ED-ISQM 1: Question 9 – Use of Technology by Firms (This Nvivo Report also Includes Other Comments on Resources)

Has ED-ISQM 1 been appropriately modernized to address the use of technology by firms in the system of quality management?

Q9 - Agree

2. Regulators and Audit Oversight Authorities

National Association of State Boards of Accountancy

Yes, we believe that the ED-ISQM 1 has been appropriately modernized to address the use of technology and that the technology terminology is broad enough so that the wording is not likely to become outdated.

3. National Auditing Standard Setters

Compagnie Nationale des Commissaires aux Comptes (CNCC) and the Conseil Supérieur de l’Ordre des Experts-Comptables (CSOEC)

We welcome the reference to the use of technology.

Conselho Federal de Contabilidade - Federal Accounting Council (Brazil)

We believe that the ED has appropriately included requirements for quality objectives related to the use of technological resources and additional material could be required and issued if technology evolves and requires additional or specific guidance

Hong Kong Institute of Certified Public Accountants

In general, we consider the ED-ISQM 1 has been appropriately modernized to address the use of technology by firms in the system of quality management, in particular, it covers the situation where IT applications (including commercial software) are used to monitor compliance with relevant ethical requirements, record and maintain information about independence and audit documentation.

Japanese Institute of CPAs

We believe that ED-ISQM 1 has been appropriately modernized to address the use of technology by firms in the system of quality management.

New Zealand Auditing and Assurance Standards Board

The NZAuASB supports the introduction of requirements addressing the use of technological resources, in both the performance of engagements and the operation of the system of quality management, in a principled way.

4. Accounting Firms

Baker Tilly International

Given the rate of change in technology, and the significant variation in complexity of firms, the standard should remain relatively agnostic in relation to the use of technology in the system of quality management. This will help to ensure it is truly scalable to the needs of different types of firms whilst also future proofing
the standard against changes in technology. As such, we have no detailed comments on the current content of the ED which seems appropriate.

CAS International
Yes, adequate for time being.

Deloitte Touche Tohmatsu Limited
In recognition of firms' increased use of technology both in the performance of engagements and in the operation of the system of quality management, DTTL is supportive of the adaptation of the resources component to include technological (as well as intellectual) resources. See responses to Question 12 for further consideration within the monitoring and remediation process of how the standard may be modernized to address the use of technology by firms in the system of quality management.

Duncan and Topliss
R9: Yes, the requirement to assess quality objectives and associated risks relating to changing technology is clear throughout the standard.

ETY Global
Yes. The requirement allows the use of technology by firm even in an evolving environment due to the way it is worded.

Haysmacintyre LLP
ED-ISQM1 appears to address the use of technology adequately and appropriately. The overarching requirements for firms to exercise judgment and adopt a risk-based approach to achieving the objectives of the proposed standard implicitly include the appropriate use of technology.

Yes.

Kreston International
Yes.

Mazars
Yes.

Mazars USA LLP
Yes, ED-ISQM 1 is appropriately modernized to address the use of technology by firms in their system of quality management.

MNP LLP
Yes, in our view, this is sufficiently addressed.

PKF International Limited
In our view, through its principles-based approach to technological resources, ED-ISQM 1 has been appropriately modernized to address the use of technology by firms in the system of quality management.

PKF South Africa
Through its principles-based approach to technological resources, ED-ISQM 1 has been appropriately modernised to address the use of technology by firms in the system of quality management.
RSM International Limited
Yes.

5. Public Sector Organizations

Auditor General South Africa
Yes, the ED-ISQM 1 has been appropriately modernised to address the use of technology by firms in the system of quality management.

Australasian Council of Auditors General
In a general sense, ED-ISQM 1 has been modernised through referencing the use of technology in the system of quality management. Within the risk assessment process and development of tailored responses, the audit firm will be able to incorporate specific responses related to technology as necessary depending on assessed risks.

International Organization of Supreme Audit Institutions
We agree that these changes aim to modernize the standard and address the use of technology to a certain extent.

Office of the Auditor General of Alberta
Yes, ED-ISQM 1 appropriately accounts for the use of technology in the system of quality management.

Office of the Auditor General of Canada
Yes, ED-ISQM 1 has been appropriately modernized to address the use of technology by firms in the system of quality management.

Provincial Auditor Saskatchewan (1)
Yes, ED-ISQM 1 has been appropriately modernized to address the use of technology by firms in the system of quality management.

6. Member Bodies and Other Professional Organizations

Accountancy Europe
We welcome the reference to the use of technology. Technology could always be addressed in greater detail, but we are conscious that SMPs are not at the same stage as larger firms in terms of access to and use of technology. Adding on these aspects might represent information overload for SMPs. For the aspects around the alternative audit delivery models, we refer to our response to ED-220 as we think it is more appropriate to deal with them there.

CA Ireland
Yes the application guidance contains several paragraphs setting out requirements around the use of technology. In particular, paragraph 38(e) provides sufficient flexibility for firms of all sizes in this regard.

CPA Australia
Response: Yes, we consider the standard addresses that appropriately.

The standard addresses technology by expanding the element “human resources” to the new component “resources”, which encompasses technological resources. Although it addresses technology in a minimal
way, we consider it is sufficient for a principles based standard. We do not think that it will inhibit technological innovation, which is increasingly important as technologies evolve.

**European Federation of Accountants and Auditors for SMEs**

Yes, ED-ISQM 1 has been appropriately modernized to address the use of technology. However, we suspect that many SMPs are not as advanced as larger firms in terms of their technological maturity. We hope PAOs will collaborate to provide tools to help SMPs with their quality management.

**EXPERTsuisse**

Regarding the aspect of modernization of ED-ISQM 1 to address the use of technology by firms in the system of quality management, in our view this subject has been well addressed. As smaller firms may not be at the same stage as larger ones regarding access to and use of technology, the modernization of ED-ISQM 1 must be designed to allow for a scalable application.

**IFAC Small and Medicum Practices Committee**

Yes, the proposed standards have been appropriately modernized to address the use of technology.

However, it is important for IAASB to ensure that these requirements should not become a barrier to SMPs being unable to meet such growing expectations.

**Illinois CPA Society**

Yes.

**Institut des Experts-comptables et des Conseils Fiscaux – Instituut Van de Accountants en de Belastingconsulenten (IAB-IEC)**

The modernization was necessary to keep up with the technological evolution, for example cloud computing. The draft also considers the difference in the use of IT technology, depending on the size of the firm.

**Malaysian Institute of CPAs**

ED-ISQM 1 covered technological resources, IT related quality risk and other considerations in general terms given that the scope of IT is so wide that more detailed requirements are difficult to set out. Therefore, the principles set out do draw attention that quality management need to focus on IT. However, it is up to individual firms to establish their specific approach to deal with this issue.

**New York State Society of CPAs**

Response: Yes, the proposed standard has been appropriately modernized to address the use of technology.

**Nordic Federation of Public Accountants**

Yes, we believe so.

**Royal Institute of Chartered Surveyors**

Yes, we believe the new requirement addresses the modernization of the standard with respect to the use technological resources - both in the performance of engagements and the operation of the system of quality management. In sum, the new requirement is principles-based as technologies are frequently evolving (and at times at a rapid pace), therefore, we believe this new standard is appropriately modernized.
9. Individuals and Others

Shady Fouad Ahmed Mehelba

Yes

Training and Advisory Services and Chartered Accountants Academy

ED ISQM 1 has been appropriately modernized to address the use of technology by firms in the system of quality management, the IAASB recognized that firms are increasingly using technology in performing engagements, which may be developed by the firm or obtained from the firm’s network or an external service provider. Firms are also increasing their use of technology in facilitating the operation of their systems of quality management, for example, technology may be used to continually monitor the permissibility of financial investments recorded by personnel as part of the firm’s independence responses and therefore appropriately modernized ED ISQM 1 to address the use of technology.

Q9 - Agree but with further comments

1. Monitoring Group

International Forum of Independent Audit Regulators

We support the expansion of the Resources section to extend beyond human resources, especially given the significant increase in use of technology by firms in support of their systems of quality management, but also at the engagement level. We however also support further increasing the emphasis in the standard on the aspect of quality control relating to firm resources. Other matters to consider as part of this section include considering risks that technology might introduce (at the firm and engagement level), setting clear expectations for how tools are to be used and the related responsibilities of engagement partners in this regard, and having proper processes and controls to manage use of technology and to upskill auditors on technology.

2. Regulators and Audit Oversight Authorities

Financial Reporting Council United Kingdom

Yes. We strongly support the introduction of the new technology related concepts, along with the enhanced requirements and much of the application material. The material better reflects the current technological environment and is sufficiently principles-based to allow for changing circumstances. However, we suggest that relocating some of the application material to a dedicated appendix or external guidance would be beneficial in reducing the length of the application material overall. Our suggestions in relation to specific paragraphs that can be relocated can be found in Appendix 5.

3. National Auditing Standard Setters

AICPA

Yes. We see this as an area for further guidance and outreach, perhaps as part of implementation support and implementation review processes as firms adopt and experiment with new technologies in delivering audit and attest services.

Australian Auditing and Assurance Standards Board

The AUASB is supportive of the recognition of the use of technology in the proposed ISQM 1. The AUASB considers that the balance of requirements is appropriate and that the proposed standard is sufficiently principles based in this area.
The AUASB considers that further guidance and clarification on the scope of IT is required. The usage of customised IT applications in the performance of engagements is increasing rapidly. As part of the quality management system, the firm should establish the necessary processes and policies in place to govern the usage of customised IT applications by the engagement teams (ie identifying the risks that the engagement team must mitigate) as it will not be possible for the firm to determine these for every customised IT application.

Additionally, the AUASB notes that paragraph A129 includes a bullet point on ‘unauthorised access may result in breaches of confidentiality ….’ The AUASB considers that this could be expanded to note that the firm / engagement teams will need to consider the application of relevant privacy legislation in the conduct of the engagement, including the extraction, storage and presentation of personally identifiable data. Equally this needs to be considered in the authorised access of the data by the engagement team in the conduct of the audit not just in the unauthorised access.

Additionally, the AUASB notes for consideration that paragraph A130 is an example of where the application material is too onerous. The specific application material that ‘it is necessary for the firm to determine that the IT application operates appropriately’ may imply a need to obtain absolute assurance rather than reasonable assurance that the quality objectives are being met. Furthermore, the last bullet point in paragraph A130 refers to the consideration that general IT controls are designed appropriately. Historically this would include consideration of controls to manage changes in the code and the prevent access by the users to the code. The AUASB understand that this is not possible in many new IT applications and therefore the engagement team will be required to implement additional mitigating controls. The AUASB recommends that this be considered in the application material.

There are several application material paragraphs that are too onerous in nature or too granular in detail, for example A130 in relation to technology; and A67 –A74 in relation to ethics where the IAASB have attempted to summarise the IESBA Code in a few paragraphs, whilst practitioners need to comply with the full Code.

**Canadian Auditing and Assurance Standards Board**

The introduction of requirements dealing specifically with technological and intellectual resources, as well as the recognition of the use of service providers, reflects the current environment.

However, we believe the IAASB could include more examples of the use of technology in applying ED-ISQM 1. For example, ED-ISQM 1 could recognize that, as more files are prepared electronically, there are opportunities to use technological resources to monitor quality, including performing in-process reviews, for example, to ensure the appropriate checklists are completed, etc. Another example provided by Canadian stakeholders is a technological control that does not allow an engagement team to open an engagement file unless the client acceptance and continuance process has been completed. The IAASB could include such examples in the final standard.

**Kammer der Steuerberater und Wirtschaftsprüfer**

Yes, further guidance specifically for smaller firms is required. We believe that general IT controls as mentioned in A 129 shall be part of the responses designed and implemented by the firm to address quality risks identified and assessed by the firm. A “may” does not address the current use of technology in the audit nor does it address future developments.

We welcome the reference to the use of technology but believe that technology could be addressed in greater detail.
Royal Nederlandse Beroepsorganisatie van Accountants

It is mentioned that the use of technology may give rise to quality risks (par. A129). We support this in principle. More attention could be given to the fact that adequate responses need to be developed to address these risks. It is mentioned that general IT controls may be part of the response, but other examples could be given as well. Furthermore, technology could be used as responses to risks and used in a positive way. Finally, we agree that the standard should remain fit-for-purpose and not become too much dependent upon specific technology which may become obsolete.

4. Accounting Firms

BDO International

Given the digital transformation that has occurred within the auditing profession, we remain supportive of steps taken by the IAASB in ED-ISQM 1 to reflect how technology is being used to support performance of engagements and operation of quality management in firms’ systems.

We support the principles-based approach that the IAASB has adopted in requirement paragraph 38(e). In our view, this requirement provides sufficient flexibility for firms of all sizes through use of the word ‘appropriate’. This, when combined with the application guidance in paragraphs A124-A131 acknowledges different extant usage of technology (both in terms of engagement team performance and supporting the system of quality management) while also not inhibiting future technological innovation in these areas.

We also agree that data management and interrogation is likely to be an essential element to an effective monitoring program; therefore, maintenance of an information system that supports a system of quality management (paragraph 40) is imperative.

In requirement 38 (e), (notwithstanding the application guidance provided in A124-A131) there is concern that the phrase ‘enable the operation of the firm’s system of quality management’ could lead to too narrow an interpretation of this requirement (i.e., to focus only on technologies that support data capture of audit quality indicators within a firm, rather than broader use of technologies which may be used day to day by firms and teams but which in aggregate support the overall quality management of a firm). It may be helpful to provide some additional guidance or enhancements in the application guidance to highlight that this is not just tools solely developed for quality management tracking.

Crowe Global

We welcome the references in the standard to the use of technology. Technological applications in professional firms are changing rapidly and a challenge for the IAASB is issuing a standard whose language remains fit for purpose. As presented, the standard and application guidance sufficiently address the subject of technology, which will be applied differently depending upon the nature and circumstances of the firm. However, circumstances may quickly change and firms cannot be held back by interpretations of the standard by national oversight bodies that discourage innovation and evolution of approach. Additional wording from the IAASB acknowledging that the technology environment will continue to evolve would be helpful.

EY Global Limited

We agree with expanding the scope of the ‘Resources’ component to include technological resources; however, we believe the standard should be clarified to state that the technological resources that are to be evaluated and documented as part of the system of quality management are limited to those that are designed to enable the system of quality management and the performance of engagements.
Specifically, paragraph 38(e) should be rewritten to be “The firm obtains or develops, implements, and maintains appropriate technological resources designed to enable the operation of the firm’s system of quality management and the performance of engagements.” We believe that, by indicating that the scope of the resources is those designed to enable the SQM and the performance of engagements, this clarifies which technological resources are in scope of ISQM 1 and that the scope does not include applications such as email, as mentioned in the FAQ materials. This change should be reflected in the supporting application materials (e.g., A205) and FAQs as appropriate.

We would recommend that the IAASB re-evaluate the application guidance for certain requirements such as ‘Acceptance and Continuance of Client Relationships and Specific Engagements’ in paragraphs A76 through A90 and the application material related to technological resources in paragraphs A124 through A131 because it is our view that there is an opportunity to further reduce the length by removing content that we don’t believe is necessary to understand the requirements. For example, we believe paragraphs A128 and A129 could both be deleted as we don’t believe this content is needed.

However, we disagree with the inclusion of potential quality risks in paragraph A129 as the firm should identify and assess its own quality risks. The inclusion of potential quality risks in the standard is not in line with the described intentions for the firm’s risk assessment process, which emphasize the importance of the risks being specific to the nature and circumstances of the firm. Examples of quality risks that are included in the application material could be misconstrued as quality risks that firms are expected to identify. Any example quality risks that the IAASB believes may be useful in firms’ efforts to implement ED-ISQM 1 are better suited to implementation materials, such as the FAQ materials.

**Grant Thornton International Limited**

We are of the view that, although the proposed amendments in ED-ISQM 1 have begun to address a firm’s use of technology in its system of quality management, further guidance and clarification on the scope is needed in the application material to ED-ISQM 1. For example, would the requirements therein apply to use of routine technology such as excel, and to more complex matters such as cyber security issues or data protection issues? Implementation guidance, in the form of examples could also be provided, which contrasts the extent of the responses that would need to be implemented and the related documentation at both ends of the spectrum. Consideration would also need to be given to how requirements in this area would be capable of being inspected against. For example, consideration could be given to whether there are suitable external benchmarks for firms to use in developing their responses and for regulators to inspect against.

**KPMG IFRG Limited**

We believe that including technology resources as part of the “Resources” component, will emphasise the importance of technology, and quality management of it, in modern day audit.

However, as technological resources is a new component of the SoQM we would welcome more clarity in paragraph 33(e), or within the Application Guidance, with respect to the nature and extent of technological resources that would be within the scope of the standard. The ED should clearly state the extent to which technological resources that are to be documented as part of the SoQM are those that are specifically designed to enable the performance of engagements as well as the overarching SoQM – which would therefore include independence tools, performance management tools, audit delivery tools, etc.
Nexia Smith & Williamson

Given the fast-changing nature of technology, and the different levels of usage by different sizes of firm, we understand the IAASB’s desire not to be too specific in this area. However, as currently worded, some of the application guidance is too general to be of any use (we discuss some examples in the “editorial comments” section below).

Paragraph A129:
- In our view, the use of IT applications or other aspects in the IT environment will give rise to quality risks.
- Similarly, we believe that the nature and significance of these quality risks will be based on whether, and the extent to which, the firm relies on IT.
- We also believe that general IT controls must be part of the responses.

Paragraph A131: again, we do not consider it appropriate for a quality management standard to imply that it would be acceptable for engagement teams not to receive training on how to use IT applications appropriately.

PriceWaterhouseCoopers

The addition of technological resources is a worthwhile addition to the standard. We note the criticality of the word “appropriate” when describing technological and intellectual resources. In some jurisdictions or smaller sized practitioners, technology may not be as advanced or widely used. Therefore, it is important that the standard does not mandate the use of technology in too broad a sense.

6. Member Bodies and Other Professional Organizations

Australian Accounting Professional and Ethics Standards Board

Subject to APESB’s significant concerns about the current form, scalability and prescriptive nature of the proposed ED-ISQM 1, we support the introduction of requirements to establish quality objectives in respect of technological resources. We encourage the IAASB to consider the likely future developments of technology and its impact on quality management and provide additional guidance on this for stakeholders.

California Society of CPA’s

Relating to the points made above, additional guidance could be provided regarding scalability of these issues to smaller practitioners, including for example an ability to conclude that risks relating to the use of technology maybe considered insignificant when the firm’s practice is to use non-customized audit tools and software purchased from third parties.

Center for Audit Quality

ED-ISQM 1 adequately deals with the modern auditing environment, including the use of different audit delivery models and technology. As currently written, the standard and related application guidance neither inhibit nor mandate the use of technology on an audit and is sufficiently flexible.

However, the standard should be clarified to state that the technological resources that are to be evaluated and documented as part of the system of quality management are limited to those that are designed to enable the system of quality management and the performance of engagements.

We believe that, by indicating that the scope is those resources designed to enable the system of quality management and the performance of engagements, this clarifies which technological resources are in
scope of ISQM 1 and that the scope does not include applications such as email, as mentioned in the FAQ materials. This change should be appropriately reflected in the supporting application materials and FAQs as appropriate.

Chartered Accountants Australian and New Zealand and ACCA

We support the acknowledgement of use of technology in ED-ISQM1, however, we believe it could go even further to not just acknowledging the use of technology but also establishing principles on how firms should evaluate and adopt new technologies in the audit process.

Comision Interamericana de Control de Calidad de la AIC

Yes, more in a practical and simple guide should be elaborated in detail what this concept consists of and avoid confusion of interpretation.

Comite Control de Calidad del ICPARD

Response: Yes, but in a practical and simple guide it is necessary to abound in detail in which this concept consists, and so to avoid confusions of interpretation.

Institute of Chartered Accountants of Pakistan

The proposed standard highlights the relevance of use of technology by firms in the system of quality management. However, we suggest that IAASB gives further consideration and guidance on this important but lesser understood area to enable SMPs to meet the proposed requirements.

Institute of Chartered Accountants of Scotland (ICAS)

We are aware that several of the large firms have invested significantly in technology as part of their audit function and therefore we welcome the additional material within ED-ISQM1 to address the use of technology. However, we would highlight that many smaller audit firms do not have the resources available to be able to invest in such technology and therefore the requirements need to be sufficiently flexible in order that they are capable of application by these firms.

Furthermore, many of the firms, particularly the smaller firms, will obtain many of the automated tools to facilitate compliance with ED-ISQM1 from an external software provider. Therefore, we recommend that the relevant regulators, standard-setters and professional bodies engage in early dialogue and discussions with these providers to help ensure that they will be fit for purpose and ready by the proposed implementation date.

Institute of CPAs of Uganda

ICPAU believes that the ED-ISQM 1 has been appropriately modernized to address the use of technology in quality management systems. Firms are now required to establish information systems to support both internal and external communication and interactions during the performance of engagements. The use of technology has been modernized by ED-ISQM 1 especially in the promotion of information systems in firms.

However, ICPAU believes that the Board should consider developing guidance on how firms should equip their human resources with the necessary skills in relation to emerging technologies in order to ensure quality management in performance of engagements.
Institute of Independent Auditors of Brazil (IBRACON)

We consider appropriate the inclusion of technology in the ED as presented due to the variety of jurisdictions and firms’ nature and size. Additional material and examples would be helpful to clarify the extent of the requirement around technology.

In general, the application material is always helpful. However, in this ED, there are some areas that can be reduced and simplified, such A76 through A90 and A124 through A131.

Instituto de Censores Jurados de Cuentas de España

Consideration in Para 38 e) and application material in Paras A124 to A131 are new and we believe that are appropriate as a part of the resources that firms need to allow internal quality systems operation and engagement performance.

Application material outlines the circumstances under which technological resources could be used and the need for specialised personnel for the performance of the engagements; and describes what a technological resource is (application, infrastructure and processes) and the risks associated to them.

Providing examples, in the standard or in a separate guidance material, would be desirable, especially for SMPs, since larger firms have already included technology in their quality management systems.

South African Institute of Chartered Accountants

In recognising and responding to the fact that firms are increasingly using technology to facilitate the operation of their SOQM, SAICA welcomes the reference to the use of technological resources.

With reference to paragraph 38(e) and to clarify the technological resources that are within the scope of ED-ISQM 1, we recommend that the standard clarify that the technological resources evaluated and documented as part of the SOQM are limited to those that are specifically designed to enable the SOQM and the performance of engagements.

However, the use of technology in the firm’s SOQM poses a risk to quality in itself and it is our view that ED-ISQM 1 does not clearly caution firms in this regard. We therefore recommend that the IAASB consider expanding on paragraph 38(g) by stating that firms should be alert to additional risks to quality that arise in using technological resources to facilitate the operation of the SOQM.

In line with the increasing use of technology by firms in the SOQM, firms are required to determine whether the software that they are using is an appropriate resource. Software used may include off the shelf packages that are widely used and generally accepted as being appropriate for use, or the firm may implement custom made software. Depending on the origin of the software, the work effort required to conclude that it is an appropriate resource may differ greatly. It is our view that the standard is not clear in terms of the extent of work that the firm is required to perform in concluding that the software is appropriate.

Q9 - Disagree

2. Regulators and Audit Oversight Authorities

Independent Regulatory Board for Auditors (South Africa)

We recommend that ISQM 1 be further modernised with respect to technological resources. Quality risks related to technological resources pose a high risk to the system of quality management. Technological resources will likely affect most, if not all, of the system of quality management (and quality management at the engagement level). Paragraphs A124-A131 of ED-ISQM 1 contain generic wording regarding
technological resources. Both the requirement (paragraph 38 of ED-ISQM 1) and the application material do not state that the pace of change in technology contributes to quality risks, including technological resources themselves and their impact on other components. We urge the IAASB to address this.

3. National Auditing Standard Setters

Malaysian Institute of Accountants - Auditing and Assurance Standards Board

The ED only deals with technology in its discussion on the Resources component. In light of Industrial Revolution 4.0, most operations in firms may be digitalized. As such, more technology related objectives and responses should be included within other components too.

6. Member Bodies and Other Professional Organizations

Belgian Institute of Registered Auditors IBR-IRE

We are of the opinion that the standard should rather specify that technologies used by firms must be adapted to the system of quality management of the firm.

Consiglio Nazionale dei Dottori Commercialisti e degli Esperti Contabili (CNDCEC)

CNDCEC deems that introducing the specific requirement to have technological resources for the performance of engagements but also to manage its quality system is too burdensome for small and medium-sized practices, in particular with reference to the quality system.

CNDCEC obviously recognizes the usefulness of technological resources, judging them essential to the performance of the engagement, however it doesn’t deem appropriate to introduce the obligation of developing, implementing and maintaining appropriate technology resources also with reference to the system of quality management (see paragraph 38 e) of ED-ISQM 1).

CNDCEC has developed its own method to perform audit engagements in small sized enterprises, also providing several examples of working material and a model for a handbook of quality control procedures. Furthermore, CNDCEC has strongly recommended using a software to perform audit engagements without however imposing its adoption.

Wirtschaftsprueferkammer

We think that technological developments are not appropriately addressed in this standard.

The proposed standards International Standard on Quality Management 1 (ISQM 1), International Standard on Quality Management 2 (ISQM 2) and International Standard on Auditing 220 (Revised) will have a significant impact on all audit firms and will shape the future of the performance of engagements significantly. Therefore we would have expected more detailed information of fundamental technological trends and developments (e.g. data protection).

As mentioned under Question 2 extant A59 of ISQC 1 provides the professional with application materials regarding the electronically scanning of original paper documentation for inclusion in engagement files. We are surprised that the IAASB has not given further explanations on the important and forward-looking topic (paperless audit). Short application materials (e.g. A138 “…digital records may replace or supplement physical records”) are less substantive.
**Q9 - Unclear**

4. Accounting Firms

**MGI Worldwide**

We have no strong view on this point as our member firms are at varying stages of their technological development in respect of audit and assurance and practice management tools.

**Moore Stephens International**

We appreciate that the issue of technology is a difficult one.

**Nexia International**

Not really an objective of the standards but should be considered by each firm.

5. Public Sector Organizations

**National Audit Office of Malta**

The effective operation of an audit quality management system could include ensuring the proper use of Data Analytics, Artificial Intelligence and Robotics in auditing, where applicable.

**Swedish National Audit Office**

The issue of technology may not be the most important aspect in the ISQM. It would be more relevant to address technology in other standards, like 315, 330, 520 etc.

6. Member Bodies and Other Professional Organizations

**Institute of Chartered Accountants in England and Wales**

We have commented in a number of recent responses to IAASB our concern about the manner in which technological developments have - or have not - been dealt with. Many such developments are cross-cutting issues and have no obvious home and we note the significance of these issues in the most recent IAASB paper on audit evidence. This highlights a number of different ways in which the issues might be dealt with, the fact that the issues are not homogeneous, and the fundamental questions they give rise to. The one thing IAASB must not do is ignore these issues, or shunt them even further down the line.
Other Comments on Resources

1. Monitoring Group

International Forum of Independent Audit Regulators

We strongly support the IAASB’s development of proposals to address firms’ quality control systems and to strengthen the engagement quality review standard. We have identified the following areas where substantive improvements have been made to the extant standards:

- Enhancements to Governance and Leadership that reinforce that the firm’s leadership collectively has the responsibility and accountability for setting and demonstrating the firm’s culture and values;
- Establishment of requirements relating to resources (including, but not limited to, personnel), networks and service providers. These improvements are required to respond to the evolution of the audit industry, including how firms are responding to environmental changes in order to provide services effectively and achieve the appropriate levels of quality;
- Expanded scope of engagements requiring engagement quality reviews;

We support the expansion of the Resources section to extend beyond human resources, especially given the significant increase in use of technology by firms in support of their systems of quality management, but also at the engagement level. We however also support further increasing the emphasis in the standard on the aspect of quality control relating to firm resources. Other matters to consider as part of this section include considering risks that technology might introduce (at the firm and engagement level), setting clear expectations for how tools are to be used and the related responsibilities of engagement partners in this regard, and having proper processes and controls to manage use of technology and to upskill auditors on technology. There should also be more focus on evolving use of audit delivery models, in particular delivery centres. Delivery centres can be involved in supporting functions related to the systems of quality management, but can also be involved in performing procedures on audits. These delivery centres can be effective in managing quality risk, but if not well constructed or managed can introduce more risk. We suggest explicit requirements to address how delivery centres are managed by the firm and the responsibilities of engagement partners and teams when using work performed by delivery centres. For example, some firms have policies and procedures for more detailed reviews of work that is performed at a delivery centre, including emphasizing that the engagement partner remains responsible for the work performed by the delivery centre and that such work addresses entity-specific facts and circumstances.

2. Regulators and Audit Oversight Authorities

Committee of European Auditing Oversight Bodies

21. Similarly, we suggest that there should be an increased focus on both the competence and culture/behaviour of personnel in the resources section.

Independent Regulatory Board for Auditors (South Africa)

Regarding resources:

Paragraph 38(d) states that: “Personnel demonstrate a commitment to quality through their actions and behaviours, develop and maintain the appropriate competence to perform their roles, and are held accountable through timely evaluations, compensation, promotion and other incentives.” We recommend that consequences or actions to be taken by the firm for personnel who demonstrate actions or behaviours that negatively affect quality, such as those mentioned in paragraph A123, be embedded into a requirement.
Irish Auditing and Accounting Supervisory Authority

Similarly, we suggest that there should be an increased focus on both the competence and culture/behaviour of personnel in the resources section.

3. National Auditing Standard Setters

Canadian Auditing and Assurance Standards Board

We believe the IAASB could remove paragraphs 11, A21, some of the examples in A69, A112, A122 and A188. In our opinion, these paragraphs do not add clarity or new information.

Japanese Institute of CPAs

The third sentence of A12, A21, A31, A32, the last sentence of A34, A35, A36, A39, A41, A57, A94, A97, A116, A121, A122, A137, A154, the first sentence of A172, the last paragraph of A180, A187 (excluding the last paragraph), and A188

Kammer der Steuerberater und Wirtschaftspruefer

Answer: Basically we support the proposals addressing service providers, but alternative audit delivery models are not dealt with in sufficient detail.

4. Accounting Firms

Baker Tilly International

Resources

ED-ISQM1.38(d) – The first sentence of the requirement that “Personnel demonstrate a commitment to quality through their actions and behaviors” will be very difficult to demonstrate in practice. The remainder of that objective is reasonable and more clearly demonstrable. We would suggest removing the first sentence of this objective.

Resources

We note that there are no required responses developed by the IAASB in ED-ISQM1.39 which is particularly disappointing given that there are seven control objectives. If the IAASB is unable to identify appropriate responses to meet the objectives, we contend that it will be difficult for individual firms, in particular SMPs, to identify appropriate responses.

BDO International

That being said, we do support:

• Including examples of some potential positive behaviour within paragraph A123.

• Including explicit reference to a firm’s technical specialists (such as accounting or auditing experts who may operate in firm’s technical departments) as part of paragraph 38 (f) and (g) and associated application guidance.

The following drafting points have been highlighted during our consideration of ED-ISQM 1:

• In paragraph 38 (and other parts later in ED-ISQM 1) we note the replacement of ‘personnel’ used in extant ISQC 1 with ‘human resources’. In addition, these terms are used interchangeably within paragraph 38 without any obvious need for differentiation. We are not convinced that this change is helpful as ‘human resources’ or ‘HR’, as it’s more commonly known within firms is usually a separate
functional unit with a responsibility to support the business rather than those individuals who are client-facing. This could create unnecessary confusion for users and stakeholders and particularly those individuals in non-audit but operational roles.

**EY Global Limited**

For example, we believe paragraphs A128 and A129 could both be deleted as we don’t believe this content is needed.

Since the firm is responsible for the system of quality management, we observe that the quality objectives in paragraphs 38(d) and 38 (g) in the ‘Resources’ component and all the quality objectives in the ‘Engagement performance’ component are not worded as actions of “The firm…” Instead, the quality objectives noted above in the ‘Resources’ component and all of the quality objectives within the ‘Engagement performance’ component are directed at personnel or engagement teams. This seems contradictory to both the objective of the standard, which is directed at the firm, as well as to most of the other quality objectives in ED-ISQM 1. Therefore, we recommend these quality objectives be rewritten to require action by the firm to clarify that the responsibility for achieving all the quality objectives lies with the firm.

Paragraph A117

- We are unclear what is meant by “a defined standard” and recommend it be removed from the paragraph improve the clarity of the proposed standard.

**Moore Stephens International**

In terms of this particular standard, a key issue is ADMs, particularly service delivery centres. Obviously the draft does address these but especially in the light of the fact that there is currently no consensus between regulators as to what is required in terms of the approach firms can or should take towards the use of these in a quality context, we would welcome further guidance probably in the application material. Given that these things are evolving all the time, a clear statement of the key principles (especially around responsibilities) which will remain and are essentially independent of whatever bright new ideas may emerge in the next few years would be helpful

**Nexia Smith & Williamson**

Paragraph A134 implies that engagement teams do not have to follow the firm’s methodology where one exists, which we assume is not the intention.

Paragraph A123: we do not consider it appropriate for a quality management standard to say that a firm “may” take action where personnel demonstrate poor quality, and that the actions “may” depend on severity and frequency. We believe that this should be a required response.

The expression “all personnel” in the final bullet of paragraph A119 is perfectly understandable without the following three lines of explanation.

The requirement in paragraph A113 that “Given the nature of financial resources, the quality objectives and responses in governance and leadership, such as those that address financial and operational priorities, address financial resources” is opaque – is it simply saying that appropriate resource planning must include financial resources?

We find some of the application guidance very difficult to understand as drafted. For example:

We find the presentation of paragraph 38(a)(i) and (ii) as “either/or” confusing. It implies that (ii) doesn’t require knowledge or experience.
PriceWaterhouseCoopers

This appendix illustrates our vision of quality objectives and quality risk factors, as described in our response to question 6(b), for two components. The quality risk factors are illustrative only and not intended to represent a definitive or complete list.

**Component: Resources**

**Quality objective:** The firm recruits, develops, and retains appropriate personnel to deliver quality engagements and/or to support the firm’s system of quality management.

**Quality risk factors:**
- Leadership has insufficient information to assess risks related to recruiting, developing and retaining personnel and to take action as necessary
- The human capital function does not have sufficient capabilities for effective recruitment, development and retention of staff and partners
- Qualified people cannot be retained
- The recruitment plan does not meet resource needs

**Quality objective:** The firm assigns sufficient and appropriate personnel to each engagement

**Quality risk factors:**
- Engagement partners and team members do not have the appropriate competence, capabilities, and sufficient time to perform quality engagements
- Resource needs are not identified by engagement leaders on a timely basis
- Qualifications of team members do not match resource requests in terms of competencies, capabilities or sufficient availability of time
- Workloads of partners and staff are not appropriately managed
- Insufficient information is available to assign personnel to engagements

**Quality objective:** The firm evaluates, compensates, and promotes personnel in a fair and transparent manner for their performance in demonstrating their commitment to quality.

**Quality risk factors:**
- The human capital function does not have sufficient capabilities to effectively manage the objective setting, evaluation and compensation process
- Roles and responsibilities of personnel are not clearly defined our communicated to enable a fair performance evaluation
- Evaluation criteria are not consistent with defined objectives and expectations
- Evaluation criteria were not communicated to personnel
- Insufficient/ineffective coaching and feedback received from engagement leaders
- Personnel perceive rewards and recognition for their performance as unfair or insufficient

**Quality objective:** The firm obtains or develops, implements and maintains IT systems and tools that meet users’ needs and are accessible, reliable and secure and are appropriately used by personnel.
Quality risk factors:

- The IT function does not have the capability to support the development and maintenance of IT applications used in quality management or in the delivery of engagements
- IT applications are not properly implemented
- IT applications used are not reliable
- Process for granting, monitoring and revoking user access to IT applications is inappropriate
- IT applications do not identify, capture, process and maintain relevant and reliable information

Quality objective: The firm provides, and personnel make use of, relevant intellectual resources that enable consistent performance of quality engagements.

Quality risk factors:

- Human resources responsible for the development of intellectual resources do not have sufficient capabilities to provide efficient and effective support
- Intellectual resources provided to personnel do not meet professional standards
- Leadership has insufficient information to assess the effectiveness and efficiency of intellectual resources and their use by personnel and to take action as necessary
- Engagement leaders do not use available intellectual resources on their engagements
- Tools and guidance do not adequately support personnel for effective and efficient engagement planning, execution, reporting and documentation

Paragraph A119 - We suggest the following addition to the final bullet: “[...], and for the individual(s) assigned operational responsibility for the firm’s system of quality management […].”

5. Public Sector Organizations

Office of the Auditor General New Zealand

We believe that the 29 quality objectives in the proposed standard are appropriate. We note there are no quality objectives relating to the appropriateness of the firm’s training to staff and the evaluation of the effectiveness of this. However, we note the resources component assumes they are sufficiently trained per paragraph 38 (a) of ISQM1.

In paragraph 38(d) it is not clear how you hold someone accountable through promotion. It seems that this should be a broader point about evaluations, compensation, promotion and other incentives encouraging and rewarding actions, behaviours, and competence that support quality, and discouraging those that do not.

6. Member Bodies and Other Professional Organizations

Accountancy Europe

For the aspects around the alternative audit delivery models, we refer to our response to ED-220 as we think it is more appropriate to deal with them there.

Alternative audit delivery models are not dealt with in sufficient detail. We refer to our response to Question 9.
Belgian Institute of Registered Auditors IBR-IRE

The following A-paragraphs could for example be removed: A12 to A16, A55, A83, A85, A86, A90, A91, A94 to A97, A100, A105, A114, A115, A116. In particular, A59 is a repetition of the requirement (par. 10 c). Par. A59 could be removed and A69 should be an A-paragraph linked to par. 10 (c).

California Society of CPA’s

Resources – Paragraph 38 – We think these objectives may be problematic and somewhat in conflict with AICPA guidelines that allow CPAs to take on work in unfamiliar areas. The implication, if not a requirement, in these objectives is that personnel are competent from the get go. There does not appear to be the opportunity to “get smart” before issuing a report.

CPA Australia

We suggest the following editorial amendments:

- The standard needs to address all types of engagements so we suggest deleting “audit” in the following application material:
  
  Para. A133. The intellectual resources may be made available to personnel through technological resources, for example, the firm’s audit methodology may be embedded in the audit-IT application that facilitates the planning and performance of the engagement.

Institute of Chartered Accountants in England and Wales

Competency

Together with professional scepticism, auditor competency is a key factor in achieving audit quality, but practitioners may focus on process. While process can compensate for some shortcomings in competency or experience, we do not believe that the balance is right in the proposals. ISQM 1 in particular should further emphasise the importance of competency in the Engagement Performance and Resources components. The link with the IAESB’s work in this area should also be made clearer by referring explicitly to the proposed IESs, particularly IES 8.

The proposals rightly emphasise iteration and connectivity as well as process. But practitioners may focus on process and IAASB could improve the proposals by balancing this perceived emphasis with more focus on competence, and the importance of its role in fostering professional scepticism. The link with the IAESB’s work on this area should be made clearer by referring explicitly to the proposed IESs, particularly IES 8.

Competency and professional scepticism are critical to quality and ISQM 1 should emphasise the importance of competence in components other than risk assessment. The link with the IAESB’s recent work on this should be made clearer. This could be done by referring explicitly to the proposed IESs currently being revised, particularly IES 8.

Audit delivery models (including service delivery centres) are increasingly significant to audit quality and they rely on technology. There are differences of opinion between firms and regulators about whether engagement teams can rely on quality measures applied at the firm level to such centres, whether they need to perform their own, or both.

Such models and centres are tolerably well described, including their role within networks, but the different ways of approaching them from a quality point of view should be better described either in application material, or in an examples document.
The following comments are on paragraphs that are unnecessarily obvious, verbose, repetitive, circular or otherwise hard to understand (or apparently illogical) as a result of the clumsy use of language. They are simply those that have been brought to our attention and do not represent a comprehensive analysis.

- Para 38 first para (repetition of 'resource')
- Para 38 (i) and (ii), the meaning here is very unclear, as a result of the use of the word 'or' implying that (ii) does not require knowledge or experience
- Para A119: final bullet - either 'all personnel' is wrong, or the list that follows is incomplete. All personnel are defined as partners and staff.
- Para A123: A firm ‘may’ take action where personnel demonstrate poor quality in the sense that it is permitted so to do, but does IAASB really consider this optional? Any action will (not may) depend on severity and frequency. This feels more like a required response.
- Para A129: the idea that IT applications or other aspects of the IT environment might not give rise to quality risks does not make sense. The nature and significance of those risks are (not may be) based on the extent to which the firm relies on IT. Similarly egregious examples can be found in paras A134, A160 and A209.
- The last three sentences in para A113 (verbose and particularly impenetrable)
- Para A124: suggest delete (circular, unnecessary in many respects, para A125 would suffice, the rest is methodology and more relevant to and covered in ED ISA 315)

Institute of Chartered Accountants of Scotland (ICAS)

We support the proposals addressing service providers but would welcome more detailed guidance on the approach when dealing with alternative audit delivery models.

Malaysian Institute of CPAs

Provide clarity about the role of a firm’s technical specialists in the context of paragraphs 38(f) and (g)

Wirtschaftsprüferkammer

Extant A59 of ISQC 1 contains application materials regarding the electronically scanning of original paper documentation for inclusion in engagement files. We are surprised that the IAASB has not given further explanations on the important and forward-looking topic (paperless audit). On the contrary: information on scanned documents is not available in the draft though it is firm’s daily business (see Question 9).

8. Academics

UNSW Audit Research Network

Resources

We strongly support the focus under this objective on human resources. Without competent and capable personnel, the effectiveness of a firm’s system of quality management will inevitably be compromised. Of concern in this regard is the ability of the profession to attract and retain appropriately qualified personnel (e.g., Hermanson, Houston, Stefaniak and Wilkins 2016). With this in mind, we believe that objectives should go beyond hiring, developing and retaining personnel (see paragraph 38a), as equally fundamental issues involve making the profession attractive to those capable of performing in it and to motivate those already within it. We believe that consideration should be given to rephrasing paragraph 38(a) to ‘The firm
attracts, hires, develops, motivates and retains personnel, including ...", and explanatory material in paragraph A119 expanded to discuss examples of what the firm’s response in this regard may include.

We similarly support the recognition given to ensuring that personnel are assigned to engagements and activities such that they have sufficient time to positively contribute to quality (paragraphs 38b and 38c). Research (e.g., McDaniel 1990; Coram, Ng and Woodliff 2004) highlights the threats to quality from time pressure, and a firm’s system of quality management must address this threat. We do feel, however, that insufficient attention has been given to the multi-client / multi-task environment in assigning personnel to engagements and tasks. Our own research (Kim, Mayorga and Harding 2017) (see also Mullis and Hatfield 2018) highlights that task switching / multitasking can negatively impact the quality of audit judgments. Other research highlights the threats to quality from an intense period of work pressure (e.g., during ‘busy season’) (e.g., Hurley 2017; Hurley 2019). In a multi-client environment, research reveals that preparer and reviewer judgments are inappropriately influenced (and have the potential to negatively impact quality) by the outcome of similar judgments made on a different engagement (Bhattacharjee, Maletta and Moreno 2007; Bhattacharjee, Maletta and Moreno 2017) (i.e., preparer and reviewer judgments are subject to contrast effects).

We recommend, therefore, that paragraph 38 be expanded to recognize the need for the firm to establish quality objectives relating to allocating and assigning human resources that take into consideration, not only the time available to complete the task immediately at hand, but also the other tasks that are being completed at the same time, the volume of work that personnel have recently been required to complete, and other engagements that personnel may be, or recently have been, involved with.