15 February 2017

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International Auditing and Assurance Standards Board
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Dear Matt

IAASB Request for Input, Exploring the Growing Use of Technology in the Audit, with a Focus on Data Analytics

Thank you for the opportunity to comment on this Request for Input (RFI) from the IAASB's Data Analytics Group (DAWG). We submit the feedback from the New Zealand Auditing and Assurance Standards Board (NZAuASB) to the specific questions raised in the RFI in the attachment.

The External Reporting Board (XRB) is a Crown entity responsible for developing and issuing accounting and auditing and assurance standards in New Zealand. The XRB's outcome goal is to contribute to the creation of dynamic and trusted markets through the establishment of an accounting and assurance framework that engenders confidence in New Zealand financial reporting, assists entities to compete internationally and enhances entities' accountability to stakeholders. The NZAuASB has been delegated responsibility by the XRB for developing and issuing auditing and assurance standards.

The NZAuASB strongly supports the IAASB's initiative to explore an appropriate response to the growing use of technology in the audit. This is a topic of increasing relevance to all assurance practitioners in New Zealand, not only the larger firms which are familiar with data analytic techniques, but also Small and Medium Practices for which the use of data analytics, although scalable, will most probably be market and risk driven. The Auditor-General is also increasingly incorporating standard financial ratio analysis to its parliamentary reporting in New Zealand, for example by comparing entities across a sector in a single year and over a time series. The Auditor-General's view is that time series and comparative data, along with statistical procedures over those, is likely to develop in the context of the audit and the provision of other forms of assurance. In particular, such analysis should provide evidence and analytical support for auditor judgements on matters such as going concern and the reasonableness of valuations.

Data analytics provide potentially the biggest opportunity and the most exciting development influencing the audit profession in a long time. Their use will revitalise the audit profession, providing better insights for auditors and entities and allowing auditors to perform a more efficient and effective audit, and improve audit quality. Looking at what computerization and digitalization have done to other parts of the commercial world in

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improving information flow, timing, volume and speed of information available, similar gains could be made in auditing. These will allow greater sampling and greater speed of assessment of data, reduce the risk of human bias in selection and decision, and enable auditors to find outliers more quickly, all factors that will improve audit quality. The use of data analytics will also increase opportunities for real-time auditing.

Despite these opportunities for improved audit quality and efficiency, the NZAuASB also agrees that there are significant challenges as outlined in the RFI. In particular, they include the need to address:

- guidance on how auditors can be comfortable that all assertions have been met when using data analytics;

- documentation challenges, including the difficulty in being able to re-perform tests based on data generated at a point in time;

- the length of time data files should be retained, as well as who should retain the data file used in audit procedures – the auditor or the entity (recognising the jurisdictional challenges described in the RFI);

- the education of regulators that are lagging behind current audit practice and not understanding the techniques being used and their implications for the audit process, which could stifle innovation;

- the education of the profession – firstly to understand the competencies and skills needed, and then how to train/re-train auditors to have those skills, with the sceptical mindset needed;

- managing the expectation gap from the use of data analytics, (for example to achieve 100% sampling); and

- the likelihood that other datasets will become increasingly important in supporting the audit as evidence.

The increasing use of data analytics will require proper implementation and management by auditors, as well as a response by standard setters. The auditing standards currently accommodate the use of data analytics in a range of circumstances. The NZAuASB therefore supports the development of guidance as a first priority for the IAASB, rather than to change or seek enhancement of the standards themselves. The NZAuASB strongly encourages the IAASB as a first priority to develop general guidance responding to the types of difficulties currently being encountered by practitioners. It should also continue its outreach to understand and explore the use of technology and data analytics (as they evolve, and as their impact on the audit develops) in order to develop an effective and timely response when and if required, so that there continue to be fit for purpose auditing standards that meet users' needs.

For example, the NZAuASB is aware that XERO, a cloud technology company based in New Zealand but with global reach, is planning a 'continuous certification' functionality for its

accounting software. To meet users' needs the ISAs will need to be able to respond to such developments in assurance.

While the focus should be on guidance rather than amending standards, care will need to be taken when developing guidance that it does not become quickly out of date or restrictive in its effect. To reduce the risk of creating responsibilities within the ISAs and needing to make pervasive changes throughout the ISAs, the guidance should preferably sit outside the ISAs.

The NZAuASB also encourages the IAASB to continue exploring the benefits of using data analytics, and how they can be used to further improve the reasonable assurance model and the quality of audits. The NZAuASB considers that, although there has been a growing effort to use data analytics in transaction variation analysis, significant effort is yet to be directed into understanding how the annual audit can be carried out more effectively or efficiently to give assurance. That said, it is important that standard setters and regulators do not stifle innovation in this area, but seek a full understanding and allow the use of data analytics to go through a discovery and refining process before setting requirements.

The NZAuASB further believes that data analytic methods provide a valid tool to give assurance, which may also be suited for use in applying other assurance standards. The IAASB should therefore not limit its consideration of this matter only to the auditing standards. Other related services such as agreed-upon procedures may also benefit from the use of data analytics.

The NZAuASB also considers these issues are relevant to non-financial information. In particular, it notes that the RFI does not consider the benefits and the accompanying challenges relating to the use of data analytics where non-financial information accompanies the financial information in financial statements. Exploring the relationship that exists between the financial and non-financial information has the effect of confirming the integrity of both sets (or otherwise). The reporting and auditing of non-financial information is becoming increasingly more important (as noted in the project considering emerging forms of reporting), and we encourage the IAASB to include it in its consideration of this matter too.

The NZAuASB's detailed responses to the specific questions asked in the RFI are included in the attachment.

Should you have any queries concerning our submission please contact either myself (robert@buchananlaw.co.nz) or Sylvia van Dyk (sylvia.vandyk@xrb.govt.nz).

Yours sincerely,

Robert Buchanan
Chairman

Submission of the New Zealand Auditing and Assurance Standards Board

IAASB Request for Input, Exploring the Growing Use of Technology in the Audit, with a Focus on Data Analytics

<u>*Responses to the Request for Input (RFI)*</u>

<u>*Question (a): Has the IAASB considered all circumstances and factors that exist in the current business environment that impact the use of data analytics in a financial statement audit?*</u>

The NZAuASB has the following comments on the business environment challenges identified in the RFI:

<u>Conceptual challenges</u>

Other factors to consider are challenges that may arise from:

- real-time auditing;
- the ownership of the software being used to perform the data analytics, i.e. when it is the client's software being used, as opposed to the auditor's software;
- where the data resides; and
- understanding the implications of the huge sets of available data, and assessing 'what really matters'.

Another aspect to consider is that other datasets are likely to become increasingly important in supporting the audit as evidence. Immediate examples of such data sets include asset management, human resources and contract management information systems. Also, where non-financial performance information accompanies the financial statements, exploring the relationship that exists between the financial and non-financial information has the effect of confirming the integrity of both sets (or otherwise). Exploring this relationship in an annual audit will challenge current understandings about the 'currency' of evidence being reasonably relied on in carrying out audit procedures, and change the way that statistical procedures are used in an audit.

<u>Investment in re-training and re-skilling auditors</u>

As noted in the RFI, the use of data analytics in an audit of financial statements will not replace the need for the auditor to exercise appropriate professional judgement and professional scepticism, and the need for other testing. This is an important factor to include in any training. Professional judgement is also needed in determining what data is important, and in the interpretation and use of data analytics. In many instances, there is a risk that analytical results could be derived incorrectly, for example by the user setting incorrect parameters, or wrongly interpreted.

<u>*Question (b): Is the IAASB's list of standard setting challenges accurate and complete?*</u>

The NZAuASB commends the IAASB and DAWG for the research undertaken and consideration given to identifying the standard setting challenges. Overall the NZAuASB found the RFI a useful and thorough discussion of the range of issues. It broadly agrees with the standard setting challenges identified by the IAASB.

The NZAuASB encourages the IAASB to continue to explore ways to improve the reasonable assurance model through the growing use of data technology. This may lead to the identification of further standard setting challenges. The NZAuASB also believes it would be helpful to communicate the benefits from the use of data analytics in the audit to the wider stakeholder, i.e. that it provides better insights for auditors and entities and allows auditors to perform a more efficient and effective audit and improve audit quality. Further comments are provided below under each of the challenges identified by the RFI.

Question (c): To assist the DAWG in its ongoing work, what are your views on possible solutions to the standard setting challenges?

The NZAuASB strongly encourages the IAASB to develop guidance based on the current difficulties encountered by practitioners while highlighting the benefits, and to continue its outreach to understand and explore the use of technology and data analytics in order to effectively respond with fit for purpose auditing standards that meet users' needs.

Further comments are provided below under each of the challenges identified by the IAASB.

General IT controls

The NZAuASB agrees that the minimum level of testing of general IT controls required, and the impact of any deficiencies in the IT general controls and application controls on which the auditor intends to rely, are areas where further guidance is required. This area is already challenging where the auditor relies on system-generated reports, and it will only become more critical where more reliance is placed in the audit on information generated through an array of data analytical techniques and applications.

The NZAuASB is further of the view that it may be more efficient for the auditor to validate data, depending on its nature and source, to external sources by using data analytics rather than test the general IT controls. Guidance would be helpful to assist the auditor in deciding what the best approach is to validation.

Information produced by the entity

The NZAuASB considers the existing requirements in the ISAs remain appropriate. But, given the nature of the data being utilised in an audit using data analytics, it agrees that guidance should be developed about the procedures the auditor is expected to perform to evaluate whether the information provided is sufficiently reliable for the auditor's purpose. The

NZAuASB recommends that this address the procedures that need to be performed where management has used data analytics to produce information relevant to the audit, which is likely to increase in future.

Relevance and reliability of external data

The NZAuASB agrees that the matters raised in the RFI are valid questions to further explore. It also suggests that it would be appropriate for the auditor to consider the relevance and reliability of external data when performing the risk assessment. The procedures the auditor needs to perform when considering the relevance and reliability of information obtained from third parties will vary, depending on the nature and source of the information. Guidance on the factors to consider in various circumstances (for example when performing the risk assessment) would therefore also be very helpful.

The nature of audit evidence obtained

The NZAuASB agrees that it would be helpful to clarify when audit evidence obtained from data analytics alone would be considered sufficient appropriate audit evidence (i.e. where, in addition to supporting the risk assessment, data analytics can be used to provide substantive audit evidence and whether that evidence arises from what are classified in the ISAs as tests of controls, tests of detail, or substantive analytical procedures).

The current risk and response nature of the ISAs

The NZAuASB agrees that the questions raised in the RFI in respect of the classification of audit evidence provided by data analytics in the current risk and response nature of the ISAs are appropriate to explore further.

The nature of the audit evidence in responding to risks identified

The NZAuASB agrees that the use of data analytics does not negate the audit risk model, and that risk identification and response to the assessed risk rather can occur in one step. The NZAuASB therefore agrees that, rather than considering changing the structure of the ISAs, the IAASB should explore how the auditor, when using data analytics, should document how the audit objectives (based on the current ISA requirements) have been met. Guidance on how auditors can be comfortable that all assertions have been met when using data analytics will also be helpful.

Appropriate level of work effort for exceptions identified

The NZAuASB agrees with the challenges identified regarding the level of work effort required for exceptions identified where the auditor uses data analytics. The NZAuASB considers that the DAWG has identified appropriate questions to consider in this regard that may affect the ISAs.

Risk measurement

The NZAuASB considers that the DAWG has identified appropriate questions to consider in this regard that may affect the ISAs.

Challenges in applying the documentation requirements when applying data analytics

The NZAuASB considers that the principles of the documentation requirements in the ISAs remain appropriate, and agrees that the documentation requirements need not be different when making use of data analytics. The NZAuASB agrees with the challenges identified in the RFI in this regard, and the questions raised to further explore how to apply the documentation requirements when making use of data analytics.

Other documentation challenges to consider are:

- the difficulty in being able to re-perform tests based on data generated at a point in time; and
- the length of time data files, including snapshots of 'real time data', should be retained, as well as who should retain the data file used in audit procedures – the auditor or the entity (recognising also the jurisdictional challenges described in the RFI).

The importance of auditors establishing quality control processes

The NZAuASB considers it important for firms to apply quality control processes when developing tools, and to assess the reliability of the tools and technology utilised, to avoid a potential 'overconfidence in technology'. Making use of third party developed tools could in principle be seen as similar to the 'use of an expert'. The same principles should therefore apply in assessing the reliability of the tools and technology utilised. The NZAuASB agrees that this is an area to further explore and provide guidance on.

Considerations specific to auditors who perform audits of SMEs

The NZAuASB agrees with the considerations the DAWG has identified specific to auditors who perform audits of SMEs.

Considerations specific to SMPs

The NZAuASB agrees with the considerations the DAWG has identified specific to auditors who perform audits of SMEs. In New Zealand, this is a topic of increasing relevance to all assurance practitioners, not only the larger firms (which are familiar with data analytic techniques) but also SMPs for which the use of data analytics most probably will be market and risk driven. It is also more likely that SMPs will need to rely on third-party tools to develop and retain their capacity to audit with the use of data analytics and remain competitive with larger firms. Another specific challenge will be in organisational capability,

for example obtaining an understanding of the third-party tool and being able to assess its reliability.

<u>Considerations specific to auditors who perform audits of public sector entities</u>

The NZAuASB agrees that there are numerous other types of audits and assurance engagements performed, not only in the public sector, but also in the private and not-for-profit sector in New Zealand, that may lend themselves well to data analytics. The IAASB should therefore not limit its consideration of this matter only to the auditing standards.

Question (d): Is the DAWG's planned involvement in the IAASB projects currently underway appropriate?

The NZAuASB supports the DAWG's planned involvement in the projects currently underway, as this will assist with identifying where reference can be made to, or language related to data analytics can be included in, guidance material. It is a good opportunity to further explore some of the issues already identified, and to identify any further matters to consider.

Question (e): Beyond those initiatives noted in the Additional Resources section of the RFI, are there other initiatives of which the IAASB is not currently aware of that could further inform the DAWG's work?

The International Organisation of Supreme Audit Institutions, at its Congress in December 2016, agreed to establish a Data Analysis Working Group. This was a response in part to the theme of the Congress relating to the professionalization of public sector auditing institutions. The inaugural meeting of the working group will be held in April. The work and reflections of this group may eventually be of interest to the IAASB.

Question (f): In your view, what should the IAASB's and DAWG's next steps be?

The auditing standards currently accommodate the use of data analytics in a range of circumstances. However, it is clear from the insights gained to date by the DAWG that many auditors are finding challenges in fitting the audit evidence derived from data analytics into the current evidence ISA model. The NZAuASB therefore supports the development of guidance as a first priority for the IAASB rather than to change or seek enhancement of the standards themselves. The NZAuASB recommends that the IAASB develop the general guidance outside the ISAs, to reduce the risk of creating responsibilities within the ISAs and the need to make pervasive changes throughout the ISAs.

The NZAuASB strongly encourages the IAASB and the DAWG to continue to understand and explore the use of technology and data analytics in order to effectively respond with fit for

purpose auditing standards that meet users' needs. Collectively exploring issues and possible solutions to the identified challenges with interested parties is a very good way forward. For example, the NZAuASB is aware that XERO, a cloud technology company based in New Zealand but with global reach, is planning a 'continuous certification' functionality for its accounting software. To meet users' needs the ISAs will need to be able to respond to such developments in assurance.

Another important consideration when developing guidance (or any requirements) is to remain principle based to avoid quickly becoming out of date in such a fast-moving environment.

The NZAuASB also encourages the IAASB to further explore the benefits of using data analytics, and how it can be used to further improve the reasonable assurance model and the quality of audits. The NZAuASB considers that, although there has been a growing effort to use data analytics in transaction variation analysis, significant effort is yet to be directed into understanding how the annual audit can be carried out more effectively or efficiently to give assurance. That said, it is important that standard setters and regulators do not stifle innovation in this area, but seek a full understanding and allow the use of data analytics to go through a discovery and refining process before setting requirements.

The NZAuASB further believes that data analytic methods provide a valid tool to give assurance, which may also be suited for use in applying other assurance and related services standards. The IAASB should therefore not limit its consideration of this matter only to the auditing standards.

In particular, the NZAuASB notes that the RFI does not consider the benefits and the accompanying challenges relating to the use of data analytics where non-financial information accompanies the financial information in financial statements. The reporting and auditing of non-financial information is becoming increasingly more important (as noted in the project considering emerging forms of reporting), and we encourage the IAASB to include it in its consideration of this matter.