Meeting: IESBA
Meeting Location: Virtual
Meeting Date: September 13-17 and 27, 2021

Agenda Item

Technology NAM and Fact Finding

I. Objective
1. To receive:
   (a) A presentation on the topic of cybersecurity; and
   (b) An update on the Working Group’s\(^1\) activities.

II. Working Group’s Remit
2. Established March 2021, the IESBA Technology Working Group (TWG) is responsible for two workstreams. They are:
   (a) To undertake fact finding to identify and assess the potential impact of technology developments on the accounting profession in relation to ethics and independence. The fact-finding activities involve targeted stakeholder outreach, and review of existing reports, articles and other publications/media relating to the development, use and implementation of technology by professional accountants (PAs).\(^2\)
   (b) To develop or facilitate the development of technology-related non-authoritative guidance materials (NAM) in relation to ethics and independence for PAs and the wider stakeholder community. Such NAM is intended to:
      • Highlight the Code’s provisions that are relevant to dealing with ethical dilemmas or conflicts that might arise when developing, using, or implementing technology.
      • Raise awareness of the ethics (including independence) implications of technology-related developments for PAs; and
      • Assist PAs in consistently applying the Code, including with respect to independence.

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\(^1\) The Working Group comprises:
- Brian Friedrich, Chair, IESBA Member
- Vania Borgerth, IESBA Member
- David Clark, IESBA Technical Advisor
- Sundeep Takwani, IESBA Technical Advisor
- Johanna Field, IAASB Correspondent Member

\(^2\) An overview of the key topics and questions being explored is available in the June 2021 Working Group Briefing Paper.
Recap of June 2021 Discussions

3. The IESBA received two external presentations on blockchain and an update from the Working Group on its efforts to develop NAM and its fact-finding activities. IESBA members raised no significant comments. Subsequent to the IESBA meeting, the Planning Committee suggested that the Working Group provide more clarity about its proposed deliverables, timeline and the role of the TWG beyond December 2021.

4. In advance of the September IESBA meeting, the Planning Committee will consider and provide input on the Working Group’s proposals relating to next steps, including specific deliverables, timing and the future role of the TWG (i.e., Section IV of this paper). The IESBA will be briefed on the outcome of the Planning Committee discussion in September.

III. Activities since June 2021

Status of Fact-Finding Activities

5. The TWG has continued to conduct numerous outreach meetings with a variety of stakeholders. Refer to the Appendix 1 to this paper for the list of stakeholder outreach meetings held since February 2020.

6. The TWG has received several presentations from external presenters about specific emerging technology issues to help further inform its understanding and thinking on the ethical implications of technology developments on PAs:

(a) Blockchain and the Accounting Profession: Perspectives from Literature with an Emphasis on Ethics from Professor Thomas Calderon, the University of Akron

(b) Cybersecurity and the Accounting Profession: A Discussion of Ethical Implications from Professor Thomas Calderon, the University of Akron

(c) Ethics for Sustainable Artificial Intelligence Adoption: Connecting AI and ESG from Mr. Narayanan Vaidyanathan, Head of Business Insights, Association of Chartered Certified Accountants (ACCA)

7. A comprehensive playlist of the technology presentations is available on the IESBA’s YouTube channel. The presentations as well as other resources that the TWG has considered are available on the IESBA’s Technology Focus Webpage. The Webpage provides resources to assist stakeholders follow and monitor the work of the TWG. It also provides links to ethics-related guidance and resources relevant to navigating challenges and opportunities arising from evolving technologies.

8. The TWG will continue its fact finding in Q4 2021.

Update on Collaboration Efforts with IFAC and Others to Develop Technology-related NAM

9. The TWG continues to welcome collaborative opportunities to facilitate the development of NAM. In this respect, it is actively facilitating the development of NAM with IFAC and:

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3 Dr. Calderon performed a summary of academic research on the topics of blockchain and cybersecurity, see Appendix 2, and presented the key observations and findings to the TWG.

4 This presentation was based on a report issued by the ACCA and Chartered Accountants Australia and New Zealand which was informed by (1) a global survey with 5,723 respondents; (2) Online discussion group with 42 professionals; and (3) expert interviews with various stakeholder industries, for example, IBM.
(a) The Staff of the Accounting Professional and Ethical Standards Board (APESB). This NAM will provide guidance on how to apply the extant International Independence Standards in specific scenarios, for example, where an audit client asks a firm to:

- Implement an entire software suite.
- Implement software developed by the firm.
- Provide a non-assurance service that might appear to be “routine or mechanical.”
- Provide a non-assurance service due to insights gained from the use of technology in an audit engagement.

A preliminary working draft has been developed and a mutually agreeable process for review and release is being established. Release is anticipated by December 2021.

(b) Representatives of the Japanese Institute of CPAs (JICPA). The aim of this NAM is to provide guidance to professional accountants in business (PAIBs) and in public practice (PAPPs) on practical issues in ethical leadership for PAs. This will include topics such as:

- How leaders should communicate, structure and demonstrate their responsibility to staff when using, developing or implementing technology.
- How organizations can obtain the type of knowledge and skills relevant in the digital age.

This initiative is at the initial drafting stage. An update will be provided to the IESBA in December 2021.

(c) Representatives of CPA Canada and Institute of Chartered Accountants of Scotland (ICAS). As previously communicated to the IESBA, the TWG is providing input on four thought-leadership papers resulting from a February 2021 Exploratory Paper and Virtual Event titled; Ethical Leadership in an Era of Complexity and Digital Change.

- The first paper titled, Complexity and the Professional Accountant: Practical Guidance for Ethical Decision-Making was released in August 2021.
- The second paper is titled, Technology is a Double-Edged Sword, is currently being reviewed. Release is anticipated by October 2021.
- The other two papers are titled Managing Bias and Mis/Disinformation and Mindset and Enabling Skills. These are at a preliminary stage and release is anticipated by January 2022.

10. The TWG welcomes IESBA Staff collaboration with IFAC to develop technology-focused installments of the Exploring the IESBA Code series. The TWG has provided input on the first installment titled Applying the Conceptual Framework: Ethics and Artificial Intelligence. It is anticipated that the first installment will be released by December 2021.

**Coordination with Technology Task Force and IAASB**

11. In progressing its work, the TWG continues to liaise with the IESBA Technology Task Force and the staff of the IAASB. For example, members of the Technology Task Force participated in the TWG meetings with external presenters. Also, as part of its outreach efforts, the TWG informed stakeholders of proposed technology-related revisions to the Code being developed under the IESBA...
Technology – NAM and Fact-Finding
IESBA Meeting (September 2021)

Presentation on Cybersecurity at the September 2021 IESBA Meeting

12. To inform the IESBA’s ongoing deliberations about ethics and independence issues that might arise from cybersecurity issues, an informational presentation has been arranged for the September 2021 meeting. Following the presentation, IESBA members will be provided an opportunity to ask questions.

13. The presentation titled “Cybersecurity and the Accounting Profession: A Discussion Of Ethical Implications” will be held on September 15, 2021. Drawing from relevant academic research, guest speaker Dr. Thomas Calderon, Professor of Accounting at the University of Akron, will brief the IESBA on:
   - How cybersecurity risk is being managed in corporate and financial reporting, as well as audit and assurance, and the potential ethics and independence issues that might arise.
   - Perspectives on contemporary cybersecurity threats, including US Securities and Exchange Commission (SEC) risk disclosures.

IV. Planned Deliverables and Next Steps

14. The TWG reflected on its progress to date since its establishment in March 2021, which included:
   - Publishing a Briefing Paper to provide a basis for multi-stakeholder outreach.
   - Participating in and planning stakeholder meetings focused on:
     o Identifying and further understanding the longer-term ethical implications of technology developments on the accounting profession.
     o Raising stakeholder awareness of the potential ethics and independence issues that might arise from the development, use and implementation of technology by PAs.
     o Inviting and encouraging interested parties to partner with the IESBA (and where appropriate IFAC) to develop technology-focused ethics and independence guidance (i.e., NAM).
   - Teaming with other IESBA Task Forces/Working Groups (e.g., the NAS Task Force) to develop technology-related ethics and independence guidance.
   - Putting in place a process for collaborating with IFAC and others on ethics and technology-related initiatives relevant to the work of PAs.
   - Establishing a central location on the IESBA’s website for PAs and other stakeholders to access technology-related independence and other ethics thought-leadership and guidance (i.e., NAM) and to monitor the IESBA’s technology work.

Fact-Finding Timeline and Report

15. Against this backdrop, the TWG proposes that its existing fact-finding remit continue beyond December 2021, thereby allowing completion of a full year’s work and additional time to synthesize,
analyze and report on the insights gained. The additional time would also allow for the TWG to consider and reflect in its report:

- The inputs received from planned Q1 2022 multi-stakeholder outreach, such as a proposed forthcoming event to be hosted by the Pan African Federation of Accountants (PAFA), and other regional events that are being explored with others, including the Interamerican Accounting Association (IAA).
- The IESBA’s decisions in approving the Technology Exposure Draft (ED), expected in December 2021, and the related Explanatory Memorandum.

16. The TWG believes that there is value in publishing a report on its 2021 fact-finding work. The release of the report is anticipated by September 2022 to allow ample time for the TWG to incorporate the inputs and reactions from IESBA members and stakeholders, including the IESBA Consultative Advisory Group (CAG), and the IESBA-National Standards Setters (NSS) Liaison Group. Following the finalization of the 2021 report, the Working Group will continue its existing fact-finding and NAM remit.

Establishment of an External Technology Advisory Committee

17. In May 2021, a few representatives of the IESBA-NSS Liaison Group suggested establishing an IESBA-NSS Technology Working Group, similar to the IESBA-NSS COVID-19 Working Group. The IESBA expressed broad support for this idea in June.

18. Given the inherent dynamic nature of technological change and related impacts on the accountancy profession, the TWG proposes that the IESBA build on the idea and explore establishing a “standing” Committee of Advisors on the Ethical Implications of Technology in Accounting and Finance (Advisory Committee) made up of NSS and other experts such as technology vendors and developers, regulators, PAIBs and PAPPs. The objective of this Advisory Committee would be three-fold:

   (a) To become a source of fact finding for the Working Group (and the IESBA);
   (b) To become possible collaborators and/or peer-reviewers for future NAM; and
   (c) Raise awareness of the collaborative NAM outlined in Section III.

19. The TWG’s initial view is that the Advisory Committee membership would comprise six to eight external individual members; and a representative of each of the IAASB’s and IFAC’s Technology Advisory Groups, as well as the IESBA Technology Working Group. It is anticipated that the Advisory Committee will be chaired by a member appointed from within the Advisory Committee and staff support provided by one of the member organizations. The TWG believes that this approach would facilitate the most efficient and effective operation of the proposed Advisory Committee. The TWG also considers that there is merit in issuing a public call for nominations for Advisory Committee membership in order to amplify efforts aimed at engaging with stakeholders other than PAs, attract the best (most qualified with diverse backgrounds) individuals for the role, and increase the visibility of the IESBA’s technology fact-finding initiative. This approach might also serve to elevate proposed the Advisory Committee’s transparency, objectives, and relevance.
**Matters for Consideration**

1. IESBA members are asked for comments on or reactions to: (i) the update on the Working Group’s activities, and (ii) the presentation on cybersecurity.

2. IESBA members are asked for views on the Working Group’s workplan, timeline, deliverables and next steps relating to:
   
   (a) The development of technology-related NAM (see Section III, paragraphs 9-10).

   (b) Awareness raising and fact finding (see Section IV, paragraphs 15-19).
Targeted Outreach and Events Since Release of Phase 1 Report in February 2020
(** represent outreach meetings held since IESBA’s June 2021 meeting)

<table>
<thead>
<tr>
<th>Stakeholder/ Event</th>
<th>Date</th>
<th>Region</th>
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<tbody>
<tr>
<td>Regulators and Oversight Authorities</td>
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<tr>
<td>International Organization of Securities Commissions</td>
<td>10/20</td>
<td>Global</td>
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<tr>
<td>Committee of European Auditing Oversight Bodies</td>
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<tr>
<td>• International Auditing Standards Subgroup</td>
<td>11/20, 5/21</td>
<td>Europe</td>
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<td>** Office of the Comptroller of the Currency</td>
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<tr>
<td>• Robert J. De Tullio, Senior Policy Accountant (and CAG representative for Basel Committee on Banking Supervision)</td>
<td>7/21</td>
<td>North America</td>
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<tr>
<td>• Mary Katherine Kearney, Professional Accounting Fellow</td>
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<tr>
<td>Academia</td>
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<tr>
<td>Rutgers University</td>
<td>5/20</td>
<td>North America</td>
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<tr>
<td>• Professors Miklos Vasarhelyi and Helen Brown-Liburd, and PhD candidate Ivy Munoko</td>
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<tr>
<td>** American Accounting Association - Ethics Symposium</td>
<td>7/21</td>
<td>North America</td>
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<tr>
<td>• Panel Session on &quot;Blockchain, Smart Contracts and Related Technologies: Perspectives on Ethics&quot;</td>
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<td>Independent National Standard Setters</td>
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<td>Accounting Professional &amp; Ethical Standards Board (Australia)</td>
<td>8/20</td>
<td>Asia-Pacific</td>
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<tr>
<td>New Zealand Auditing and Assurance Standards Board</td>
<td>9/20</td>
<td>Asia-Pacific</td>
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<tr>
<td>Software Vendors/Developers</td>
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<tr>
<td>** MindBridge AI</td>
<td>7/21</td>
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<tr>
<td>• Eli Fathi, former CEO</td>
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<tr>
<td>Professional Accountancy Organizations (PAOs), including National Standard Setters</td>
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<td>Chinese Institute of CPAs</td>
<td>4/21</td>
<td>Asia-Pacific</td>
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<tr>
<td>Accountancy Europe Technet</td>
<td>6/21</td>
<td>Europe</td>
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<td>** Interamerican Accounting Association</td>
<td>6/21</td>
<td>South America</td>
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<tr>
<td>• Yvonne Huertas, President of the Technology Commission</td>
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The purpose of the sub-group is to further enhance cooperation and consistency in audit oversight in the European Union regarding the adoption and use of standards on professional ethics, internal quality control of audit firms and auditing and to contribute to technical examination of international auditing standards, including the processes for their elaboration, with a view to their adoption. Members consist of representatives (from their respective Audit Oversight Board) of the CEAOB members states.
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<thead>
<tr>
<th>Stakeholder/ Event</th>
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<tbody>
<tr>
<td>** CPA Canada Public Trust Committee and Independence Standing Committee</td>
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<tr>
<td>• Michelle Thomas, Director of Regulatory Affairs and Independence Standards</td>
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<td>• Matt Bootle, Independence Standing Committee Chair</td>
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<td>** Firms</td>
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<td>IFAC Forum of Firms</td>
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<td>European Group of International Accountancy Networks and Associations</td>
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<td>Europe</td>
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<td>** KPMG</td>
<td>6/21, 8/21</td>
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<tr>
<td>• Erik Niemi, Partner, Risk Consulting Services and Global IT Attestation Services Leader</td>
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<td>• Eric Rae, Senior Manager, Technology Risk Consulting</td>
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<td>• Renzo Francescutti, Global Independence Group Partner In Charge</td>
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<td>• Elena Zubarevsky, Managing Director</td>
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<td>** PwC</td>
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<td>Asia-Pacific</td>
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<td>• William Gee, Partner, Member of PwC’s Chief Digital Office</td>
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<td>** EY</td>
<td>9/21</td>
<td>Middle East</td>
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<tr>
<td>• Clinton Firth, Partner, Global Cybersecurity Lead for Energy and Africa, India &amp; Middle East (AIM) Cybersecurity Leader</td>
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<tr>
<td>** Other Multi-Stakeholder Meetings</td>
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<td>IAASB Technology Working Group</td>
<td>6/20, 8/20, 5/21</td>
<td>Global</td>
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<td>IFAC Technology Advisory Group</td>
<td>2/20</td>
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<tr>
<td>IFAC International Panel of Accountancy Education</td>
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<td>Global</td>
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⁶ The IESBA-NSS liaison Group comprises organizations with direct responsibility for promulgating ethics (including independence) standards in Australia, Canada, China, France, Germany, Hong Kong SAR, India, Japan, the Netherlands, New Zealand, the Russian Federation, South Africa, the UK, and the US.
### Stakeholder/ Event

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<thead>
<tr>
<th>Stakeholder/ Event</th>
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<tbody>
<tr>
<td>** Institute of Management Accountants</td>
<td>7/21</td>
<td>North America</td>
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<tr>
<td>• Loreal Jiles, Director of Research, Digital Technology &amp; Finance Transformation</td>
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<tr>
<td>Multi-Stakeholder Outreach Events</td>
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<tr>
<td>Virtual Workshop Event hosted by IFAC</td>
<td>10/20</td>
<td>Global</td>
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<tr>
<td>** Virtual Workshop Event hosted by CPA Canada, Institute of Chartered Accountants of Scotland, IFAC</td>
<td>2/21</td>
<td>North America</td>
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<tr>
<td>** Virtual Workshop Event hosted by the Saudi Organization for CPAs (SOCPA)</td>
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<td>Middle East</td>
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Appendix 2

Research on Blockchain and Cybersecurity Summarized by Dr. Calderon and Considered by the TWG

Blockchain

- Pimentel, E. and E. Boulianne (2020). "Blockchain in Accounting Research and Practice: Current Trends and Future Opportunities." Accounting Perspectives
- Sadu, I. (2018). "AUDITING BLOCKCHAIN." Internal Auditor
Dai, J., et al. (2019). "Utilizing Blockchain and Smart Contracts to Enable Audit 4.0: From the Perspective of Accountability Audit of Air Pollution Control in China." Journal of Emerging Technologies in Accounting

Cybersecurity

• Huigang, L., et al. (2019). "WHAT USERS DO BESIDES PROBLEM-FOCUSED COPING WHEN FACING IT SECURITY THREATS: AN EMOTION-FOCUSED COPING PERSPECTIVE." MIS Quarterly
• Benjamin, V., et al. (2019). "DICE-E: A FRAMEWORK FOR CONDUCTING DARKNET IDENTIFICATION, COLLECTION, EVALUATION WITH ETHICS." MIS Quarterly