Mr Matt Waldron
Technical Director
International Auditing and Assurance Standards Board
545 Fifth Avenue
New York
10017 USA

Dear Matt

Comments on the IAASB’s Data Analytics Working Group’s Request for Input on Exploring the Growing Use of Technology in the Audit, with a Focus on Data Analytics

The Independent Regulatory Board for Auditors (IRBA) is both the audit regulator and national auditing standard setter in South Africa. Its statutory objectives include the protection of the public by regulating audits performed by registered auditors, and the promotion of investment and employment in the Republic. Its statutory Committee for Auditing Standards (CFAS) is responsible for assisting the IRBA to adopt, develop, maintain, issue and prescribe auditing pronouncements.

We appreciate this opportunity to comment on the Data Analytics Working Group’s Request for Input on Exploring the Growing Use of Technology in the Audit, with a Focus on Data Analytics developed by the International Auditing and Assurance Standards Board (IAASB).

Our response has been prepared from comments provided by a task group of the CFAS at a meeting held in January 2017. The meeting comprised registered auditors, consultants, IT and data science specialists as well as regulators, including the Auditor-General of South Africa. Our comments are presented under the following sections:

1. General comments; and
2. Request for specific comments and responses.
Kindly e-mail ivanker@irba.co.za and/or creintjes@irba.co.za or phone us directly on +27 87 940 8838/+27 87 940 8828, if further clarity is required on any of our comments.

Yours faithfully

Signed electronically

Imran Vanker
Director: Standards

Ciara Reintjes
Senior Professional Manager: Standards
1. GENERAL COMMENTS

1.1. We support the efforts of the IAASB’s Data Analytics Working Group (DAWG) in exploring the growing use of technology in the audit, focusing on data analytics, and in identifying the challenges and opportunities.

1.2. This publication is encouraging as it demonstrates that effort is being invested in understanding the impact of using tools such as data analytics on assurance.

1.3. We recommend that the IAASB consider an approach to liaise with IT and data science specialists on each of its standard-setting projects so as to continue to reflect the growing use of data analytics and addresses opportunities and threats presented by the current wave of innovation in data analytics.

1.4. We support the initiative of the IAASB through its DAWG to continue to track related developments in order that standard setting and regulation may be responsive.

2. REQUEST FOR SPECIFIC COMMENTS AND RESPONSES

Question (a)

Have we considered all circumstances and factors that exist in the current business environment that impact the use of data analytics in a financial statement audit?

Response

We detail further considerations regarding two factors discussed in the publication.

Proficiency of auditors

1. Auditing in the current environment requires an auditor to have an awareness of the benefit of using data analytics, for both performing audit procedures and to obtain audit evidence. This need will likely escalate in the future.

2. In the past, auditors were trained with little emphasis on information technology (IT). The result has been that generally the auditors’ skills, experience and competencies have not necessarily led them to understand the use of data analytics in performing an audit. This, however, has to be balanced against the view that the expectation for auditors in respect of knowledge and skills is already very high, and demanding more may not be realistic.

3. There is a concern that auditors may have limited knowledge of how the work of a data specialist can be integrated into the audit engagement. This may then result in some auditors working around the system as they may not be comfortable with using data analytics, although the use of data analytics may have been made available to them. Auditors should be encouraged to expand their skills to include an understanding of data analytics. Conversely, data specialists should have an understanding of why the auditor requires the data and what the auditor will use it for.

4. We are aware that the International Accounting Education Standards Board (IESBA) has identified Information and Communications Technology as a new project¹, with stakeholder consultations, including with the DAWG, to begin in 2017². We commend this development.

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¹ Draft IAESB Strategy 2017-2021, IAESB meeting 3 February 2017. The draft work plan states “Disruptive potential of ICT and increasing pace of change; the use of intelligent systems, data mining, and predictive analytics to exploit ‘big data’ will transform both the operational and interpretive aspects of accountancy.

Data quality

5. In order to perform audit procedures such as risk assessments and obtaining of sufficient appropriate audit evidence, the quality of the underlying data used for the data analytics needs to be assessed. The data analytics may be appropriate; however, the data may be of a poor quality, rendering results from data analytics unsatisfactory.

6. The output of data analytics should be linked to assertions such as completeness, accuracy, cut-off and classification, which the auditor would then use to consider whether the information is materially misstated, in the context of the financial statement audit.

7. Data may be obtained from a third party. The auditor and the data specialist would need to ascertain the relevance, reliability and quality of the data. It should not be assumed that as the data was obtained from a third party, it is suitable, accurate and complete. If data is obtained from a service organisation, the auditor would have to consider applying ISA 402, Audit Considerations Relating to an Entity Using a Service Organisation.

8. Auditors would need to satisfy themselves as to the suitability and accuracy of algorithms used to produce and perform the data analytics. Additional concerns are the analysis of unstructured data, such as that which can be derived from social media; trends that can be derived from these analyses; and other non-financial data. This would require IT specialists or data specialists.

9. A vital consideration is whether the auditor can reliably assess the integrity of data. This concern is similar to the concept of how to trust the integrity of information in emerging forms of external reporting. Should the underlying data have been assured before being run through the system? The management of the client holds the primary responsibility for the quality of data.

10. The auditor may be using the data for a different purpose than what the company is using it for. Also, there is a concern that clients may not understand what their systems are generating, and therefore may not be able to provide the data that the auditor requires.

11. If the data is not obtained from the core IT systems, but rather from another source of information such as business intelligence systems, the auditor would need to determine if the information can be reconciled to the core system. For example, data regarding governance of the client, corporate social responsibility, integrated reporting information and other forms of emerging forms of external reporting is not necessarily obtained from traditional accounting systems.

Other factors

12. Using data analytics may result in an audit trail that is either difficult or impossible to establish, document and reperform. Inspectors of the audit engagements would then need to find evidence of how the underlying data can be traced; and how the data analytics process can be identified. The standards would require the documentation of these considerations, which in the context of data analytics may pose unique challenges.

13. Auditors need to assess what the source of the underlying data is and how this links to the trial balance and financial statements. However, it may be difficult to determine how the output of the data analytics relates to the trial balance.

14. Auditors need to determine whether sufficient appropriate audit evidence has been obtained, and this needs to be documented. This, however, may prove to be complex if data analytics is used.
**Question (b)**

Is our list of standard-setting challenges accurate and complete?

**Response**

**Further standard-setting challenges**

15. The ISAs do not motivate or encourage the use of data analytics, which makes them appear to be outdated in this regard. A concern is that the development of enhancements to standards lags behind market needs.

16. The result is that firms have designed proprietary methodologies on how to use data analytics in their audits, without the requirements underlying such methodologies being provided in the ISAs.

17. The IAASB should provide clarity on which audit procedures data analytics may be used for. For example:

   a. May data analytics be used for risk assessment, substantive testing (including analytical procedures) and tests of controls? May data analytics be used to obtain audit evidence for more than one audit procedure at a time?

   b. If the data is used for risk assessment, is it an exploratory tool only?

   c. If the data is used for substantive testing, is it a confirmatory tool only?

   d. If the data is used for tests of controls, is it a confirmatory tool only?

   e. If the data is used as audit evidence, is it a confirmatory tool only?

   f. Is data analytics its own type of audit procedure?

18. The following solutions may be considered:

   a. Data analytics be embedded in the requirements of all the ISAs that it may impact;

   b. Data analytics be included in the application material of all the ISAs that it may impact;

   c. Other guidance should be provided, such as a practice note on ISA 500, *Audit Evidence*, addressing the use of data analytics.

**Regulatory considerations**

19. It becomes inevitable that regulators will be required to have the knowledge to perform inspections of engagements that include audit evidence obtained from data analytics. As such, regulators may need clarity on how data analytics used as audit procedures are dealt with in the auditing standards.

20. Expectations may be incorrectly placed on regulators to clarify what is required to be documented to prove that sufficient appropriate audit evidence has been obtained. This expectation should ordinarily be clarified in the standard. Inspectors should have identifiers that would allow the audit procedure to be re-performed.

21. Auditors may need clarity on how the system’s algorithms need to be documented, and how much work of the data analytics specialist would need to be documented. Would the inspector need to be able to re-perform or recalculate the procedures, or would an overview of the auditor’s understanding of the system and its algorithms only need to be documented?

22. Auditors would also need clarity on what is regarded as sufficient appropriate audit evidence on the data analytics tool that was used to perform the audit procedures. How would the use of the tool be recorded?
23. The use of data analytics could emerge as a high risk among regulators. The International Forum of Independent Audit Regulators (IFIAR) should be encouraged to raise awareness in this regard.

**Question (c)**

To assist the DAWG in its ongoing work, what are your views on possible solutions to the standard-setting challenges?

24. Refer to responses to Questions (a) and (b).

**Question (d)**

Is the DAWG’s planned involvement in the IAASB projects currently underway appropriate?

25. The DAWG’s planned involvement in IAASB projects should be accelerated.

**Question (e)**

Beyond those initiatives noted in the Additional Resources section of this publication, are there other initiatives of which we are not currently aware of that could further inform the DAWG’s work?

26. The large and medium-sized audit firms and networks, especially, have developed guidance on using data analytics on assurance engagements.

27. Additional bodies that have issued relevant resources are:

   a. The Institute of Internal Auditors’ (IIA) Global Technology Audit Guide (GTAG) 16 on *Data Analysis Technologies*.

   b. The World Bank/Centre for Financial Reform’s document on *Audit Data Analytics: Opportunities and Tips*.

**Question (f)**

In your view, what should the IAASB’s and DAWG’s next steps be? For example, actions the IAASB and DAWG are currently considering include:

(i) Focusing attention on revisions, where appropriate, to ISAs affected by the IAASB’s current projects.

(ii) Exploring revisions to ISA 520.

(iii) Hosting one or more conferences with interested stakeholders to collectively explore issues and possible solutions to the identified challenges.

(iv) Continuing with outreach and exploration of issues associated with the use of data analytics in a financial statement audit, with a view towards a formal Discussion Paper consultation in advance of any formal standard-setting activities.

28. We support all the proposed actions.