently addressed in revised IES 3, through a combination of paragraph 7 (a) (i) *"Evaluate data and information from a variety of sources and perspectives through research, integration and analysis"* and paragraph 7 (a) (iv) *"Recommend solutions to unstructured, multi-faceted problems".*
IES 4 paragraph 11 (c) (i) "Explain the role of ethics within the profession and in relation to the concept of social responsibility" and (ii) "Explain the role of ethics in relation to business and good governance".	IES 4 paragraph 11 (c) (i) "Explain the importance of ethics within the profession and in relation to the concept of social responsibility" and (ii) "Explain the importance of ethics in relation to business and good governance".	We believe the replacement of "role of ethics," as used in the extant learning outcomes, with "importance of ethics" in the proposed revisions, narrows the expectation of an accountant. Simply understanding the importance does not capture the bigger picture as to why ethics matters to our profession. Therefore we recommend retaining the extant learning outcome.
IES 4 Explanatory Material, paragraph A2.	N/A	We recommend that the IAESB consider retaining this explanatory material as we believe it provides valuable context for the appropriate interpretation of IES 4. Specifically, we do not believe revised paragraph A1 captures the following important explanatory information: "IAASB pronouncements govern audit, review, assurance, and related service engagements that are conducted in accordance with international standards. References in the IAASB's pronouncements regarding 'professional skepticism' and 'professional judgment' are therefore limited to the context of audit, assurance, and related service engagements. Within this IES, however, these terms are to be interpreted as applying to the broader context of a role as a professional accountant."
IES 8 paragraph 9 (o) (iii) "Protect the confidential information of the entity in accordance with ethical responsibilities and relevant legal requirements".	IES 8 paragraph 9 (n) (iii) "Act ethically when accessing, storing, generating, using and sharing data and information of the entity".	We believe the reference to relevant legal requirements should be retained as we believe it is important to provide flexibility for differing national legal requirements. We recommend the following wording for the learning outcome: *"Act ethically and in accordance with relevant legal requirements when*

Extant Paragraph	New/Revised Paragraph	Reason
		accessing, storing, generating, using and sharing data and information of the entity".

Question 2. Are there additional ICT and professional skepticism learning outcomes that you would expect from aspiring and professional accountants (See Appendix E)?

To advance the IAESB's overall objective of improving the consistency, quality, and relevance of Initial Professional Development and Continuing Professional Development we believe that the following additional learning outcomes should be considered as part of the revisions to IESs 2 and 3. We do not believe these learning outcomes are captured by either the extant learning outcomes or the proposed revisions:

1. IES 2 (e) Audit & Assurance. "Understand the impact of ICT on the audit strategy, plan, and execution."
2. IES 2 (e) Audit & Assurance. "Understand documentation requirements as it relates to the use of ICT by management and/or an auditor."
3. IES 3 (a) Intellectual. "Demonstrate data literacy". We note that implementation guidance will be fundamental to the consistent implementation of this learning outcome, if adopted.

Question 3. Do you support the new definitions of Information and Communications Technologies, Intellectual Agility, and Professional Judgment added to the IAESB Glossary of Terms? If not, what changes would you suggest?

We support the intent of the new definitions of Information and Communications Technologies, Intellectual Agility, and Professional Judgment. However, we have the following observations, in addition to our observation in the covering letter regarding the importance of the international standard setting Boards working collaboratively to achieve alignment where projects involve deliberation of the same, or similar, topics and where standards define and contextualize common core concepts.

Information and Communications Technologies – ICT are often used by organizations and auditors to analyze financial and other operating information. With the increasing adoption of emerging technologies, such as artificial intelligence/machine learning, analysis will likely become an even more prominent part of ICT. Therefore, it may be useful to include this aspect of ICT in the definition as follows: *"A diverse set of technologies, techniques and processes used to capture, manage, transform, **analyze** and communicate data and information."*

Intellectual Agility - we believe additional Implementation Guidance would be beneficial as detailed below under Question 4.

Professional Judgment – As articulated more broadly in our covering letter, we encourage the IAESB to engage with the other international standard setting Boards to pursue alignment of definitions, both now and in the future. We are encouraged that this definition is fully aligned with the IESBA Code of ethics, although we note there is a different definition provided in extant ISA 200. It is our hope that the IAESB might view this as an opportunity to engage both the IAASB and the IESBA in an effort to develop a singular definition.

Question 4. Are there any terms within the new and revised learning outcomes of IESs 2, 3, 4, and 8, which require further clarification (See Appendix E)? If so, please explain the nature of the changes?

We believe further refinement (R) and/or issuance of non-authoritative implementation guidance (G) would be warranted for the following learning outcomes.

IES reference	R	G	Notes
IES 2 paragraph 7 (e) (vi) "Assess audit evidence for appropriateness and sufficiency".	X		Evidence used in a conclusion may be appropriate and sufficient but it may omit or ignore other audit evidence. We recommend the following wording for the learning outcome: *"Evaluate audit evidence by considering its appropriateness, sufficiency and any contrary audit evidence gathered to make informed decisions and reach conclusions".* This ensures consistency with IES 8 paragraph 9 (a) (iv), (the corresponding learning outcome for engagement leaders).
IES 2 paragraph 7 (f) (iii) "Apply ICT to support the identification, reporting and management of risk in an organization".		X	We believe this can be interpreted as meaning that ICT must always be applied by a professional accountant in identifying, reporting or managing risk. In our view, this might not always be the case (e.g., for a non-complex organization). We recommend that implementation guidance be developed to provide examples of how an accountant would develop skills to demonstrate this learning outcome in both a complex and non-complex organization.
IES 2 paragraph 7 (f) (vi) "Assess the adequacy of systems, processes and controls for capturing, transmitting, reporting and safeguarding data and information".	X	X	We recommend including "processing" and "analyzing" in the learning outcome to align with the definition of ICT. We recommend the following wording for the learning outcome: *"Assess the adequacy of systems, processes and controls for capturing, processing, transmitting, analyzing, reporting and safeguarding data and information."* In addition, we believe that it would be helpful to provide implementation guidance to explain the difference in meaning of the terms "data" and "information" when they are used together and when they are not used together or, alternatively to consider using them together in all cases, if appropriate. For example "data" and "information" are used together in IES 2 paragraph 7 (f) (vi) whereas in other cases they are also used independent of one another such as in IES 2 Paragraph 7, (b) (iii) *("Analyze data to provide information to support management decision making").*
IES 2 paragraph 7 (h) (ii) "Recommend improvements to processes and controls".	X	X	If the proposed learning outcome is intended to be specific to ICT, we would propose that the learning outcome include a reference to ICT. We also recommend that implementation guidance be developed to provide examples of how an accountant would develop skills to demonstrate this learning outcome.
IES 2 paragraph 7 (h) (vi) "Use ICT to communicate with impact and influence others" and IES 3 paragraph 7 (b) (vii)	X	X	The use of the word "influence" may not be consistent with the role of an independent auditor. We suggest "inform" may be a more appropriate term. In addition, we believe IES 2 paragraph 7 (h) (vi) could be interpreted in many ways (e.g., using email to communicate with clients, using Powerpoint/Google slides for presentations, using visualization

IES reference	R	G	Notes
"Present ideas and influence others to provide support and commitment.			software). We recommend the IAESB consider providing implementation guidance with examples of how an accountant would develop skills to demonstrate this learning outcome.
IES 2 paragraph 7 (i) (ii) "Explain the impact of ICT developments on business and organizational environments".	X	X	Given the expected pace of ICT developments, we recommend the IAESB consider making this an Advanced skill rather than an Intermediate skill or consider reducing the proficiency requirement by changing the verb from "Explain" to "Recognize". In addition, we recommend the IAESB consider providing implementation guidance with some examples of how an accountant would develop skills to demonstrate this learning outcome.
IES 3 paragraph 7 (a) (v) "Demonstrate intellectual agility".		X	We believe the learning outcome may be difficult to measure. Consequently, we recommend implementation guidance on how an accountant would develop and demonstrate this learning outcome. The guidance could leverage the rationale included in the Explanatory Memorandum such as *"re-evaluate conclusions in response to new or existing facts and identify new or alternative ways of working and, adapt quickly to changing circumstances."*
IES 3 paragraph 7 (b) (ii) "Demonstrate collaboration skills"		X	If the proposed new learning outcome is retained (see our recommendation in response to Question 1), we recommend implementation guidance to clarify how it relates to ICT and/or Professional Skepticism, as well as how it differs from the extant learning outcome articulated in IES 3 paragraph 7 (b) (i) *"Display cooperation and teamwork when working towards organizational goals"*.
IES 3 paragraph 7 (c) (vi) "Demonstrate an awareness of personal and organizational bias" and (vii) "Reflect on experiences to improve future actions".	X		We recommend the IAESB consider whether these learning outcomes would be better placed in IES 4 (alongside other professional skepticism and professional judgment learning outcomes).
IES 3 paragraph 7 (c) (vii) "Reflect on experiences to improve future actions".		X	The Explanatory Memorandum describes reflection on experiences as an underlying competency to apply professional skepticism. If there is an incremental aspect to the new learning outcome, we believe associated implementation guidance would be useful to distinguish the new learning outcome from the extant learning outcome.
IES 4 paragraph 11 (a) (ii) "Demonstrate curiosity by	X		We recommend the IAESB consider expanding "curiosity" to "intellectual curiosity" as this term is commonly referred to in relation to professional skepticism and is likely to be better understood.

IES reference	R	G	Notes
exploring beyond what is immediately apparent".			
IES 4 paragraph 11 (a) (iii) "Apply techniques to reduce bias" and IES 8 paragraph 9 (m) (iii) "Evaluate the potential impact of bias on conclusions".	X	X	We recommend the IAESB clarify whether this is personal or organizational bias. We believe it may be personal bias so we recommend the following wording for the learning outcomes: "*Apply techniques to reduce personal bias*" and *"Evaluate the potential impact of personal bias on conclusions",* respectively. In addition we recommend the IAESB consider providing implementation guidance with examples of how and accountant would develop skills to demonstrate these learning outcomes.
IES 8 paragraph 9 (a) (i) "Lead the audit engagement through active involvement in planning, directing, and reviewing the work of the engagement team".	X		We believe this may not fully address the objective noted in the Explanatory Memorandum to reflect the "importance of the engagement partner setting the tone at the top to ensure proper application of professional skepticism at all phases of the engagement." Additionally, we suggest that the learning outcome include the concept of the engagement leader "supervising the engagement team". We recommend the following wording for the learning outcome: "*Lead the audit engagement through active involvement in planning, directing, supervising and reviewing the work of the engagement team and set the tone at the top to ensure proper application of professional skepticism at all phases of the engagement".*
IES 8 paragraph 9 (f) (i) "Evaluate the ICT environment to identify controls that relate to the financial statements to determine the impact on the overall audit strategy."		X	We recommend the IAESB consider providing implementation guidance with examples of how an accountant would develop skills to demonstrate this learning outcome.
IES 8 paragraph 9 (i) (ii) "Evaluate the potential influence of cultural and language differences on the performance of the audit".		X	It may not be clear why "language" would influence the application of appropriate professional skepticism. We recommend the IAESB consider providing implementation guidance to address this as well as including examples of how an accountant would develop skills to demonstrate this learning outcome.
IES 8 paragraph 9 (j) (iv) "Promote reflection on		X	We believe "reflection" can be interpreted in multiple ways. We recommend the IAESB consider providing implementation guidance with examples of how an accountant would develop and demonstrate this learning outcome.

IES reference	R	G	Notes
experiences to improve future actions".			
IES 8 paragraph 9 (m) (v) "Resolve audit issues using inquiry and critical thinking to consider alternatives and analyze outcomes".	X		The use of "inquiry" and "critical thinking" in this learning outcome could inadvertently imply that inquiry and critical thinking is sufficient evidence for resolving audit issues. As such, we recommend adding "evidence" to the learning objective. We recommend the following wording for the learning outcome: *"Resolve audit issues using inquiry, critical thinking and evidence to consider alternatives and analyze outcomes".*