

TECHNOLOGY CATALOG

Catalog of Technology-Related Matters and Preliminary Direction on Actions

Version 3 (~~JUNE–JULY~~ 2026) [Marked from **Agenda Item 8-C**] **[Cleared]**

Purpose and Role

The Catalog of Technology-Related Matters and Preliminary Direction on Actions (the Technology Catalog) is the IAASB's central operational tool for capturing technology-related matters. It includes matters arising from technological developments that may affect the consistent or effective application of the IAASB's standards, as well as matters arising from the IAASB's work to operationalize its [Technology Position](#).

The Technology Catalog focuses on matters within the IAASB's remit that relate specifically to the IAASB's Quality Management Standards¹ and its Audit and Other Assurance Engagement Standards.² These include matters arising from: (i) technology used by entities; (ii) technology used by practitioners;³ (iii) the interaction between the two; and (iv) other work to operationalize the guiding actions in the Technology Position Statement. The Technology Catalog supports the IAASB's work plan and decision-making by:

- (a) providing a structured record of technology-related matters the IAASB is monitoring and considering;
- (b) describing, at a point in time, the IAASB's preliminary direction on actions for addressing each matter; and
- (c) promoting transparency by making visible the nature of the matters being considered and the rationale for the IAASB's preliminary direction on actions to address each matter.



For more information about the Technology Catalog Process, refer to the [IAASB's Approach to Addressing Technology-Related Matters](#)

Unless otherwise indicated, the matters reflected in the Technology Catalog are framed principally in the context of audits under the ISAs. Theme 3 groups matters whose primary focus is quality management, although quality management considerations may also arise in other themes. Theme 10 groups matters whose primary focus is other assurance engagements.

Structure

The Technology Catalog begins with a [Snapshot](#), which presents a consolidated view of all identified matters and their current status. The Snapshot is followed by three tables, which set out those matters according to how they are being tracked and addressed.

- [Table 1: Technology-Related Matters Not Currently Allocated to Active Projects or Workstreams](#). This table captures matters not currently allocated to active projects or workstreams. It also includes the Board's prioritization

¹ For purposes of the Technology Catalog, references to the IAASB's Quality Management Standards include International Standard on Quality Management (ISQM) 1, *Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements*, ISQM 2, *Engagement Quality Reviews* and International Standard on Auditing (ISA) 220 (Revised), *Quality Management for an Audit of Financial Statements*.

² This includes the ISAs, the International Standard on Auditing for Audits of Financial Statements of Less Complex Entities (the ISA for LCE), International Standards on Review Engagements (ISREs), International Standards on Assurance Engagements (ISAEs), and International Standards on Sustainability Assurance (ISSAs).

³ For technologies used by practitioners, the focus of the Technology Catalog is specifically on technological tools—a subset of technological resources used directly by engagement teams in the performance of engagements—that facilitate the design or performance of engagement procedures in obtaining evidence.

and preliminary direction on actions for each matter, including continued monitoring, further ~~information-gathering~~information gathering or analysis, standard setting, the development of non-authoritative material, or a combined or phased approach.

- [Table 2: Technology-Related Matters Allocated to Active Projects or Workstreams](#). This table captures technology-related matters that are currently being addressed through active IAASB projects or workstreams, together with the status of the work intended to address each matter.
- [Table 3: Resolved and Closed Technology-Related Matters](#). This table is currently empty, but will in due course provide a record of matters that have been addressed or removed from Tables 1 and 2, including completed work and outcomes.

Snapshot

This snapshot presents a consolidated view of all technology-related matters included in the Technology Catalog, indicates whether each matter is reflected in Table 1 or Table 2, and includes cross-references to assist readers in navigating to the relevant matter.

#	Technology-Related Matters	Allocated to an Active Project or Workstream?
Theme #1: Terminology		
1(a)	More clarity needed in technology-related terminology	Yes – see Table 2
Theme #2: Audit Conceptual Framework		
2(a)	Inherent limitations of an audit	No – see Table 1
2(b)	Impact of the growing use of technological tools on expectations about the use of technology in audits and the concept of reasonable assurance	No – see Table 1
2(c)	Auditing framework for continuous auditing	No – see Table 1
Theme #3: Quality Management		
3(a)	Quality management of technological tools enabled by emerging technologies used in engagements	Yes – see Table 2
Theme #4: Determining Whether to Use Technological Tools to Design or Perform Audit Procedures		
4(a)	Exploring introducing explicit requirements and application material about determining whether technological tools are required to achieve audit objectives	Yes – see Table 2
4(b)	Challenges to using technological tools that arise because of how data is produced and maintained by audited entities	Yes – see Table 2
4(c)	The IAASB's role in promoting best practices	No – see Table 1
Theme #5: Audited Entities' Use of Technology		
5(a)	Identifying, assessing, and responding to risks arising from the use of IT by audited entities	Yes – see Table 2
5(b)	Impact on the audit when entities use service organizations that use emerging technologies	No – see Table 1
5(c)	Highlighting opportunities associated with the use of technology by entities	No – see Table 1

#	Technology-Related Matters	Allocated to an Active Project or Workstream?
5(d)	*Newly added* Audit eChallenges in audits of entities with activities in the crypto-asset ecosystem	No – see Table 1
5(e)	*Newly added* Impact on the audit of increasingly sophisticated cybersecurity threats affecting entities	No – see Table 1
Theme #6: Using Technological Tools that Facilitate the Design or Performance of Audit Procedures		
6(a)	Exploring the need for explicit requirements and application material when using technological tools	Yes – see Table 2
6(b)	Interpretability or explainability associated with how a technological tool arrives at its outputs	Yes – see Table 2
6(c)	Categorization of audit procedures performed using technological tools	Yes – see Table 2
6(d)	Challenges associated with the use of technological tools to perform substantive analytical procedures	Yes – see Table 2
6(e)	Testing outliers and exceptions in the output of a procedure performed using technological tools	Yes – see Table 2
6(f)	Appropriate use of technological tools to design or perform audit confirmations	Yes – see Table 2
6(g)	Appropriate use of technological tools in inventory counts	Yes – see Table 2
6(h)	Documentation requirements when designing or performing audit procedures using technological tools	Yes – see Table 2
Theme #7: Using the Work of a (Management's or Auditor's) Expert		
7(a)	Evaluating the work of an auditor's expert	No – see Table 1
7(b)	Evaluating the work of a management's expert	Yes – see Table 2
7(c)	Experts are presumed to be humans in the standards	No – see Table 1
Theme #8: Auditor Mindset		
8(a)	The impact of using technological tools on the exercise of professional skepticism	Yes – see Table 2
Theme #9: Transparency Through Communication and Auditor Reporting		
9(a)	Communicating about the use of technology	No – see Table 1
Theme #10: Other Assurance Engagements		
10(a)	*Newly added* Sustainability and other assurance engagements	No – see Table 1
10(a b)	*Newly added* AI assurance	No – see Table 1
10(b)	*Newly added* Sustainability Assurance	No – see Table 1
10(c)	*Newly added* Cybersecurity assurance	No – see Table 1

Table 1: Technology-Related Matters Not Currently Allocated to Active IAASB Projects or Workstreams

#	Technology-Related Matter Including basis for concluding that it is a matter	Source of Insight ⁴	Related Standards ⁵	Preliminary Direction on Action ⁶	Prioritization ⁷ High, Medium Low
Theme #2: Audit Conceptual Framework					
2(a)	Inherent limitations of an audit As described in ISA 220 (Revised), ⁸ technological tools may enhance the quality of audits by allowing the auditor to evaluate large amounts of data more easily to, for example, provide deeper insights, identify unusual trends or more effectively challenge management’s assertions, which enhances the ability of the auditor to exercise professional skepticism. Similarly, the use of technology by entities in their information systems and financial reporting processes may enhance the quality of their financial reporting by, for example, enhancing the quality of their automated controls. As technology used by entities and auditors continues to evolve, there is an opportunity to re-examine how the inherent limitations of an audit are described and contextualized throughout the ISAs and ISQMs. For	- Guiding Action #4 - Academics - Audit regulators	ISAs	Continue monitoring At this stage, the Board does not view this matter as requiring a more active response. The IAASB will continue to undertake monitoring activities under Component 3 of the Technology Position, to understand whether stakeholders believe that further action is needed and whether developments in technology and practice suggest that any references to the inherent limitations of an audit in the IAASB’s standards should, in due course, be revisited.	Low

⁴ This column refers to how each matter was identified or where the matter originated. It includes, as applicable, the stakeholder or source that provided the insight, and whether the matter arises from the IAASB’s work to operationalize the eight guiding actions set out in Component 1 of the Technology Position, that support the Board in achieving its commitment to actively facilitate and, where appropriate, encourage the appropriate use of technology in engagements and systems of quality management.

⁵ This column identifies the extant standards to which each matter related at the time the matter was added to the Technology Catalog. It does not, in itself, imply that standard setting is contemplated; that is indicated, where relevant in the adjacent column on preliminary direction on action. For Themes 1 to 9, when a matter has a strong link with other assurance standards (i.e., beyond the ISAs), such standards are also identified. Because the Technology Catalog is updated periodically, the standards identified here may change between updates, including due to revisions to existing standards or the issuance of new standards.

⁶ This column describes the Board’s preliminary direction on action to address each matter (refer to the [Approach document \(section 1.3\)](#)). For purposes of this Technology Catalog, “preliminary direction on action” includes continued monitoring, further information gathering, standard setting, development of non-authoritative material, or a combined or phased approach. However, a preliminary direction on action does not represent a commitment by the Board. Final determinations on whether to undertake standard-setting projects or develop non-authoritative material are work plan decisions, balanced against other priorities, capacity, and availability of resources, and executed at the project or workstream level.

⁷ This column indicates the IAASB’s assessment, at a point in time, of the relative priority of acting on the preliminary direction for each matter. Prioritizations are discussed by the Board in public session and are not intended to be formulaic or fixed. Rather, they may change over time in light of the relative pervasiveness or urgency of a matter and broader considerations about the appropriate allocation of Board resources.

⁸ ISA 220 (Revised), paragraph A64

#	Technology-Related Matter	Source of Insight ⁴	Related Standards ⁵	Preliminary Direction on Action ⁶	Prioritization ⁷
	example, the use of emerging technologies by entities in their financial reporting processes may introduce new challenges for the auditor, including for example challenges with identifying risks arising from the use of IT, and with designing and performing audit procedures to address such risks (see also Matter 6(b)). The Technology Team performed a preliminary review of the references to inherent limitations throughout the ISAs. None of the references appear to be inappropriate or irrelevant within the context of the prevailing level of technologies in use today. However, a deeper dive may in due course be required on whether any of the references to inherent limitations of an audit in the IAASB's standards need to be modernized, while reinforcing the auditor's responsibility to obtain sufficient and appropriate audit evidence.				
2(b)	Impact of the growing use of technological tools on expectations about the use of technology in audits and the concept of reasonable assurance How the auditor obtains audit evidence, including for example whether technological tools are used to obtain such evidence, does not change the underlying objective of an audit which is to obtain reasonable assurance by obtaining sufficient appropriate audit evidence to reduce audit risk to "an acceptably low level". Yet, the use of technological tools to facilitate the design or performance of audit procedures may enable auditors to obtain <i>more persuasive</i> audit evidence than manual audit procedures. This may, in turn, create an expectation by stakeholders that auditors should be using technology to enhance the quality of their audits and elevate expectations about what reasonable assurance is in an audit. Certain stakeholders have identified a need for the IAASB to monitor evolving expectations by users of financial statements and other	- Stakeholder Advisory Council - Academics	ISAs	Continue monitoring At this stage, the Board does not view this matter as requiring a more active response. The IAASB will continue to undertake monitoring activities under Component 3 of the Technology Position, to understand whether stakeholder expectations about the use of technology in audits, and about the concept of reasonable assurance, are evolving in a way that suggests that further clarification or other IAASB action may in due course be needed.	Low

#	Technology-Related Matter	Source of Insight ⁴	Related Standards ⁵	Preliminary Direction on Action ⁶	Prioritization ⁷
	stakeholders, such as regulators and preparers, based on the increased availability of cost-effective technologies for auditors and whether and, if so, how that impacts key concepts in the IAASB’s standards.				
2(c)	Auditing framework for continuous auditing The concept of “continuous auditing” first emerged in the late 1980s. The first formal guidance on continuous auditing, often called the Red Book, was published jointly by the Canadian Institute of Chartered Accountants (CICA) and the American Institute of Certified Public Accountants (AICPA) in 1999. It defines continuous auditing as a methodology that enables auditors to obtain near-real-time assurance through reports issued simultaneously with, or shortly after, relevant events (CICA/AICPA, 1999). Advancements in technology have made continuous auditing increasingly feasible. For example, cloud computing now provides the necessary infrastructure, enabling automated data collection and analysis of client the <u>entity’s</u> financial data without the need for the auditor to be physically present at the entity. The standards do not contemplate a continuous audit approach. Therefore, it is worthwhile for the IAASB to monitor adoption rates for continuous reporting by entities and continuous auditing by assurance providers as that may eventually require more extensive revisions to the IAASB’s standards than those currently considered in this Catalog.	- Guiding action #1 - Guiding action #2 - Academics - Practitioners - JSS⁹	ISAs	Continue monitoring At this stage, the Board does not view this matter as requiring a more active response. The IAASB will continue to undertake monitoring activities under Component 3 of the Technology Position, to understand whether continuous reporting by entities and continuous auditing by assurance providers begin to gain sufficient traction to suggest that more extensive revisions to the IAASB’s standards may in due course be needed.	Low
Theme #4: Determining Whether to Use Technological Tools to Design or Perform Audit Procedures					
4(c)	The IAASB’s role in promoting best practices With the adoption by the IAASB of its Technology Position at its September 2024 meeting, the Board has formally recognized technology’s transformative potential to improve audit and assurance quality. It was in	Guiding action #1	- ISAs - ISQMs	Continue monitoring At this stage, the Board does not view this matter as warranting a dedicated standard-setting or non-authoritative materials response. The IAASB will continue	Low

⁹ Jurisdictional Auditing Standard Setters (JSS) that form part of the IAASB-JSS liaison group (see information on the [About IAASB](#) webpage)

#	Technology-Related Matter	Source of Insight ⁴	Related Standards ⁵	Preliminary Direction on Action ⁶	Prioritization ⁷
	this context that the IAASB has committed in its Technology Position Statement to facilitate and, where appropriate, encourage the use of technology in engagements and systems of quality management. Audit regulators worldwide have more recently started to feature in their inspection reports observations about best practices they are observing in their inspections of audits, including how technological tools used in audits have improved audit quality. This was a strategic shift by audit regulators to elevate audit quality at the firms by being deliberate about balancing positive and critical feedback relating to audit work (i.e., audit findings). The Board is monitoring whether there is a need for content addressing "best practices" for stakeholders, as well as the appropriate nature, timing and scope of such content.			to monitor stakeholder perspectives on whether there is a meaningful role for the IAASB in promoting or facilitating best practices relating to the use of technological tools in engagements and systems of quality management, including whether a clearer need emerges for IAASB-developed or IAASB-facilitated non-authoritative material.	
Theme #5: Audited Entities' Use of Technology					
5(b)	Impact on the audit when entities use service organizations that use emerging technologies Like in Matter 5(a) in Table 2, which deals with the increasing sophistication of technologies used by entities under audit, service organizations may also be using sophisticated technologies in delivering services to user entities or in operating controls over those services. This may also give rise to challenges in identifying, assessing, and responding to risks from the use of IT by service organizations in audits of financial statements of user entities (i.e., by user auditors).	- Feedback on the IAASB's Strategy and Work Plan for 2024-2027 - JSS	- ISA 402 ISAE 3402¹¹	Further information gathering The IAASB did not prioritize revising ISA 402 as a proposed project for its 2024-2027 Work Plan. However, this matter now warrants higher priority information gathering because developments in practice suggest that the use of emerging technologies by service organizations may give rise to increasingly complex questions for both service auditors and user auditors. The Technology Team will continue to gather additional information about how emerging technologies used by service organizations are affecting the application of ISA	Medium High (With the possibility of moving higher)¹³

¹¹ [ISAE 3402, Assurance Reports on Controls at a Service Organization](#)

¹³ [This matter is currently assessed as a medium priority; however, monitoring activities have identified it as an increasingly prominent or frequently discussed topic. As a result, the matter is being closely monitored as it may warrant a higher priority assessment in the near future.](#)

#	Technology-Related Matter	Source of Insight ⁴	Related Standards ⁵	Preliminary Direction on Action ⁶	Prioritization ⁷
	User auditors typically rely to some extent on the work performed by service auditors in relation to controls at the service organization, as addressed in ISA 402.¹⁰ Accordingly, where a service organization uses emerging technologies in a way that is integral to the services provided, embedded in relevant controls, or affects the achievement of the service organization's control objectives, this may create challenges for both service auditors and user auditors. These challenges may be especially pronounced where the technology is difficult to understand or explain, where the service organization is relying on it within a process or control, or where its use affects areas such as change management, data integrity, processing integrity, or the reliability of outputs used by user entities and their auditors.			402 and related standards (e.g., other ISAs or ISAE 3402),¹² including: • whether they introduce risks or control considerations that are not being addressed consistently in practice or raise other quality considerations relating to existing principles and guidance in the standards; and • whether further action may be needed, including the nature, timing and scope of action.	
5(c)	Highlighting opportunities associated with the use of technology by entities As described in guiding action #5 of the IAASB's Technology Position Statement, the IAASB will strike the right balance when referring to opportunities and challenges associated with the use of technology by practitioners and entities. This matter is not about recasting the standards to address "opportunities" in the same way they address risks. Rather, it is about whether the IAASB's standards and related material give sufficient recognition to the fact that technology used by entities may, in some circumstances, enhance the relevance, reliability, timeliness, or accessibility of information relevant to audit and other assurance engagements, and thereby create opportunities to enhance engagement quality or efficiency.	• Guiding action #1 • Guiding action #5	• ISAs	Combined approach (i.e., Standard setting and Non-authoritative material) This matter is expected to be addressed progressively through both current and future IAASB projects and workstreams, as opportunities arise to revisit how references to technology are framed in the standards and related material. <u>For example, in focusing on addressing the impact of technology in the Audit Evidence and Risk Response (AERR) project, the Board has introduced concepts and requirements to help future-proof the standards that allow for further evolution in entities' and auditors' use of technology, and has added specific application material on the impact of technology, including in relation to the auditor's testing of controls (e.g.,</u>	Medium

¹⁰ ISA 402, *Audit Considerations Relating to an Entity Using a Service Organization*

¹² ~~ISAE 3402, *Assurance Reports on Controls at a Service Organization*~~

#	Technology-Related Matter	Source of Insight ⁴	Related Standards ⁵	Preliminary Direction on Action ⁶	Prioritization ⁷
				<u>circumstances requiring tests of controls and navigating the testing of direct and indirect controls reflecting the impact of different types of automated controls and general IT controls).</u> As standards are revised in future standard-setting activities, there is an opportunity for the IAASB to consider whether references to technology can be framed in a more balanced and technology-forward way, including by better acknowledging that technology used by entities may enhance the relevance, reliability, timeliness, or accessibility of information related to their financial or other external reporting, and that technology used by practitioners may in turn create opportunities to enhance engagement quality or efficiency. This would not involve recasting the standards away from the risk-based model that underpins them. Rather, it would involve ensuring that the standards and related material appropriately reflect both the opportunities and the challenges associated with technology, consistent with Guiding Action #5 of the Technology Position Statement. The Board may also consider whether non-authoritative material would be helpful in due course to support a more consistent articulation of these matters.	
5(d)	<u>Audit e</u>Challenges in audits of entities with activities in the crypto-asset ecosystem Audits of entities with activities in the crypto-asset ecosystem can present significant practical challenges in applying the ISAs. Based on feedback received to date from stakeholders, the issue does not appear to be that the underlying principles in the standards are inappropriate. Rather,	• Guiding action #4 • Audit regulators • Practitioners	• ISAs	Further information gathering <u>This matter warrants the attention of the IAASB because e</u>Crypto-asset-related activities are becoming more globally relevant and may create significant challenges in obtaining sufficient appropriate audit evidence. At the same time, the current fact pattern does not indicate that standard setting	<u>Low</u>Medium

#	Technology-Related Matter	Source of Insight ⁴	Related Standards ⁵	Preliminary Direction on Action ⁶	Prioritization ⁷
	challenges often arise in obtaining sufficient appropriate audit evidence because the risks are distinctive, procedures may need to be tailored to those risks, and specialized skills, tools and techniques, and in some cases specialists, may be needed to identify and assess those risks and design and perform appropriate procedures. This issue extends beyond entities whose principal business is in crypto-assets. It may also arise in audits of entities that hold, trade, exchange, safeguard, mine, or stake crypto-assets. Examples of the challenges include auditing the existence of crypto-assets on a blockchain and whether the entity has rights to those assets; evaluating the reliability of information obtained from using technological tools such as blockchain explorers; addressing custody and control arrangements, including where third parties or service organizations are involved; and responding to fraud, related party, valuation, and completeness risks in pseudonymous, highly technical, and rapidly evolving environments. In some cases, substantive procedures alone may not be sufficient. This matter raises the question of whether there is a role for the IAASB to contribute non-authoritative material in an area where credible jurisdictional materials already exist, including whether IAASB involvement could provide an internationally coherent reference point, grounded in the ISAs, to support more consistent and effective application globally.			is the appropriate initial response. While credible resources already exist in some jurisdictions, questions remain as to whether those materials are sufficiently accessible and globally applicable to support consistent or effective application of the ISAs. The first step for addressing this matter will be to gather additional information to define the matter more precisely and assess whether a genuine international gap or priority for standard-setting exists. Based on the outcome of that work, the Board may then consider whether targeted non-authoritative material would be an appropriate response, including whether such material could complement, rather than duplicate, existing guidance by providing an internationally coherent, ISA-grounded reference point.	
5(e)	Impact on the audit of increasingly sophisticated cybersecurity threats affecting entities Entities are increasingly exposed to more sophisticated cybersecurity threats, including threats arising from advances in technology and from increasingly organized and capable malicious actors.	- Stakeholder Advisory Council - Technology Advisory Network	- ISA 315 (Revised 2019)¹⁵ - ISA 330¹⁶	Further information gathering This matter warrants further information gathering because cyber threats affecting entities appear to be increasing in sophistication and relevance, and may in some	Medium

¹⁵ ISA 315 (Revised 2019), *Identifying and Assessing the Risks of Material Misstatement*

¹⁶ ISA 330, *The Auditor's Responses to Assessed Risks*

#	Technology-Related Matter	Source of Insight ⁴	Related Standards ⁵	Preliminary Direction on Action ⁶	Prioritization ⁷
	Cyber incidents or breaches affecting an entity's information systems, data, or digital infrastructure may in some circumstances give rise to risks of material misstatement, including through unauthorized access, alteration, or destruction of information relevant to financial reporting. This matter is not about firms' own cybersecurity obligations when housing or using entity data, which are addressed elsewhere in the Technology Catalog in the quality management context. Rather, it concerns the implications for the audit when entities are exposed to increasingly sophisticated cyber threats or have experienced cyber incidents that may affect financial reporting, internal control, or the reliability and availability of information intended to be used as audit evidence. In some circumstances, cybersecurity breaches perpetrated against the entity by external parties may constitute instances of fraud or suspected fraud, which ISA 240 (Revised)¹⁴ describes as third-party fraud. This raises questions about whether the IAASB's standards and related material sufficiently support auditors in identifying and assessing risks of material misstatement arising from cyber threats and incidents affecting entities, and in designing and performing appropriate responses where such threats or incidents may be relevant to the audit.	• Broader monitoring activities	• ISA 240 (Revised) • ISA 570 (Revised 2024)¹⁷	circumstances give rise to risks of material misstatement or other matters relevant to the audit. Further work would help clarify the fact patterns in which cyber incidents or cyber-related threats are giving rise to audit challenges in practice, including whether those challenges are being addressed consistently under the extant standards and whether any future IAASB response may be warranted.	
Theme #7: Using the Work of a (Management's or Auditor's) Expert					
7(a)	Evaluating the work of an auditor's expert ISA 620¹⁸ deals with the auditor's responsibilities relating to the work of an auditor's expert when that work is used to assist the auditor in obtaining sufficient appropriate audit evidence.	• Guiding action #2 • Guiding action #6 • Audit regulators	• ISA 620	Further information gathering ISA 620 was classified as a 'reserve topic' in the IAASB's Strategy and Work Plan for 2024-2027 because, although the IAASB received feedback on possible revision of this standard, other candidate topics were considered to be	Medium

¹⁴ ISA 240 (Revised), *The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements*

¹⁷ ISA 570 (Revised 2024), *Going Concern*

¹⁸ ISA 620, *Using the Work of an Auditor's Expert*

#	Technology-Related Matter	Source of Insight ⁴	Related Standards ⁵	Preliminary Direction on Action ⁶	Prioritization ⁷
	The increasing sophistication of technologies used by auditors' experts to perform their work, including Generative Artificial Intelligence (AI) (Gen AI), may make it more challenging for auditors to comply with the ISA 620 requirements. In particular, the auditor is required to understand and evaluate the adequacy of the expert's work, and that may become more challenging when the auditor's expert uses technology that may lack interpretability or explainability (also see Matter 6(b) in Table 2). This may exacerbate concerns already raised by audit regulators about whether auditors are consistently evaluating the relevance and reasonableness of the findings or conclusions of an auditor's expert.			higher priorities at the time (based on the criteria in the public agenda papers for the Strategy and Work Plan). Accordingly, the appropriate preliminary direction is further information gathering. This would include researching how emerging technologies, including Gen AI, are being used by auditors' experts; assessing whether those technologies are creating distinct challenges for auditors in applying ISA 620; and considering whether further action may be needed, including the nature, timing and scope of action. Because reserve topics in the Work Plan could be elevated to projects when circumstances change, this matter will also continue to be monitored as part of the IAASB's broader technology monitoring activities.	
7(c)	Experts are presumed to be humans in the standards ISA 620, which deals with the auditor's expert, and ISA 500,¹⁹ which includes requirements and application material relevant to information prepared by management's expert, include wording that either explicitly or implicitly assumes that an expert is a human. At the same time, new technologies, including artificial intelligence, robotic process automation, and increasingly autonomous forms of AI, are in some circumstances designed to reduce, or eliminate, the need for human involvement in performing specialized tasks. This raises the question of whether the assumption in the IAASB's standards that experts must be human, or at least involve meaningful human involvement, remains appropriate as technology evolves.	- Guiding action #1 - Guiding action #2 - Technology experts	- ISA 500 - ISA 620	Continue monitoring This is currently a low-priority matter because the IAASB has not heard extensive feedback on it to date. The Board will continue to monitor developments in technology and practice to assess whether this matter becomes more significant over time and whether a more active response, may eventually be warranted.	Low

¹⁹ ISA 500, *Audit Evidence*

#	Technology-Related Matter	Source of Insight ⁴	Related Standards ⁵	Preliminary Direction on Action ⁶	Prioritization ⁷
Theme #9: Transparency Through Communication and Auditor Reporting					
9(a)	Communicating about the use of technology Some stakeholders have questioned whether, and to what extent, auditors should communicate about their use of technological tools that facilitate the design or performance of audit procedures in obtaining evidence. Such communication could occur in different ways, including strengthening expectations for dialogue with those charged with governance (TCWG) and/or through communication in the auditor's report. The rationale for exploring this matter includes: • Helping TCWG and/or users of financial statement better understand the nature of the auditor's work and the role of technology, particularly both its benefits and limitations. • Responding to growing expectations from some stakeholders, including, for example, TCWG of entities that the auditor discloses whether technology was used, and, if so, how it contributed to audit evidence and the auditor's conclusions. • Reducing potential inconsistency, as practitioners may otherwise adopt varied approaches in how (and whether) they communicate the use of technological tools, resulting in uneven levels of transparency.	• Guiding action #3 • Guiding action #5 • Board member feedback	• ISA 260 (Revised)²⁰ • ISA 700 (Revised)²¹	Continue monitoring This issue is currently assessed as low priority. While stakeholder interest in communication about the auditor's use of technology is increasing, it is not presently viewed as a communication gap.	Low
Theme #10: Other Assurance Engagements					
10(a)	[Moved from 10(b)] Sustainability and other assurance engagements	• Board member feedback •	• ISSAs 5000 • <u>ISAEs</u> • <u>ISREs</u>	Continue monitoring <u>Sustainability assurance</u> The Board will continue to monitor how technology-related application questions emerge in practice under ISSA 5000,	Low

²⁰ ISA 260 (Revised), *Communication with Those Charged with Governance*

²¹ ISA 700 (Revised), *Forming an Opinion and Reporting on Financial Statements*

#	Technology-Related Matter	Source of Insight ⁴	Related Standards ⁵	Preliminary Direction on Action ⁶	Prioritization ⁷
	ISSA 5000²² is an overarching standard for assurance engagements on sustainability information. As entities increasingly use complex systems, external data sources, service organizations, and information from others in the value chain in preparing sustainability information, and as practitioners increasingly use technological tools in performing sustainability assurance engagements, questions may arise about the consistent and effective application of ISSA 5000. <u>The same questions also may arise in relation to review engagements under the ISREs and other assurance engagements under the ISAEs.</u> These may relate, for example, to the practitioner's understanding of the entity's information system and internal control, the relevance and reliability of information used as evidence, and disclosures involving estimates, assumptions, models, and forward-looking information. Many of these matters may overlap with technology-related matters elsewhere in the Catalog that have been identified in the audit context. <u>The matters identified in Themes 1–9 affecting the ISAs may also have broader implications for other assurance standards.</u> The matter reflected here is whether, and to what extent, similar matters arise under ISSA 5000 <u>and other assurance engagements</u> and whether any sustainability-assurance-specific clarification may in due course be needed.			including whether matters identified elsewhere in the Catalog in the audit context also arise in sustainability assurance engagements. Given that ISSA 5000 becomes effective for periods beginning on or after December 15, 2026, implementation questions may emerge more clearly as the standard begins to be applied in practice. As implementation experience develops, this may help inform whether any sustainability-assurance-specific clarification or other IAASB response may in due course be warranted. <u>Other assurance engagements</u> <u>Further information gathering will be required to evaluate the extent and nature of the matters and their impact on the other assurance engagement standards. Additional consideration will also be necessary to assess how proposals developed in response to these matters within the ISAs could be reflected, adapted, or incorporated into other assurance engagement standards, as appropriate.</u>	
10(a b)	AI assurance Technological developments are raising questions about whether there is a need for new or evolving forms of assurance engagements in relation to AI, including assurance over an entity's AI system or its AI governance framework in accordance with suitable criteria. Some firms are beginning	• Guiding action #1 • Guiding action #5 • Board member feedback • JSS	• ISAEs	Further information gathering The IAASB is gathering information to better understand the landscape of subject matter-specific assurance engagements, other than assurance on sustainability information, in order to consider the IAASB's potential role.	Medium

#	Technology-Related Matter	Source of Insight ⁴	Related Standards ⁵	Preliminary Direction on Action ⁶	Prioritization ⁷
	to develop and offer AI assurance engagements, and interest in such engagements appears to be growing in some jurisdictions. This gives rise to questions about the subject matter(s) and suitable criteria for such engagements, and their proximity to the IAASB's remit (i.e., the extent to which these engagements are related to general-purpose external reporting by entities). Questions also arise about whether such engagements can be performed under the IAASB's existing standards, i.e., ISAE 3000 (Revised)²³ (alone or supplemented with non-authoritative material), or whether in due course there may be a need for a subject matter-specific ISAE.				
10(c)	Cybersecurity assurance Technological developments and the increasing significance of cybersecurity risk are raising questions about whether there is a need for new or evolving forms of assurance engagements in relation to cybersecurity, including assurance engagements addressing an entity's cybersecurity risk management program or related controls. In some jurisdictions, frameworks and guidance have already been developed to support such engagements. This gives rise to questions about whether such engagements can be performed under the IAASB's existing assurance standards, i.e., ISAE 3000 (Revised) (alone or supplemented with non-authoritative material), or whether in due course there may be a need for a subject matter-specific ISAE.	• Stakeholder Advisory Council • Technology Advisory Network • Broader monitoring activities	• ISAEs	Further information gathering The IAASB is gathering information to better understand the landscape of subject matter-specific assurance engagements other than assurance on sustainability information. This matter could be considered as part of that work, including understanding the extent of current practice, the role of existing jurisdictional frameworks and guidance, and whether any gap may emerge that would warrant future IAASB consideration.	Medium

²³ ISAE 3000 (Revised), *Assurance engagements Other Than Audits or Reviews of Historical Financial Information*

#	<u>Technology-Related Matter</u> Including basis for concluding that it is a matter	<u>Source of Insight</u> ⁴	<u>Related Standards</u> ⁵	<u>Preliminary Direction on Action</u> ⁶	<u>Prioritization</u> ⁷ High, Medium Low
Theme #2: Audit Conceptual Framework					
2(a)	Inherent limitations of an audit As described in ISA 220 (Revised), ⁸ technological tools may enhance the quality of audits by allowing the auditor to evaluate large amounts of data more easily to, for example, provide deeper insights, identify unusual trends or more effectively challenge management’s assertions, which enhances the ability of the auditor to exercise professional skepticism. Similarly, the use of technology by entities in their information systems and financial reporting processes may enhance the quality of their financial reporting by, for example, enhancing the quality of their automated controls. As technology used by entities and auditors continues to evolve, there is an opportunity to re-examine how the inherent limitations of an audit are described and contextualized throughout the ISAs and ISQMs. For example, the use of emerging technologies by entities in their financial	- Guiding Action #4 - Academics - Audit regulators	ISAs	Continue monitoring At this stage, the Board does not view this matter as requiring a more active response. The IAASB will continue to undertake monitoring activities under Component 3 of the Technology Position, to understand whether stakeholders believe that further action is needed and whether developments in technology and practice suggest that any references to the inherent limitations of an audit in the IAASB’s standards should, in due course, be revisited.	Low

⁴ This column refers to how each matter was identified or where the matter originated. It includes, as applicable, the stakeholder or source that provided the insight, and whether the matter arises from the IAASB’s work to operationalize the eight guiding actions set out in Component 1 of the Technology Position, that support the Board in achieving its commitment to actively facilitate and, where appropriate, encourage the appropriate use of technology in engagements and systems of quality management.

⁵ This column identifies the extant standards to which each matter related at the time the matter was added to the Technology Catalog. It does not, in itself, imply that standard setting is contemplated; that is indicated, where relevant in the adjacent column on preliminary direction on action. For Themes 1 to 9, when a matter has a strong link with other assurance standards (i.e., beyond the ISAs), such standards are also identified. Because the Technology Catalog is updated periodically, the standards identified here may change between updates, including due to revisions to existing standards or the issuance of new standards.

⁶ This column describes the Board’s preliminary direction on action to address each matter (refer to the [Approach document \(section 1.3\)](#)). For purposes of this Technology Catalog, “preliminary direction on action” includes continued monitoring, further information gathering, standard setting, development of non-authoritative material, or a combined or phased approach. However, a preliminary direction on action does not represent a commitment by the Board. Final determinations on whether to undertake standard-setting projects or develop non-authoritative material are work plan decisions, balanced against other priorities, capacity, and availability of resources, and executed at the project or workstream level.

⁷ This column indicates the IAASB’s assessment, at a point in time, of the relative priority of acting on the preliminary direction for each matter. Prioritizations are discussed by the Board in public session and are not intended to be formulaic or fixed. Rather, they may change over time in light of the relative pervasiveness or urgency of a matter and broader considerations about the appropriate allocation of Board resources.

⁸ ISA 220 (Revised), paragraph A64

#	Technology-Related Matter	Source of Insight ⁴	Related Standards ⁵	Preliminary Direction on Action ⁶	Prioritization ⁷
	reporting processes may introduce new challenges for the auditor, including for example challenges with identifying risks arising from the use of IT, and with designing and performing audit procedures to address such risks (see also Matter 6(b)). The Technology Team performed a preliminary review of the references to inherent limitations throughout the ISAs. None of the references appear to be inappropriate or irrelevant within the context of the prevailing level of technologies in use today. However, a deeper dive may in due course be required on whether any of the references to inherent limitations of an audit in the IAASB's standards need to be modernized, while reinforcing the auditor's responsibility to obtain sufficient and appropriate audit evidence.				
2(b)	Impact of the growing use of technological tools on expectations about the use of technology in audits and the concept of reasonable assurance How the auditor obtains audit evidence, including for example whether technological tools are used to obtain such evidence, does not change the underlying objective of an audit which is to obtain reasonable assurance by obtaining sufficient appropriate audit evidence to reduce audit risk to "an acceptably low level". Yet, the use of technological tools to facilitate the design or performance of audit procedures may enable auditors to obtain <i>more persuasive</i> audit evidence than manual audit procedures. This may, in turn, create an expectation by stakeholders that auditors should be using technology to enhance the quality of their audits and elevate expectations about what reasonable assurance is in an audit. Certain stakeholders have identified a need for the IAASB to monitor evolving expectations by users of financial statements and other stakeholders, such as regulators and preparers, based on the increased	- Stakeholder Advisory Council - Academics	ISAs	Continue monitoring At this stage, the Board does not view this matter as requiring a more active response. The IAASB will continue to undertake monitoring activities under Component 3 of the Technology Position, to understand whether stakeholder expectations about the use of technology in audits, and about the concept of reasonable assurance, are evolving in a way that suggests that further clarification or other IAASB action may in due course be needed.	Low

#	Technology-Related Matter	Source of Insight ⁴	Related Standards ⁵	Preliminary Direction on Action ⁶	Prioritization ⁷
	availability of cost-effective technologies for auditors and whether and, if so, how that impacts key concepts in the IAASB’s standards.				
2(c)	Auditing framework for continuous auditing The concept of “continuous auditing” first emerged in the late 1980s. The first formal guidance on continuous auditing, often called the Red Book, was published jointly by the Canadian Institute of Chartered Accountants (CICA) and the American Institute of Certified Public Accountants (AICPA) in 1999. It defines continuous auditing as a methodology that enables auditors to obtain near-real-time assurance through reports issued simultaneously with, or shortly after, relevant events (CICA/AICPA, 1999). Advancements in technology have made continuous auditing increasingly feasible. For example, cloud computing now provides the necessary infrastructure, enabling automated data collection and analysis of client-the <u>entity’s</u> financial data without the need for the auditor to be physically present at the entity. The standards do not contemplate a continuous audit approach. Therefore, it is worthwhile for the IAASB to monitor adoption rates for continuous reporting by entities and continuous auditing by assurance providers as that may eventually require more extensive revisions to the IAASB’s standards than those currently considered in this Catalog.	- Guiding action #1 - Guiding action #2 - Academics - Practitioners - JSS⁹	ISAs	Continue monitoring At this stage, the Board does not view this matter as requiring a more active response. The IAASB will continue to undertake monitoring activities under Component 3 of the Technology Position, to understand whether continuous reporting by entities and continuous auditing by assurance providers begin to gain sufficient traction to suggest that more extensive revisions to the IAASB’s standards may in due course be needed.	Low
Theme #4: Determining Whether to Use Technological Tools to Design or Perform Audit Procedures					
4(c)	The IAASB’s role in promoting best practices With the adoption by the IAASB of its Technology Position at its September 2024 meeting, the Board has formally recognized technology’s transformative potential to improve audit and assurance quality. It was in this context that the IAASB has committed in its Technology Position	Guiding action #1	- ISAs - ISQMs	Continue monitoring At this stage, the Board does not view this matter as warranting a dedicated standard-setting or non-authoritative materials response. The IAASB will continue to monitor stakeholder perspectives on whether there is a	Low

⁹ Jurisdictional Auditing Standard Setters (JSS) that form part of the IAASB-JSS liaison group (see information on the [About IAASB](#) webpage)

#	Technology-Related Matter	Source of Insight ⁴	Related Standards ⁵	Preliminary Direction on Action ⁶	Prioritization ⁷
	Statement to facilitate and, where appropriate, encourage the use of technology in engagements and systems of quality management. Audit regulators worldwide have more recently started to feature in their inspection reports observations about best practices they are observing in their inspections of audits, including how technological tools used in audits have improved audit quality. This was a strategic shift by audit regulators to elevate audit quality at the firms by being deliberate about balancing positive and critical feedback relating to audit work (i.e., audit findings). The Board is monitoring whether there is a need for content addressing "best practices" for stakeholders, as well as the appropriate nature, timing and scope of such content.			meaningful role for the IAASB in promoting or facilitating best practices relating to the use of technological tools in engagements and systems of quality management, including whether a clearer need emerges for IAASB-developed or IAASB-facilitated non-authoritative material.	
Theme #5: Audited Entities' Use of Technology					
5(b)	Impact on the audit when entities use service organizations that use emerging technologies Like in Matter 5(a) in Table 2, which deals with the increasing sophistication of technologies used by entities under audit, service organizations may also be using sophisticated technologies in delivering services to user entities or in operating controls over those services. This may also give rise to challenges in identifying, assessing, and responding to risks from the use of IT by service organizations in audits of financial statements of user entities (i.e., by user auditors).	- Feedback on the IAASB's Strategy and Work Plan for 2024-2027 - JSS	- ISA 402 ISAE 3402¹¹	Further information gathering The IAASB did not prioritize revising ISA 402 as a proposed project for its 2024-2027 Work Plan. However, this matter now warrants higher priority information gathering because developments in practice suggest that the use of emerging technologies by service organizations may give rise to increasingly complex questions for both service auditors and user auditors. The Technology Team will continue to gather additional information about how emerging technologies used by service organizations are affecting the application of ISA	Medium High (With the possibility of moving higher)¹³

¹¹ [ISAE 3402, Assurance Reports on Controls at a Service Organization](#)

¹³ [This matter is currently assessed as a medium priority; however, monitoring activities have identified it as an increasingly prominent or frequently discussed topic. As a result, the matter is being closely monitored as it may warrant a higher priority assessment in the near future.](#)

#	Technology-Related Matter	Source of Insight ⁴	Related Standards ⁵	Preliminary Direction on Action ⁶	Prioritization ⁷
	User auditors typically rely to some extent on the work performed by service auditors in relation to controls at the service organization, as addressed in ISA 402.¹⁰ Accordingly, where a service organization uses emerging technologies in a way that is integral to the services provided, embedded in relevant controls, or affects the achievement of the service organization's control objectives, this may create challenges for both service auditors and user auditors. These challenges may be especially pronounced where the technology is difficult to understand or explain, where the service organization is relying on it within a process or control, or where its use affects areas such as change management, data integrity, processing integrity, or the reliability of outputs used by user entities and their auditors.			402 and related standards (e.g., other ISAs or ISAE 3402),¹² including: • whether they introduce risks or control considerations that are not being addressed consistently in practice or raise other quality considerations relating to existing principles and guidance in the standards; and • whether further action may be needed, including the nature, timing and scope of action.	
5(c)	Highlighting opportunities associated with the use of technology by entities As described in guiding action #5 of the IAASB's Technology Position Statement, the IAASB will strike the right balance when referring to opportunities and challenges associated with the use of technology by practitioners and entities. This matter is not about recasting the standards to address "opportunities" in the same way they address risks. Rather, it is about whether the IAASB's standards and related material give sufficient recognition to the fact that technology used by entities may, in some circumstances, enhance the relevance, reliability, timeliness, or accessibility of information relevant to audit and other assurance engagements, and thereby create opportunities to enhance engagement quality or efficiency.	• Guiding action #1 • Guiding action #5	• ISAs	Combined approach (i.e., Standard setting and Non-authoritative material) This matter is expected to be addressed progressively through both current and future IAASB projects and workstreams, as opportunities arise to revisit how references to technology are framed in the standards and related material. <u>For example, in focusing on addressing the impact of technology in the Audit Evidence and Risk Response (AERR) project, the Board has introduced concepts and requirements to help future-proof the standards that allow for further evolution in entities' and auditors' use of technology, and has added specific application material on the impact of technology, including in relation to the auditor's testing of controls (e.g.,</u>	Medium

¹⁰ ISA 402, *Audit Considerations Relating to an Entity Using a Service Organization*

¹² ~~ISAE 3402, *Assurance Reports on Controls at a Service Organization*~~

#	Technology-Related Matter	Source of Insight ⁴	Related Standards ⁵	Preliminary Direction on Action ⁶	Prioritization ⁷
				<u>circumstances requiring tests of controls and navigating the testing of direct and indirect controls reflecting the impact of different types of automated controls and general IT controls).</u> As standards are revised in future standard-setting activities, there is an opportunity for the IAASB to consider whether references to technology can be framed in a more balanced and technology-forward way, including by better acknowledging that technology used by entities may enhance the relevance, reliability, timeliness, or accessibility of information related to their financial or other external reporting, and that technology used by practitioners may in turn create opportunities to enhance engagement quality or efficiency. This would not involve recasting the standards away from the risk-based model that underpins them. Rather, it would involve ensuring that the standards and related material appropriately reflect both the opportunities and the challenges associated with technology, consistent with Guiding Action #5 of the Technology Position Statement. The Board may also consider whether non-authoritative material would be helpful in due course to support a more consistent articulation of these matters.	
5(d)	<u>Audit e</u>Challenges in audits of entities with activities in the crypto-asset ecosystem Audits of entities with activities in the crypto-asset ecosystem can present significant practical challenges in applying the ISAs. Based on feedback received to date from stakeholders, the issue does not appear to be that the underlying principles in the standards are inappropriate. Rather,	• Guiding action #4 • Audit regulators • Practitioners	• ISAs	Further information gathering <u>This matter warrants the attention of the IAASB because e</u>Crypto-asset-related activities are becoming more globally relevant and may create significant challenges in obtaining sufficient appropriate audit evidence. At the same time, the current fact pattern does not indicate that standard setting	<u>Low</u>Medium

#	Technology-Related Matter	Source of Insight ⁴	Related Standards ⁵	Preliminary Direction on Action ⁶	Prioritization ⁷
	challenges often arise in obtaining sufficient appropriate audit evidence because the risks are distinctive, procedures may need to be tailored to those risks, and specialized skills, tools and techniques, and in some cases specialists, may be needed to identify and assess those risks and design and perform appropriate procedures. This issue extends beyond entities whose principal business is in crypto-assets. It may also arise in audits of entities that hold, trade, exchange, safeguard, mine, or stake crypto-assets. Examples of the challenges include auditing the existence of crypto-assets on a blockchain and whether the entity has rights to those assets; evaluating the reliability of information obtained from using technological tools such as blockchain explorers; addressing custody and control arrangements, including where third parties or service organizations are involved; and responding to fraud, related party, valuation, and completeness risks in pseudonymous, highly technical, and rapidly evolving environments. In some cases, substantive procedures alone may not be sufficient. This matter raises the question of whether there is a role for the IAASB to contribute non-authoritative material in an area where credible jurisdictional materials already exist, including whether IAASB involvement could provide an internationally coherent reference point, grounded in the ISAs, to support more consistent and effective application globally.			is the appropriate initial response. While credible resources already exist in some jurisdictions, questions remain as to whether those materials are sufficiently accessible and globally applicable to support consistent or effective application of the ISAs. The first step for addressing this matter will be to gather additional information to define the matter more precisely and assess whether a genuine international gap or priority for standard-setting exists. Based on the outcome of that work, the Board may then consider whether targeted non-authoritative material would be an appropriate response, including whether such material could complement, rather than duplicate, existing guidance by providing an internationally coherent, ISA-grounded reference point.	
5(e)	Impact on the audit of increasingly sophisticated cybersecurity threats affecting entities Entities are increasingly exposed to more sophisticated cybersecurity threats, including threats arising from advances in technology and from increasingly organized and capable malicious actors.	- Stakeholder Advisory Council - Technology Advisory Network	- ISA 315 (Revised 2019)¹⁵ - ISA 330¹⁶	Further information gathering This matter warrants further information gathering because cyber threats affecting entities appear to be increasing in sophistication and relevance, and may in some	Medium

¹⁵ ISA 315 (Revised 2019), *Identifying and Assessing the Risks of Material Misstatement*

¹⁶ ISA 330, *The Auditor's Responses to Assessed Risks*

#	Technology-Related Matter	Source of Insight ⁴	Related Standards ⁵	Preliminary Direction on Action ⁶	Prioritization ⁷
	Cyber incidents or breaches affecting an entity's information systems, data, or digital infrastructure may in some circumstances give rise to risks of material misstatement, including through unauthorized access, alteration, or destruction of information relevant to financial reporting. This matter is not about firms' own cybersecurity obligations when housing or using entity data, which are addressed elsewhere in the Technology Catalog in the quality management context. Rather, it concerns the implications for the audit when entities are exposed to increasingly sophisticated cyber threats or have experienced cyber incidents that may affect financial reporting, internal control, or the reliability and availability of information intended to be used as audit evidence. In some circumstances, cybersecurity breaches perpetrated against the entity by external parties may constitute instances of fraud or suspected fraud, which ISA 240 (Revised)¹⁴ describes as third-party fraud. This raises questions about whether the IAASB's standards and related material sufficiently support auditors in identifying and assessing risks of material misstatement arising from cyber threats and incidents affecting entities, and in designing and performing appropriate responses where such threats or incidents may be relevant to the audit.	• Broader monitoring activities	• ISA 240 (Revised) • ISA 570 (Revised 2024)¹⁷	circumstances give rise to risks of material misstatement or other matters relevant to the audit. Further work would help clarify the fact patterns in which cyber incidents or cyber-related threats are giving rise to audit challenges in practice, including whether those challenges are being addressed consistently under the extant standards and whether any future IAASB response may be warranted.	
Theme #7: Using the Work of a (Management's or Auditor's) Expert					
7(a)	Evaluating the work of an auditor's expert ISA 620¹⁸ deals with the auditor's responsibilities relating to the work of an auditor's expert when that work is used to assist the auditor in obtaining sufficient appropriate audit evidence.	• Guiding action #2 • Guiding action #6 • Audit regulators	• ISA 620	Further information gathering ISA 620 was classified as a 'reserve topic' in the IAASB's Strategy and Work Plan for 2024-2027 because, although the IAASB received feedback on possible revision of this standard, other candidate topics were considered to be	Medium

¹⁴ ISA 240 (Revised), *The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements*

¹⁷ ISA 570 (Revised 2024), *Going Concern*

¹⁸ ISA 620, *Using the Work of an Auditor's Expert*

#	Technology-Related Matter	Source of Insight ⁴	Related Standards ⁵	Preliminary Direction on Action ⁶	Prioritization ⁷
	The increasing sophistication of technologies used by auditors' experts to perform their work, including Generative Artificial Intelligence (AI) (Gen AI), may make it more challenging for auditors to comply with the ISA 620 requirements. In particular, the auditor is required to understand and evaluate the adequacy of the expert's work, and that may become more challenging when the auditor's expert uses technology that may lack interpretability or explainability (also see Matter 6(b) in Table 2). This may exacerbate concerns already raised by audit regulators about whether auditors are consistently evaluating the relevance and reasonableness of the findings or conclusions of an auditor's expert.			higher priorities at the time (based on the criteria in the public agenda papers for the Strategy and Work Plan). Accordingly, the appropriate preliminary direction is further information gathering. This would include researching how emerging technologies, including Gen AI, are being used by auditors' experts; assessing whether those technologies are creating distinct challenges for auditors in applying ISA 620; and considering whether further action may be needed, including the nature, timing and scope of action. Because reserve topics in the Work Plan could be elevated to projects when circumstances change, this matter will also continue to be monitored as part of the IAASB's broader technology monitoring activities.	
7(c)	Experts are presumed to be humans in the standards ISA 620, which deals with the auditor's expert, and ISA 500,¹⁹ which includes requirements and application material relevant to information prepared by management's expert, include wording that either explicitly or implicitly assumes that an expert is a human. At the same time, new technologies, including artificial intelligence, robotic process automation, and increasingly autonomous forms of AI, are in some circumstances designed to reduce, or eliminate, the need for human involvement in performing specialized tasks. This raises the question of whether the assumption in the IAASB's standards that experts must be human, or at least involve meaningful human involvement, remains appropriate as technology evolves.	• Guiding action #1 • Guiding action #2 • Technology experts	• ISA 500 • ISA 620	Continue monitoring This is currently a low-priority matter because the IAASB has not heard extensive feedback on it to date. The Board will continue to monitor developments in technology and practice to assess whether this matter becomes more significant over time and whether a more active response, may eventually be warranted.	Low

¹⁹ ISA 500, *Audit Evidence*

#	Technology-Related Matter	Source of Insight ⁴	Related Standards ⁵	Preliminary Direction on Action ⁶	Prioritization ⁷
Theme #9: Transparency Through Communication and Auditor Reporting					
9(a)	Communicating about the use of technology Some stakeholders have questioned whether, and to what extent, auditors should communicate about their use of technological tools that facilitate the design or performance of audit procedures in obtaining evidence. Such communication could occur in different ways, including strengthening expectations for dialogue with those charged with governance (TCWG) and/or through communication in the auditor's report. The rationale for exploring this matter includes: • Helping TCWG and/or users of financial statement better understand the nature of the auditor's work and the role of technology, particularly both its benefits and limitations. • Responding to growing expectations from some stakeholders, including, for example, TCWG of entities that the auditor discloses whether technology was used, and, if so, how it contributed to audit evidence and the auditor's conclusions. • Reducing potential inconsistency, as practitioners may otherwise adopt varied approaches in how (and whether) they communicate the use of technological tools, resulting in uneven levels of transparency.	• Guiding action #3 • Guiding action #5 • Board member feedback	• ISA 260 (Revised)²⁰ • ISA 700 (Revised)²¹	Continue monitoring This issue is currently assessed as low priority. While stakeholder interest in communication about the auditor's use of technology is increasing, it is not presently viewed as a communication gap.	Low
Theme #10: Other Assurance Engagements					
10(a)	[Moved from 10(b)] Sustainability and other assurance engagements	• Board member feedback •	• ISSA 5000 • <u>ISAEs</u> • <u>ISREs</u>	Continue monitoring <u>Sustainability assurance</u> The Board will continue to monitor how technology-related application questions emerge in practice under ISSA 5000,	Low

²⁰ ISA 260 (Revised), *Communication with Those Charged with Governance*

²¹ ISA 700 (Revised), *Forming an Opinion and Reporting on Financial Statements*

#	Technology-Related Matter	Source of Insight ⁴	Related Standards ⁵	Preliminary Direction on Action ⁶	Prioritization ⁷
	ISSA 5000²² is an overarching standard for assurance engagements on sustainability information. As entities increasingly use complex systems, external data sources, service organizations, and information from others in the value chain in preparing sustainability information, and as practitioners increasingly use technological tools in performing sustainability assurance engagements, questions may arise about the consistent and effective application of ISSA 5000. <u>The same questions also may arise in relation to review engagements under the ISREs and other assurance engagements under the ISAEs.</u> These may relate, for example, to the practitioner's understanding of the entity's information system and internal control, the relevance and reliability of information used as evidence, and disclosures involving estimates, assumptions, models, and forward-looking information. Many of these matters may overlap with technology-related matters elsewhere in the Catalog that have been identified in the audit context. <u>The matters identified in Themes 1–9 affecting the ISAs may also have broader implications for other assurance standards.</u> The matter reflected here is whether, and to what extent, similar matters arise under ISSA 5000 <u>and other assurance engagements</u> and whether any sustainability-assurance-specific clarification may in due course be needed.			including whether matters identified elsewhere in the Catalog in the audit context also arise in sustainability assurance engagements. Given that ISSA 5000 becomes effective for periods beginning on or after December 15, 2026, implementation questions may emerge more clearly as the standard begins to be applied in practice. As implementation experience develops, this may help inform whether any sustainability-assurance-specific clarification or other IAASB response may in due course be warranted. <u>Other assurance engagements</u> <u>Further information gathering will be required to evaluate the extent and nature of the matters and their impact on the other assurance engagement standards. Additional consideration will also be necessary to assess how proposals developed in response to these matters within the ISAs could be reflected, adapted, or incorporated into other assurance engagement standards, as appropriate.</u>	
10(a b)	AI assurance Technological developments are raising questions about whether there is a need for new or evolving forms of assurance engagements in relation to AI, including assurance over an entity's AI system or its AI governance framework in accordance with suitable criteria. Some firms are beginning	• Guiding action #1 • Guiding action #5 • Board member feedback • JSS	• ISAEs	Further information gathering The IAASB is gathering information to better understand the landscape of subject matter-specific assurance engagements, other than assurance on sustainability information, in order to consider the IAASB's potential role.	Medium

#	Technology-Related Matter	Source of Insight ⁴	Related Standards ⁵	Preliminary Direction on Action ⁶	Prioritization ⁷
	to develop and offer AI assurance engagements, and interest in such engagements appears to be growing in some jurisdictions. This gives rise to questions about the subject matter(s) and suitable criteria for such engagements, and their proximity to the IAASB's remit (i.e., the extent to which these engagements are related to general-purpose external reporting by entities). Questions also arise about whether such engagements can be performed under the IAASB's existing standards, i.e., ISAE 3000 (Revised)²³ (alone or supplemented with non-authoritative material), or whether in due course there may be a need for a subject matter-specific ISAE.				
10(c)	Cybersecurity assurance Technological developments and the increasing significance of cybersecurity risk are raising questions about whether there is a need for new or evolving forms of assurance engagements in relation to cybersecurity, including assurance engagements addressing an entity's cybersecurity risk management program or related controls. In some jurisdictions, frameworks and guidance have already been developed to support such engagements. This gives rise to questions about whether such engagements can be performed under the IAASB's existing assurance standards, i.e., ISAE 3000 (Revised) (alone or supplemented with non-authoritative material), or whether in due course there may be a need for a subject matter-specific ISAE.	- Stakeholder Advisory Council - Technology Advisory Network - Broader monitoring activities	ISAEs	Further information gathering The IAASB is gathering information to better understand the landscape of subject matter-specific assurance engagements other than assurance on sustainability information. This matter could be considered as part of that work, including understanding the extent of current practice, the role of existing jurisdictional frameworks and guidance, and whether any gap may emerge that would warrant future IAASB consideration.	Medium

²³ ISAE 3000 (Revised), *Assurance engagements Other Than Audits or Reviews of Historical Financial Information*

Table 2: Technology-Related Matters Allocated to Active Projects or Workstreams

#	Technology-Related Matter	Related Standards ²⁴	Active Project or Workstream	How the Matter is Being Addressed ²⁵
Theme #1: Terminology				
1(a)	More clarity needed in technology-related terminology As the IAASB continues to operationalize its Technology Position, it is critical that the terms the IAASB uses to refer to technology (e.g., in its standards and other communications) are internally consistent and understandable. Stakeholders have asked for more clarity about the meaning of technology-related terms used in standards (including standards that are currently under revision) and non-authoritative material. This will contribute to enhanced clarity and consistency about what auditors should be considering when using technological tools to perform audit procedures. Specifically, stakeholders recommended that the IAASB: • Provide a definition for the term “automated tools and techniques”, particularly if the IAASB intends to add requirements related to this term. • Consider replacing the word “automated” in the term “automated tools and techniques” with another term. Stakeholders have also asserted that it is unclear what the term “automated tools and techniques” is meant to apply to. For example, does the term also refer to auditing software used to compile audit	• ISAs • Quality Management Standards	Audit Evidence and Risk Response (AERR) Project	This matter is in scope of the AERR project (Issue #13 of the project proposal). Subject to Board approval at the June 2026 IAASB meeting to expose The project team’s current proposals, as presented in Proposed ISA 330 (Revised), Proposed ISA 500 (Revised) and Proposed ISA 520 (Revised) for public comment, the project team’s current proposals would address this matter by replacing “automated tools and techniques” with “technological tools” through conforming and consequential amendments to other ISAs and to ISQM 1. This is intended to reduce ambiguity, improve coherence between ISQM 1 and the ISAs and within the ISAs, and align more closely with the International Ethics Standards Board for Accountants’ <i>International Ethics Standards Board for Accountants’ International Code of Ethics for Professional Accountants (including International Independence Standards)</i> (IESBA Code). The proposed amendments to ISQM 1 would also clarify that technological tools are a subset of technological resources used directly by engagement teams in planning and performing the audit, and that they are used to facilitate the design or performance of engagement procedures in obtaining evidence.

²⁴ This column identifies the extant standards most directly related to each matter, based on analysis at the time of the current update to the Technology Catalog. It is intended to indicate the standards context in which the matter arises, and does not, in itself, imply that standard setting is contemplated, unless this is evident from the project or projects identified in the adjacent column to the right.

²⁵ For matters linked to the AERR project, this column summarizes key aspects of the project team’s current proposals ahead of the Board’s consideration at the June 2026 IAASB meeting of the exposure of Proposed ISA 330 (Revised), *The Auditor’s Responses to Assessed Risks*, Proposed ISA 500 (Revised), *Audit Evidence*, and Proposed ISA 520 (Revised), *Analytical Procedures*, together with related conforming and consequential amendments to other ISAs and to ISQM 1. For matters linked to the ISA 500 Series project, this column summarizes the current proposals and developing direction of the project for Board consideration at the June 2026 IAASB meeting. For more information, please refer to Agenda Items 2 and 4 on the [June 2026 Meeting Page](#).

#	Technology-Related Matter	Related Standards ²⁴	Active Project or Workstream	How the Matter is Being Addressed ²⁵
	documentation (i.e., the audit platform) or Microsoft Excel used to perform routine calculations?			
Theme #3: Quality Management				
3(a)	Quality management of technological tools enabled by emerging technologies used in engagements Stakeholder outreach indicates that firms generally have mature quality management and certification processes for more traditional technological tools that are transparent and deterministic in nature. By contrast, practical challenges are arising as firms adopt technological tools enabled by emerging technologies, particularly Gen AI, including agentic AI, whose characteristics may include opacity, non-determinism, or adaptivity. Those characteristics are making it more difficult to apply the IAASB's quality management standards consistently and effectively. The challenges identified through the roundtables and related information-gathering activities are concentrated in several areas. At the firm level, they include the onboarding of third-party foundational Gen AI models and solutions; determining the nature and extent of pre-deployment testing, validation, and approval that is sufficient; and monitoring continued operation after deployment, including where tools may change over time or through vendor updates. At the engagement level, they include how engagement partners discharge responsibilities relating to the use of such tools in engagements, including direction, supervision, and review, evaluation of outputs, appropriate human oversight, and managing risks of over-reliance. These matters arise across the lifecycle of the technological tool and across the relevant layers at which responsibilities and oversight typically arise in practice.	• ISQM 1 • ISA 220 (Revised)	Technology Quality Management Workstream	In December 2025, the Board concluded that the most appropriate response at this stage is the development of non-authoritative material to address these challenges in a timely, scalable, and proportionate manner. In March 2026, the Board approved the Action Plan for the Technology Quality Management Workstream. The planned non-authoritative material is expected to involve a guide series that will focus on Gen AI-enabled technological tools, including tools with agentic capabilities, used in engagements. The guide series is expected to address quality management considerations across the life cycle of the tool and the relevant firm-level and engagement-level responsibilities. Based on the timetable in the Action Plan, the Board is expected to consider the proposed roadmap, guide structure, content elements and initial drafting approach at its June 2026 meeting. Drafting, Board input and Board approval of guides or parts of guides are then expected to continue on a rolling basis through Q2 2027 as Technology Quality Management Workstream staff develop and present material to the Board. The guide series is expected to be completed by mid-2027, subject to Board direction and developments in technology and practice.

#	Technology-Related Matter	Related Standards ²⁴	Active Project or Workstream	How the Matter is Being Addressed ²⁵
Theme #4: Determining Whether to Use Technological Tools To Design or Perform Audit Procedures				
4(a)	Exploring introducing explicit requirements and application material about determining whether technological tools are required to achieve audit objectives There are no explicit requirements in the ISAs for auditors to determine whether technological tools are required to achieve audit objectives. Guiding action #3 of the Technology Position Statement states the Board will explore the need to introduce such principles-based requirements and application material in its standards. Based on outreach undertaken, the IAASB understands that there may be circumstances when it will be challenging, or in some cases impracticable, for auditors to obtain sufficient appropriate audit evidence to address financial-statement or assertion-level risks without using technological tools. Some examples that stakeholders have provided include: • Audits of entities with crypto-asset activities (e.g., crypto miners, companies that hold crypto-assets, etc.) may require the use of “block explorers” to verify sales and purchases of crypto-asset on the applicable blockchains. • Audits of online gaming entities to, for example, test amortization of “game props” or to assess user lifecycles. • Responding to assessed risks in expected credit loss (ECL) estimates at larger financial institutions involving complex estimation methods and dependances on significant data inputs from several IT systems. Some stakeholders have also suggested that the auditor may need to use technological tools that facilitate the design or performance of procedures to adequately audit the financial statements of entities with fully digitalized information systems or when responding to risks arising from the use of	• ISA 220 (Revised) • ISA 330 • ISA 500	AERR Project	This matter is in scope of the AERR project (Issue #13 of the project proposal). The current proposals would not introduce explicit technology-specific requirements in the ISAs to determine when technological tools are required. Instead, the project team is proposing conforming and consequential amendments to ISA 220 (Revised), including strengthening paragraph 25 regarding the engagement partner’s responsibility to determine that sufficient and appropriate resources, including technological resources, are assigned or made available to the engagement team, thereby giving more prominent attention to technological and other resources at the engagement level. The current proposals also include new application material in ISA 220 (Revised) to support the auditor’s determination of whether to use technological tools, together with examples of circumstances in which the use of technological tools may be necessary. In addition, the proposed technology appendix in Proposed ISA 500 (Revised) provides guidance on the auditor’s considerations in using technological tools.

#	Technology-Related Matter	Related Standards ²⁴	Active Project or Workstream	How the Matter is Being Addressed ²⁵
	sophisticated IT applications by entities, including artificial intelligence, in their financial reporting processes.			
4(b)	Challenges to using technological tools that arise because of how data is produced and maintained by audited entities The ability of auditors to use technological tools in their audits depends on whether the entities whose financial statements are being audited have digitalized information systems and the availability, form, or restrictions around the data from those systems. Specifically, the following factors apply: • Availability of data in a usable form, and of sufficiently high quality; • Limitations in accessing information, whether due to restrictions imposed by data privacy laws or regulations, or to entities' concerns about data security once transferred to the auditor; and • Challenges with collecting, extracting, storing, transferring, and transforming data from entities' systems, to be usable by the auditor.	• ISA 500	AERR Project	This matter is in scope of the AERR project (Issue #2 of the project proposal). The current proposals would strengthen the auditor's evaluation of the relevance and reliability of information intended to be used as audit evidence, including by requiring the auditor to consider the source of the information and the attributes of reliability that are of significance in the circumstances. The current proposals in Proposed ISA 500 (Revised) also include new application material on the form, availability, accessibility and understandability of information, including information produced and maintained by entities, as matters that may affect both the design and performance of the audit procedures in which the information will be used and the auditor's evaluation of the relevance and reliability of the information. In addition, the current proposals include guidance relevant to information used in technological tools, including how the integrity of those inputs is maintained during collection, extraction, transfer, transformation and use.
Theme #5: Audited Entities' Use of Technology				
5(a)	Identifying, assessing, and responding to risks arising from the use of IT by audited entities As described in guiding action #4 of the IAASB's Technology Position Statement, the IAASB will address the impact of technology used by reporting entities. As entities increasingly use more sophisticated technologies, including technologies that may be difficult to understand, explain, or interrogate, challenges may arise for the auditor in identifying	• ISA 315 (Revised 2019) • ISA 330 • ISA 500	AERR Project Post-Implementation Review of ISA 315 (Revised 2019)	This matter is in scope of the AERR project (Issues #9 and #17 of the project proposal). The current proposals would address this matter principally through revisions to Proposed ISA 330 (Revised), including application material clarifying how an entity's use of technology may affect the auditor's responses to assessed risks and the design and performance of tests of controls. In addition, the IAASB's post-implementation review of ISA 315 (Revised 2019), which is expected to commence in Q3 2026, may provide further

#	Technology-Related Matter	Related Standards ²⁴	Active Project or Workstream	How the Matter is Being Addressed ²⁵
	and assessing risks arising from the use of IT by entities and in designing and performing appropriate responses to those risks. These challenges may become more pronounced where entities use increasingly complex or opaque IT applications, including artificial intelligence, in their information systems or financial reporting processes. This gives rise to the question of whether the IAASB's standards and related material sufficiently support auditors in identifying and assessing such risks and in responding appropriately to assessed risks when those technologies are relevant to the audit.			insight into whether auditors are experiencing challenges in identifying and assessing risks arising from increasingly sophisticated or opaque IT systems used by entities, and may also help inform whether any further IAASB action is needed in this area.
Theme #6: Using Technological Tools that Facilitate the Design or Performance of Audit Procedures				
6(a)	Exploring the need for explicit requirements and application material when using technological tools Using technological tools that facilitate the design or performance of audit procedures gives rise to unique challenges that need to be carefully managed by auditors. Audit regulators are raising inspection findings that point to deficiencies in three areas. Specifically, auditors are not consistently: • Considering the relevance and reliability of the data inputs, • Determining whether the technological tools operate as designed, and • Determining whether the outputs meet the purpose for which the technological tool is designed to address. These recurring concerns raise the question of whether introducing requirements or application material relating to the appropriate use of technological tools could help support more consistent and effective auditor responses in practice.	• ISA 220 (Revised) • ISA 330 • ISA 500	AERR Project	This matter is in scope of the AERR project (Issues #13 and #17 of the project proposal). The current proposals would not pursue the conditional requirement included in the earlier holding package of Proposed ISA 500 (Revised)²⁶ that would have specified the auditor's responsibilities when using technological tools. Instead, the current proposals would address this matter through higher-level application material and a proposed technology appendix in Proposed ISA 500 (Revised), with a view to keeping the standards principles-based, flexible and capable of remaining current as technology evolves. The proposed materials would provide guidance on the use of technological tools and the evaluation of information intended to be used as audit evidence derived from them (see also Matter 4(a)). They would not, however, address the operation of technological tools themselves, as further insight on that aspect is expected to be drawn from the Technology Quality Management Workstream (see Matter 3(a)).

²⁶ The latest version of proposed ISA 500 (Revised), *Audit Evidence*, that was presented to the Board at its March 2024 meeting has been referred to as the Pre-Finalization Holding Package of Proposed ISA 500 (Revised)

#	Technology-Related Matter	Related Standards ²⁴	Active Project or Workstream	How the Matter is Being Addressed ²⁵
6(b)	Interpretability or explainability associated with how a technological tool arrives at its outputs A lack of interpretability or explainability²⁷ associated with a technological tool makes it challenging or, in some cases impracticable, for firms or auditors to understand how the technology is transforming inputs into outputs. This issue is becoming critical as the use of black-box technologies, including some AI applications including Gen AI and agentic AI, are likely to become ubiquitous in engagements and systems of quality management. It is in this context that the IAASB may consider the implications of the standards requiring firms and auditors to understand the logic and processing of technological tools in all circumstances—or whether in certain cases it may be sufficient for the auditor to focus instead on the evaluation of the outputs (see also Matter 6(a)). Furthermore, these considerations may include the appropriate division of quality management responsibilities between the firm and the engagement team.	• ISQM 1 • ISA 220 (Revised)	Technology Quality Management Workstream	This matter is currently being addressed through the Technology Quality Management Workstream (see Matter 3(a)). In particular, the planned non-authoritative material is expected to provide further insight into quality management considerations arising when technological tools enabled by emerging technologies, including advanced forms of AI, may lack interpretability or explainability, including implications for firm-level evaluation, approval and monitoring of such technological tools, and for engagement-level human oversight, challenge of outputs, and direction, supervision and review.
6(c)	Categorization of audit procedures performed using technological tools We’ve heard feedback that it is becoming increasingly more challenging to understand how procedures performed using technological tools should be categorized, including: • Whether they are risk assessment procedures or further audit procedures, or both;	• ISA 330 • ISA 500 • ISA 520²⁸	AERR Project	This matter is in scope of the AERR project (Issues #14 and #15 of the project proposal). The current proposals would clarify that technological tools are used by the auditor to perform audit procedures, rather than being audit procedures themselves, and would emphasize that the intended purpose of the audit procedure is the key basis for categorization. The current proposals would also simplify terminology by consolidating “dual-purpose tests” and “multiple-purpose procedures” into the broader notion of an audit procedure used for more than one purpose, and by requiring the auditor to evaluate whether the

²⁷ [Link to resources from IBM](#) on explainable AI, including the difference between the interpretability and explainability of an AI system

²⁸ ISA 520, *Analytical Procedures*

#	Technology-Related Matter	Related Standards ²⁴	Active Project or Workstream	How the Matter is Being Addressed ²⁵
	- Whether they are tests of controls or substantive procedures or both (i.e., dual-purpose tests); and - Relating specifically to substantive procedures, whether they are tests of details or substantive analytical procedures. The categorization matter was described as a barrier to practitioners using technology in the Technology Position Issues Paper presented to the Board at its June 2024 meeting (see Agenda Item 5).			audit evidence obtained meets each intended purpose of such a procedure. In addition, the project team has sought to future-proof the standards by broadening the definition of substantive procedures in Proposed ISA 330 (Revised) and to clarify the distinction between tests of details and substantive analytical procedures through revised definitions, related application material, and examples.
6(d)	Challenges associated with the use of technological tools to perform substantive analytical procedures The increased use of technological tools used to design or perform audit procedures is giving rise to questions about how these procedures map to the requirements in ISAs, including ISA 520 which deals with the auditor's use of analytical procedures as substantive procedures. The IAASB has issued non-authoritative materials to address questions of interpretation about the requirements in the ISAs relating to using technological tools to perform audit procedures including substantive analytical procedures.²⁹ However, questions continue to be raised on this topic, indicating that there is a need for additional clarity, including standard-setting on this topic.	- ISA 330 - ISA 500 - ISA 520	AERR Project	This matter is in scope of the AERR project (Issues #11 and #15 of the project proposal). The current proposals would strengthen the requirements and application material supporting the use of substantive analytical procedures, including those designed and performed using technological tools. Proposals address the key elements that determine the necessary precision of such procedures, the relevance and reliability of the information on which the auditor's expectation is based, and the threshold for investigating differences between that expectation and recorded amounts. The current proposals would also extend ISA 520 to provide a more complete framework for the auditor's use of analytical procedures across the audit, define substantive analytical procedures separately from analytical procedures, and clarify the distinction between substantive analytical procedures and tests of details through separate definitions, application material, and examples. In addition, the proposals would clarify that analytical procedures may be used in combination with tests of controls or other substantive procedures as further audit procedures to address risks of material misstatement. Consistent with Board direction, the proposals do not refer to specific technologies and are intended to remain principles-based and capable of applying regardless of the technological tools used.

²⁹ Refer to the IAASB's [Technology](#) Page to access non-authoritative material titled: *Using Automated Tool and Techniques (ATT) in Performing Audit Procedures*

#	Technology-Related Matter	Related Standards ²⁴	Active Project or Workstream	How the Matter is Being Addressed ²⁵
6(e)	Testing outliers and exceptions in the output of a procedure performed using technological tools The standards do not provide guidance on considerations relating to testing outliers and exceptions identified by a procedure performed using technological tools. The IAASB has issued non-authoritative materials to address this matter.³⁰ However, this guidance has been challenged by audit regulators. Specifically, some audit regulators believe that Notes 6 and 7 of the FAQ suggest that auditors can choose to ignore the outliers or exceptions identified by a procedure performed using technological tools and revert to “alternative procedures” to test the underlying population. Their concern is that this could be interpreted to mean, for example, that auditors can choose to ignore an inordinately large number of outliers or exceptions when more “traditional procedures” (e.g., sampling) of the underlying population is more efficient. Audit regulators have noted that auditors cannot “unsee” what they’ve seen and that it would be inappropriate to ignore the outputs of procedure performed using technological tools.	• ISA 330 • ISA 500 • ISA 520 • ISA 450³¹	AERR Project	This matter is in scope of the AERR project (Issue #16 of the project proposal). The current proposals would address this matter principally through proposed application material in Proposed ISA 500 (Revised) under the section dealing with inconsistencies in audit evidence. That application material clarifies that when, in performing a risk assessment procedure or a further audit procedure, the auditor identifies items that are inconsistent with the auditor’s expectations or exhibit characteristics that are unusual for the population, those items may indicate a possible misstatement or an inconsistency in audit evidence and therefore require further investigation. The current proposals also clarify that the extent of that further investigation depends on the intended purpose of the audit procedure. In addition, the current proposals retain and reposition into Proposed ISA 330 (Revised) the requirement on determining a means of selecting items for testing, and strengthen the requirements in Proposed ISA 520 (Revised) for investigating differences that exceed the threshold set by the auditor in a substantive analytical procedure.
6(f)	Appropriate use of technological tools to design or perform external confirmation procedures ISA 505,³² which deals with the auditor’s use of external confirmation procedures to obtain audit evidence, is currently undergoing revision as part of the project, “Modernization of Other Targeted Standards in the ISA 500 Series” in the Work Plan for 2024-2027, including technology-related revisions. This standard was last revised prior to 2009 and the auditing environment	• ISA 505	ISA 500 Series	This matter is in scope of the ISA 500 Series project (refer to Issue A.3 in the project proposal). The current proposals include adding a requirement for auditors to evaluate the implications for the reliability of confirmation requests and responses when using an intermediary in the external confirmation process. In addition, the current proposals include enhancing application material by clarifying that the auditor or confirming party may engage an intermediary in the external confirmation process, and that doing so does not diminish the

³⁰ Refer to the IAASB’s [Technology](#) Page to access non-authoritative material titled: *FAQ on Investigating Exceptions & Relevance of Performance Materiality When Using ATT*

³¹ ISA 450, *Evaluation of Misstatements Identified During the Audit*

³² ISA 505, *External Confirmations*

#	Technology-Related Matter	Related Standards ²⁴	Active Project or Workstream	How the Matter is Being Addressed ²⁵
	and methods of communication with confirming parties have evolved significantly since then. Today, auditors use various electronic means for confirmations, including one or more of the following: • Electronic means like email or e-fax; • Firm-acquired or developed automated tools that enable secure communication, such as robotic process automation (RPA)-enabled platforms and Application Program Interfaces (APIs); and • Third-party intermediaries, like confirmation.com or shared-service centers, which use automated platforms to facilitate confirmation requests. Modernization of the principles and guidance in ISA 505 may be warranted in view of the widespread adoption of technology-enabled confirmation procedures that introduce unique risks, opportunities, and considerations. Examples include auditors' control over the automated confirmation process, evaluation of the reliability of audit evidence obtained electronically, and ensuring the security of communication channels to verify that confirmations are sent to and received from the appropriate third party.			auditor's responsibility to maintain control over the external confirmation process. The application material would also clarify that intermediaries are considered service providers under ISQM 1, and that direct access to information maintained by a knowledgeable external source does not constitute an external confirmation procedure, but rather another means of obtaining relevant and reliable audit evidence.
6(g)	Appropriate use of technological tools in inventory counts ISA 501³³ deals with, among other matters, specific considerations in obtaining audit evidence relating to inventory. This standard is currently undergoing revision as part of the project, "Modernization of Other Targeted Standards in the ISA 500 Series" in the Work Plan for 2024-2027, including technology-related revisions. ISA 501 includes a requirement for auditors to perform alternative procedures if attending the physical inventory counts is impracticable (paragraph 7). Business interruptions during the COVID-19 lockdown	• ISA 501	ISA 500 Series Project	This matter is in scope of the ISA 500 Series project (refer to Issue A.1 in the project proposal). The current proposals include removing the reference to "physical" in the requirements in paragraphs 4 to 7 of ISA 501 to allow greater flexibility in how auditors may comply with the requirement to attend inventory counts, including by attending the inventory count physically or remotely. In addition, the current proposals include adding application material clarifying that attendance at inventory counts may be undertaken either physically or remotely using technological tools, depending on the auditor's

³³ ISA 501, *Audit Evidence—Specific Considerations for Selected Items*

#	Technology-Related Matter	Related Standards ²⁴	Active Project or Workstream	How the Matter is Being Addressed ²⁵
	made physical attendance of inventory counts impracticable in some cases, leading auditors to leverage technology to attend inventory counts remotely (e.g., location cameras, drones, etc.). Additionally, the increasing use by entities of automated warehouses powered by emerging technologies (e.g., a fleet of fully autonomous robots and AI-powered software) that operate with minimal human access has also made physical attendance by auditors impracticable. These examples have raised questions among regulators and practitioners about how the use of those technologies by auditors and entities maps to ISA 501.			evaluation of whether such mode of attendance provides sufficient and appropriate audit evidence. The application material would also emphasize that the auditor may identify, and may need to test, IT applications and automated controls, including relevant general IT controls, within inventory management processes. It would further explain that the auditor may determine it necessary to involve an expert when management uses technology in inventory management.
6(h)	Documentation requirements when designing or performing audit procedures using technological tools The growing use of technology in audits is giving rise to questions about what auditors should be documenting when designing and performing procedures using technological tools. The IAASB issued non-authoritative materials to address some of these questions.³⁴ However, questions persist. Clarification is sought on documentation considerations, including: • Whether the data used as an input into the technological tools needs to be retained. • Whether each successive set of refinements being made to the parameters used in a technological tool needs to be documented, or whether documenting only the final set of parameters is sufficient. • Whether the auditor needs to retain the data output from the technological tool or whether a description of the identifying characteristics of the outputs is sufficient.	• ISQM 1 • ISA 220 (Revised) • ISA 230 • ISA 330 • ISA 500 • ISA 520	AERR Project Technology Quality Management Workstream	This matter is in scope of the AERR project (Issue #12 of the project proposal). Earlier in the project, various ways of addressing this matter were considered, including the possible inclusion of application material in Proposed ISA 500 (Revised), including through the proposed technology appendix, to address documentation considerations when technological tools are used. However, the current proposals do not pursue documentation-specific application material in the in-scope standards for the project. This reflects the view that Proposed ISA 500 (Revised), as a principle-based reference framework standard, does not contain specific documentation requirements, and that ISA 230 serves a similar ‘reference framework’ purpose in respect of audit documentation. It also reflects the Board’s view that the IAASB may consider updating its existing non-authoritative material in the future, which addresses engagement-level documentation considerations when technological tools are used (see the link in footnote 38 to access that material).

³⁴ Refer to the IAASB’s [Technology](#) Page to access non-authoritative material titled: *Audit Documentation when Using ATT*

#	Technology-Related Matter	Related Standards ²⁴	Active Project or Workstream	How the Matter is Being Addressed ²⁵
	- Whether the documentation requirements are different when a procedure is performed using technological tools and is intended to be a risk assessment procedure or a further audit procedure or both. - What information should be retained at the engagement level versus what documentation could be retained at the firm level. There is a further question of clarifying how auditors determine the sufficiency of their documentation related to procedures performed using technological tools and using the “experienced auditor” requirement in ISA 230.³⁵ Specifically: - Is the “experienced auditor” from a similar jurisdiction, with similar expertise and technological access? - Is the “experienced auditor” an individual that has experience with the specific technology-enabled procedure used?			In addition, documentation considerations relating to firm-level tool certification, approval, and ongoing monitoring, including policies and procedures regarding what firms expect engagement teams to document when such tools are used to design or perform engagement procedures, are expected to be addressed through the Technology Quality Management Workstream (see Matter 3(a)).
Theme #7: Using the Work of a (Management’s or Auditor’s) Expert				
7(b)	Evaluating the work of a management’s expert Like in Matter 7(a) which deals with the auditor’s expert, ISA 500 (paragraph 8) also requires, depending on the significance of the management expert’s work for the auditor’s purposes, the auditor to obtain an understanding of the work done by the expert and to evaluate the appropriateness of that work. The increasing sophistication of technologies used by management’s experts to perform their work, including Gen AI, may make it more challenging for auditors to comply with the ISA requirements. In particular, the auditor is required to understand and evaluate the adequacy of the expert’s work, and that may become more challenging when the management’s expert uses technology that may lack interpretability or	ISA 500	AERR Project	This matter is in scope of the AERR project (Issue #2 of the project proposal). The current proposals would strengthen the requirements and application material in Proposed ISA 500 (Revised) relating to information prepared by a management expert. The specific requirements relating to a management expert are explicitly linked to the baseline requirement in the standard for the auditor to evaluate the relevance and reliability of information intended to be used as audit evidence, in respect of which principle-based guidance is provided regarding, for example, the source and form of information, such as information from digitalized information systems enabled by technology or generated using technology (see also Matter 4(b)). In particular, the current proposals would require the auditor to obtain an understanding of how the

³⁵ ISA 230, *Audit Documentation*, paragraph 8

#	Technology-Related Matter	Related Standards ²⁴	Active Project or Workstream	How the Matter is Being Addressed ²⁵
	explainability.			information prepared by management's expert has been used by management in the preparation of the financial statements and the related application material explains that this may assist the auditor in evaluating the relevance and reliability of that information. The further information gathering related to Matter 7(a) may provide insights that are more broadly relevant to 'experts' using emerging technologies, including Gen AI, and any distinct challenges, which may affect further action by the IAASB in due course.
Theme #8: Auditor Mindset				
8(a)	The impact of using technological tools on the exercise of professional skepticism Professional skepticism remains fundamental as the use and sophistication of technological tools in engagements continues to grow. Auditors need to critically assess whether information and outputs obtained through such tools are relevant, reliable, and consistent with other audit evidence. There is a need to consider whether the IAASB's standards and related material sufficiently articulate how professional skepticism is exercised in that context, including in relation to challenging outputs and avoiding over-reliance or bias. At the same time, technological tools may also enhance the exercise of professional skepticism by enabling broader interrogation of data, identification of unusual patterns or relationships, and more effective challenge of management's assertions. The IAASB's standards and related material therefore need to strike an appropriate balance in addressing both the risks and the opportunities associated with the use of technological tools, including in how they refer to the exercise of professional skepticism.	• ISQM 1 • ISA 200³⁶ • ISA 220 (Revised) • ISA 330 • ISA 500 • ISA 520	AERR Project Technology Quality Management Workstream	This matter is in scope of the AERR project, primarily through Issues #2, #3 and #17 of the project proposal. The current proposals would strengthen the requirements and application material (including the proposed technology appendix) that support the auditor's exercise of professional skepticism when evaluating the relevance and reliability of information intended to be used as audit evidence. They would also reinforce the need to design and perform audit procedures in an unbiased manner, respond appropriately to doubts about the relevance or reliability of information or inconsistencies in audit evidence, and address potential auditor biases, including automation bias. This matter is also relevant to the Technology Quality Management Workstream (see Matter 3(a)), particularly insofar as that workstream is expected to provide further insight into challenging AI-generated outputs and recognizing and responding to technology-related biases in practice.

³⁶ ISA 200, *Overall Objectives of the Independent Auditor and the Conduct of an Audit in Accordance with International Standards on Auditing*, paragraph 17

Table 3: Resolved and Closed Technology-Related Matters

#	<u>Technology-Related Matter</u> Including basis for concluding that it is a matter	<u>Related Standards</u>	<u>Related Project</u>	<u>How the Matter was Addressed</u>
	<i>[Not applicable as at June 2026]</i>			