



DAWG RFI: Analysis of Responses

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IAASB Meeting, New York

Agenda Item 8

September 2017

IAASB

**International Auditing
and Assurance
Standards Board**

Request for Input

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September 2016

Comments requested by: February 15, 2017

Data Analytics Working Group

Exploring the Growing Use of
Technology in the Audit, with a
Focus on Data Analytics

Exploring the Growing Use of Technology in the Audit, with a Focus on Data Analytics

- Published: Sep 01, 2016
- Comment period closed: Feb 15, 2017
- **51** responses

Request for Input

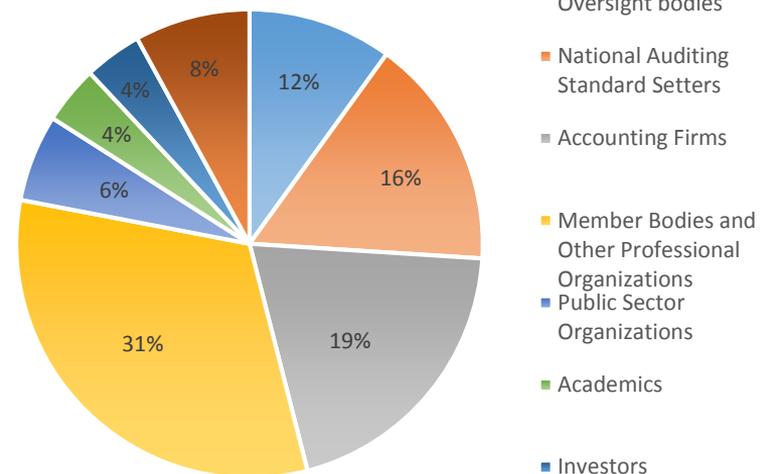
The RFI publication provides insights into the opportunities and challenges with the use of DA in the audit and outlines the insights gained from the DAWG's activities to date. Responses to **six questions** have been requested:

- (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?
- (b) Is our list of standard-setting challenges accurate and complete?
- (c) To assist the DAWG in its ongoing work, what are your views on possible solutions to the standard-setting challenges?
- (d) Is the DAWG's planned involvement in the IAASB projects currently underway appropriate?
- (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?
- (f) In your view, what should the IAASB's and DAWG's next steps be?
Suggested steps were included in the publication.

Responses

Total	51
Regulators and Oversight Authorities	6
National Auditing Standard Setters	8
Accounting Firms	10
Member Bodies and Other Professional Organizations	16
Public Sector Organizations	3
Preparers of Financial Statements	-
Those Charged with Governance	-
Academics	2
Investors	2
Individuals and Others	4

Respondents



General Views on the DAWG's Activities and Involvement in IAASB Projects

Strong **SUPPORT** for the DAWG



“We see the working group playing an important role in being the Board’s ‘eyes and ears’ on developments, a catalyst to engage stakeholders in debate to develop consensus around key issues, and a valuable resource to the various standard-setting and other projects.” (PwC)

“The AASB strongly supports the work of the IAASB’s DAWG to understand issues and learn about initiatives underway in this field. The AASB also supports the setting up of a project advisory panel to further explore key questions.” (AASB – CANADA)

“We commend the IAASB DAWG on the publication of an insightful summary of the current data analytics landscape.” (FRC)

“We encourage the IAASB to continue to work on this project as the use of data analytics and other new technology driven innovations continue to evolve, and consider the implications of new developments for all of its current standards setting projects with a view to contributing to improvement of audit quality and continuing to meet investors and other stakeholders’ needs.” (IFIAR)

Key Views or Themes in Responses to RFI

Principle based ISAs should stand, but need to reflect the digital era in application guidance

“We do not believe that today’s standards are ‘broken’ or a barrier to the application of data analytics in the audit, as we believe that the principles therein are capable of being adapted to the evolving use of data analytics in today’s audits.” (DTTL)

“The principles in the extant ISAs are still appropriate. The challenges relating to the use of data analytics could be addressed by building on the principles already contained in the ISAs and adapting and expanding these to address new tools that have emerged as a result of evolving technology.” (SAICA)

“The auditing standards currently accommodate the use of data analytics in a range of circumstances”.
(NZAuASB)

“The auditing standards and the risk-based approach as currently defined in the ISAs are fundamentally sound.”
(IAIS)

Key Views or Themes in Responses to RFI

Applying **Professional Skepticism** during DA remains paramount



“The auditor should, among other things, understand the benefits and limits of the data analytics tools in view of its intended use in the audit; exercise professional skepticism when using data analytics or other technologies; ...” (IFIAR)

“The importance of professional judgement, professional skepticism and critical thinking should be continue to be emphasized, as these are integral in determining the appropriate data to use, the procedures to perform, the relevance to the audit, the nature of audit evidence, and evaluation of the results of data analytic procedures.” (AUASB)

“We emphasise the importance of the continued application of auditor professional skepticism and professional judgments which should not be replaced by the use of data analytics.” (IAIS)

“While it is essential that the audit engagement team be expanded to include specialists, audit firms must continue to train auditors to exhibit enhanced critical thinking skills and professional skepticism, particularly when evaluating the results of audit data analytic procedures.” (RUTGERS)

Question (a): Circumstances and Factors impacting DA

- **Question (a):** Have we considered all circumstances and factors (CaF) that exist in the current business environment that impact the use of data analytics in a financial statement audit?

There is overwhelming **agreement** with the CaF listed by **all** the respondents. Areas of focus for specific stakeholders include:

Respondent:	Areas of focus:
Regulators and Oversight Bodies and National Auditing Standard Setters	<ul style="list-style-type: none">• Data acquisition – par 18(a)<ul style="list-style-type: none">– The quality and source of the data remain a key consideration– Clients may be hesitant to provide access to live operational systems• Investment in re-training and re-skilling auditors – par 18(f)<ul style="list-style-type: none">– Many respondents believe this challenge applies to a broader audience, for example: Regulators and Audit Committees– Collaboration with universities and other educational institutions required

Question (a): Circumstances and Factors impacting DA continued

Respondent:	Areas of focus:
Accounting Firms	<ul style="list-style-type: none">• How regulators and audit oversight authorities maintain oversight – par 18(e)<ul style="list-style-type: none">– Reluctance to embrace DA as Regulators may have different interpretations on how audit standard objectives are met– DA technology and tools are likely to be developed globally at accounting firm level. A consistent approach to oversight may be challenging• Investment in re-training and re-skilling auditors – par 18(f)<ul style="list-style-type: none">– Collaboration with universities and other educational institutions required

“The RFI recognizes the importance of practitioners establishing quality control processes over the development of data analytics technology. Regulators may wish to scrutinize these processes during their inspections and this may pose particular challenges when tools are developed centrally or globally and the quality control processes are in different jurisdictions.” (KPMG)

Question (b): Standard setting challenges

- **Question (b):** Is our list of standard-setting challenges accurate and complete?

There is much **agreement** with the **challenges** listed by all the respondents. Areas of focus include:

Respondent:	Areas of focus:
Regulators and Oversight Bodies	<p>Included in RFI:</p> <ul style="list-style-type: none"> • In the current risk and response nature of the ISAs, how does an engagement team classify the audit evidence provided by data analytics – par 19(e)? • Challenges in applying the documentation requirements when applying data analytics – par 19(i) <p>Other possible challenges:</p> <ul style="list-style-type: none"> • What is the impact of other technologies such as Block Chain?

“In particular, test of controls is one area where we perceive it to be more difficult to apply data analytics.” (UKFRC)

“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.” (IRBA)

Question (b): Standard setting challenges continued

Respondent:	Areas of focus:
National Auditing Standard Setters	<p>Included in RFI:</p> <ul style="list-style-type: none">• Considering the relevance and reliability of internal versus external data – par 19(c)• What is an appropriate level of work effort for exceptions identified – par 19(g)? <p>Other possible challenges:</p> <ul style="list-style-type: none">• Distinction in audit approach when the audit firm uses own tools versus third party tools?• The publication is silent on DA procedures regarding non-financial data• Impact when the client integrates DA in its control environment

“The discussion paper does not make any reference to the audited entity’s functions use of data analytics. However, this will have a direct impact on the work of an auditor. Another challenge is therefore posed where the internal audit function of the audited company or the management have integrated data analytics tools into their processes.” (CNCC-CSOEC)

Question (b): Standard setting challenges continued

Respondent:	Areas of focus:
Accounting Firms	<p>Much support for items listed in RFI</p> <p>Other possible challenges:</p> <ul style="list-style-type: none">• The concept of performance materiality when designing DA audit procedures• Management of stakeholder expectations: Reference to “100% testing” may be misleading in some instances – rather use “analysis”?• Ethical requirements: The client may integrate its own or the auditor’s DA technology / tools in its control environment• Rotation: Work effort required during the audit of opening balances where the prior year auditor utilized DA technology or tools

“Application of performance materiality in determining the nature, timing and extent of audit procedures in circumstances when audit procedures are applied to financial information that is disaggregated into sub-populations of an account balance is an existing auditing challenge. However, this challenge is more routinely encountered when using data analytics techniques.” (EYG)

Question (b): Standard setting challenges continued

Respondent:	Areas of focus:
Member Bodies and Other Professional Organizations	Much support for items listed in RFI Other possible challenges: <ul style="list-style-type: none"><li data-bbox="658 412 1580 445">• The definition of DA versus analytical procedures (ISA 520)<li data-bbox="658 456 1671 489">• Impact when the client integrates DA in its control environment?<li data-bbox="658 500 1682 576">• Question of the level of audit quality: Audit using DA versus audit with no DA<li data-bbox="658 587 1715 707">• The paper refers to the auditor's work effort where exceptions are identified. Conversely, what is the responsibility where there are no exceptions?
Other respondents	Support for items listed in RFI

Question (c): Possible solutions to the standard-setting challenges

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

The need for guidance is pervasive and therefore excluded from key observations below.

Key possible solutions	Respondent
<u>Investors and Analysts</u> <ul style="list-style-type: none"> – Major skills gap in DA environment: IFAC needs to address this issue in the IAESB's International Accounting Education Standards 	TSP
<u>Regulators and Oversight Authorities</u> <ul style="list-style-type: none"> – Risk based approach in current standards remains sound, but ISAs need to be reconsidered in the context of the new technological environment. – Standards to remain technologically neutral, but able to adapt to and accommodate changes in IT environment – DA to be included in all relevant Standards (Requirements & AM) 	IAIS IFIAR IRBA



Question (c): Possible solutions to the standard-setting challenges continued

Key possible solutions	Respondent
<p><u>Regulators and Oversight Authorities (continued)</u></p> <ul style="list-style-type: none"> – Important principles: <ul style="list-style-type: none"> ▪ Standards to clarify that DA may be appropriate, but may not be applicable to all audits ▪ If DA procedures are applied, documentation should be sufficient for a knowledgeable third party to understand and support the conclusion reached. – it is neither practicable nor desirable to revise all impacted standards at once 	<p>NASBA, FRC</p> <p>NASBA</p> <p>FRC</p>



“We encourage the IAASB, to ensure, while remaining technologically neutral, that the auditing standards can adapt to and be accommodative of the changes in technology, especially the changes in information technology (IT) which has experienced ongoing development since the initial drafting of the current standards.” (IFIAR)

Question (c): Possible solutions to the standard-setting challenges continued

Key possible solutions	Respondent
<p><u>National Auditing Standard Setters</u></p> <ul style="list-style-type: none"> – Continue to engage with stakeholders, in particular: <ul style="list-style-type: none"> ▪ Auditors already utilizing DA ▪ DA specialists / Data scientists ▪ Software developers – Commission a working group to develop implementation guidance that contains practical examples – Standards to remain principle based 	<p>AASB-CNAC</p> <p>JICPA</p> <p>MAASB</p> <p>AASB-CNAC</p> <p>AUASB, CNCC-CSOEC</p>



Area to prioritize:

“In the shorter term development of practical guidance on the use of data analytics including the extensive use of examples for all stages of the audit. Going forward, the revision of auditing standards needs the adoption of a principles based approach in relation to the use of data analytics.” (AUASB)

Question (c): Possible solutions to the standard-setting challenges continued

Key possible solutions	Respondent
<p><u>Accounting Firms:</u></p> <ul style="list-style-type: none"> – Development of non-authoritative guidance is critical – Premature standard setting may hinder or slow down innovation <p><u>Public Sector Organizations:</u></p> <ul style="list-style-type: none"> – Apply caution against developing premature solutions – Framing of the standards should remain technological neutral – Consider involving the Internet Engineering Task Force 	<p>BT, DTTL, EYG, PwC KPMG, PwC, EYG</p> <p>AGNZ CIPFA AGA</p>



“We recognize that an appropriate standard-setting response to the challenges identified may not always involve updates to the ISAs and that other forms of guidance may be effective to address particular issues and perhaps be more useful to auditors.” (EYG)

Question (c): Possible solutions to the standard-setting challenges continued

Key possible solutions	Respondent
<p><u>Member Bodies:</u></p> <ul style="list-style-type: none"> – Key priority: Provide guidance on the use of ADA – Auditing standards to remain principles-based and sufficiently flexible and adaptable in a changing business environment – Engage with AICPA: Involved in various DA projects – PRIORITY TO CHANGE STANDARDS? <ul style="list-style-type: none"> ▪ More information is required before changes to Standards are considered <p><i>versus</i></p> <ul style="list-style-type: none"> ▪ Too much caution may hinder innovation? 	<p>AE, CAANZ, CPAA, PICPA</p> <p>ICAS, PICPA, SMPC</p> <p>AICPA, CPA CANADA</p> <p>HARVEST INVESTMENTS, SMPC</p> <p>CPAA, ICAEW</p>



“We consider there is a much greater risk that not making changes to the ISAs could inhibit innovation. Certain data analytics techniques may not be seen to meet the existing requirements of the ISAs thereby making their use uneconomic as duplicative traditional techniques may still be perceived to be needed to comply with the ISAs and meet the expectations of regulators.” (CPAA)

Question (d): Involvement of DAWG in IAASB projects

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

Overwhelming support. None of the respondents objects to the DAWG's planned involvement.

Recommendations or Concerns are limited to:	Respondents:
Involvement need to be increased or accelerated	IAIS, IRBA, SAICA
IAASB may need to invest more resources to DAWG activities	AASB-CNAC, CPA CANADA
DA project to receive priority	AUASB



“Priority needs to be given to projects identified by stakeholders that will advance ADAs. We believe the IAASB may need to invest significant additional resources to these activities.” (AASB-CNAC)

“Whilst the AUASB and its stakeholders are encouraged by the level of involvement to date, our stakeholders are of the view that the data analytics project be given an increased priority in the current IAASB work plan given its pervasive impact on the current auditing environment and the rapid evolution of technology.” (AUASB)

Question (e): Initiatives that could further inform the DAWG

- **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?

Additional possible resources:	Respondent:
<p><u>Regulators and Oversight Bodies</u></p> <ul style="list-style-type: none"> – Most large firms have developed DA guidance – The Institute of Internal Auditors' Global Technology Audit Guide – The World Bank/Centre for Financial Reform's document on Audit Data Analytics – FRC performed a thematic review on DA 	<p>IRBA, NASBA</p> <p>IRBA (<i>also referred to by SAICA</i>)</p> <p>IRBA</p> <p>FRC</p> <p><u>Other respondents that refer to this review:</u></p> <p>NASS: CNCC-CSOEC</p> <p>Accounting firms: DTTL, EYG</p> <p>Member bodies: ICAS</p>



Question (e): Initiatives that could further inform the DAWG (continued)

Additional possible resources:	Respondent:
<p><u>National Auditing Standard Setters</u></p> <ul style="list-style-type: none"> – Consider output from the INTOSAI Data Analytics Working Group – Larger accountancy firms are already investing heavily in data analytics – JICPA has released IT Committee Research Report on the “Outlook for IT-Based Auditing”. 	<p>AUASB, NZAuASB <i>(also referred to by AGNZ)</i></p> <p>IDW</p> <p>JICPA</p>
<p><u>Accounting firms</u></p> <ul style="list-style-type: none"> – AICPA projects (Developing guide on DA and developing Audit Data Standards) – PCAOB is specifically researching effects of changes in the use of data and technology in audits 	<p>DTTL, EYG, KPMG</p> <p>PwC</p>



Question (e): Initiatives that could further inform the DAWG (continued)

Additional possible resources:	Respondent:
<p><u>Member Bodies and Other Professional Organizations</u></p> <ul style="list-style-type: none"> – Work performed by academic at Copenhagen Business school – ACL’s report ‘White Paper: Best Practices for the Use of Data Analysis in Audits’ – AICPA Guide on DA (<i>also referred to by 3 accounting firms & TSP</i>) – Joint research performed by ICAS & FRC: <ul style="list-style-type: none"> ▪ Skills, Competencies and the Sustainability of the Modern Audit ▪ The Capability and Competency Requirements of Auditors in Today’s Complex Global Business Environment 	<p>AE, ICAEW</p> <p>AE</p> <p>AICPA, CPA CANADA</p> <p>SMPC</p> <p>SMPC</p>



Question (e): Initiatives that could further inform the DAWG (continued)

Additional possible resources:	Respondent:
<u>Investors and Analysts</u> <ul style="list-style-type: none"><li data-bbox="198 423 1081 500">– AICPA projects (Developing guide on DA and developing Audit Data Standards)<li data-bbox="198 527 929 560">– ISO launched an Audit Data Collection Project	TSP TSP
<u>Public sector Organizations</u> <ul style="list-style-type: none"><li data-bbox="198 723 1093 756">– Consider activities of the Internet Engineering Task Force<li data-bbox="198 784 826 816">– INTOSAI Data Analytics Working Group	AGA AGNZ



Question (f): What should the next steps be?

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

Suggested steps are included in the RFI

Overwhelming support for the steps listed.



Additional matters that may be considered:	Respondents:
Block chain technology, artificial intelligence, robotics, etc.	CNCC-CSOEC, ACCA, MSUK, EYG, KPMG, PwC
Revision of specific Standards to be prioritized: <ul style="list-style-type: none"> – ISA 230 – ISA 500 	BT, AE, ICAEW, CPA CANADA JICPA, BT, DTT, EYG, PwC, ACCA, AE, ICAEW, SAICA, CPA CANADA
Significant desire for GUIDANCE	Pervasive – see next 2 slides

Question (f): What should the next steps be?

- Key desire going forward: **GUIDANCE**



“We believe the priority should be the development of guidance that demonstrates how data analytics can be utilized within the existing audit standards.” (CAANZ)

“Whilst we believe that ultimately a review of the current ISAs may be necessary, in the short term there is a more pressing need for guidance in the use of audit data analytics as part of the audit process and therefore the issue of staff guidance notes or international auditing practice notes (IAPNs) would appear more appropriate at this stage.” (ICAS)

“We note in our major points above the need to balance the risks associated with premature standard-setting with the need for guidance now, in order for auditors and regulators to proceed with certainty and to ensure that the value of data analytics is retained within ISA audits.” (ICAEW)

Question (f): What should the next steps be?

- Key desire going forward: **GUIDANCE** (continued)



“We support the actions being considered above, however our stakeholders have expressed a clear need for guidance.” (CPAA)

“We encourage the IAASB to progress the project with energy and open mind and to focus attention in the short-term with providing guidance – through the development of non-authoritative material, including staff papers and international auditing practice notes...” (AE)

“We suggest priority is given to developing practical guidance rather than standards. Practitioners in the field who already use data analytics need it.” (BT)

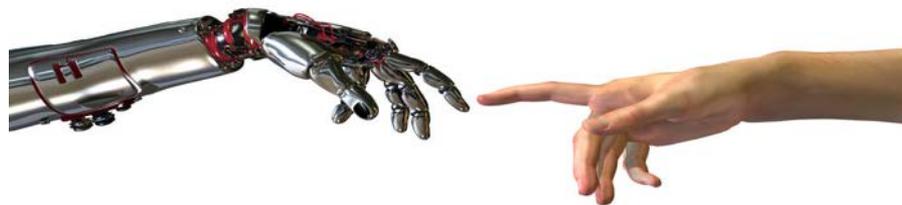
DAWG Next Steps

- Continue interaction with current IAASB project task forces and working groups
- Schedule roundtables (possibly virtual) with variety of firms to more fully understand
 - Current applications of data analytics
 - Best practices, concerns, etc.
- Develop publication to
 - Share results of RFI feedback with stakeholders
 - Communicate way forward
- Establish continuing interaction with US PCAOB



DAWG Next Steps continued

- Monitor activity of AICPA “audit evidence” project
- Continue dialogue with Project Advisory Panel
- Innovation Working Group to further consider
 - Artificial intelligence, robots, etc.
 - Block chain technology





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