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Our ref RD/288

16 April 2021

Dear Mr Francis

IVS 500 Financial Instruments: Exposure Draft 2020

We appreciate the opportunity to comment on the IVS 500 *Financial Instruments: Exposure Draft 2020* ('the Exposure Draft'). We have consulted with, and this letter represents the views of, the KPMG network.

Overall, we support the IVSC Financial Instrument Board's ('the Board') ambition to establish principles that will enable entities to derive IVSC compliant, fit-for-purpose valuations of financial instruments in all market conditions and circumstances. We support the development of an international standard which will enhance the consistency, credibility and reliability of valuations of financial instruments particularly if adopted by large financial institutions, such as banks.

Whilst we welcome the Board's ambition, we nevertheless have some observations regarding the content of the Exposure Draft. Our main observations, as you might expect from a firm of accountants and auditors, pertain to the 'Governance' and 'Data' sections of the Exposure Draft, specifically Questions 6, 7 & 8.

We acknowledge the decision of the Board to publish the Exposure Draft on the improvements to IVS 500 *Financial Instruments* in stages, which together will be cumulative in forming the overall international standard. Therefore, some of our comments or observations contained within this letter and its appendix may be addressed by upcoming stages of the Exposure Draft, but equally may provide some guidance for you in developing these future stages.

Below we have set out responses to the questions raised in the Exposure Draft, as well as other comments related to specific elements of the Exposure Draft in Appendix 1.

Objective

Question 1: Do you agree with the proposed objective? Why or why not? If you agree with only parts of the proposed objectives, please specify what you agree and disagree with. If you disagree with the proposal, please explain what you propose instead and why.

We note there is a discrepancy in how the objective of the Exposure Draft is defined within the document. The objective, as outlined on page 6, of the Exposure Draft states “it is to establish principles that will enable entities to derive fit-for-purpose valuations of financial instruments in all market conditions and circumstances, and for whatever purpose it is required, including for financial, tax and regulatory reporting.”

However, paragraph 10.1 of the draft standard states it is “to provide guidance on the principles and procedures to be adopted in developing a fit-for-purpose valuation of a financial instrument.”

If the proposed objective of the Exposure Draft is to establish principles as outlined on page 6, then we agree that the standard meets the objective.

However, if the proposed objective of the Exposure Draft is to establish principles and procedures as outlined at paragraph 10.1, then we do not believe it currently provides sufficient practical guidance on the procedures required to support application by valuation practitioners.

Please refer to Appendix 1 for our detailed comments.

Question 2: The Exposure Draft is focused on the requirements that have to be met for two elements, Governance, and Data, of the proposed standard in order for an entity to arrive at a fit-for-purpose valuation of financial instruments. Do you agree that the requirements are clear, complete and provide adequate guidance to ensure compliance? Why or why not? If you agree with only parts of the requirements, please specify what you agree and disagree with. If you disagree with the requirements, please explain what you propose instead and why. If you think the requirements are incomplete, please explain what you propose should be included and why.

We agree the proposals in the Exposure Draft focus on the requirements that have to be met for two elements (Governance, and Data) in order for an entity to arrive at a fit-for-purpose valuation of financial instruments.

We agree that some of the requirements as documented in the Exposure Draft are clear, complete and provide adequate guidance. However, other areas within these sections of the Exposure Draft require further clarity. Please refer to Appendix 1 for our detailed comments.

Scope

Question 3: Do you agree with these proposals? Why or why not? If you agree with only parts of the proposals, please specify what you agree and disagree with. If you disagree with the proposals, please explain what you propose instead and why.

We have a number of comments in respect of the scope exclusions of the Exposure Draft. Please refer to Appendix 1 for our detailed comments.

Definitions

Question 4: Do you agree with these proposals? Why or why not? If you agree with only parts of the proposals, please specify what you agree and disagree with. If you disagree with the proposals, please explain what you propose instead and why.

We agree that parts of the proposals set out in paragraphs 30.1 to 30.5 provide definitions for the purpose of applying IVS 500 *Financial Instruments*. Our comments mainly relate to the basic definition of financial assets and financial liabilities. We note that when using IAS 32 *Financial Instruments: Presentation* as the basis for the definitions, care should be taken that vital details contained in the IFRS body of work as a whole are not omitted. Please refer to Appendix 1 for our detailed comments.

Question 5: Do you agree with these proposals? Why or why not? If you agree with only parts of the proposals, please specify what you agree and disagree with. If you disagree with the proposals, please explain what you propose instead and why.

We agree that the proposed wording in paragraphs 30.6 to 30.8 sets out to define valuation uncertainty and valuation risk for the purposes of IVS 500 *Financial Instruments*. We also agree with the approach of using valuation risk to set proportionality parameters that determine the level of effort and the nature and extent of processes and controls needed in order to arrive at a fit-for-purpose valuation of a financial instrument.

We agree with the objective of the Board in outlining valuation risk in order to enable constituents to consistently evaluate the extent and rigour of the processes necessary to ensure a fit-for-purpose valuation of financial instruments given the requirement for which it is needed, market conditions and other circumstances prevailing at the valuation date.

Our comments mainly relate to definitional differences between this standard and existing literature, such as ISA 540 *Auditing Accounting Estimates and Related Disclosures* and IAS 1 *Presentation of Financial Statements*. Please refer to Appendix 1 for our detailed comments.

Governance

Question 6: Do you agree with these proposals? Why or why not? If you agree with only parts of the proposals, please specify what you agree and disagree with. If you disagree with the proposals, please explain what you propose instead and why.

We agree with the majority of the guidance to provide assistance on the processes that entities should follow to ensure proper governance around financial instrument valuations. However, we make a number of detailed observations in respect of the governance section of the Exposure Draft, where we believe further clarity is required. Please refer to Appendix 1 for our detailed comments.

Throughout the Exposure Draft there is discussion of controls. We acknowledge that you plan to release another Exposure Draft relating to 'Controls and Reporting'. We suggest incorporating the concepts from the COSO¹ *Internal Control – Integrated Framework* across all Exposure Drafts, including this one. Many of the concepts from the COSO principles are included in this draft, but there are some entity level controls which could be further expanded.

We note this Exposure Draft does not discuss valuation methods and models, or controls and reporting thereon. For example, the Exposure Draft does not discuss how an institution demonstrates that the model employed to value a particular class of financial instruments is in practice only used to value those approved products (i.e. the population of financial instruments that it is used to price are homogenous).

Data

Question 7: Do you agree with the principles outlined in paragraphs 60.5.1 to 60.5.3 regarding the development of a data taxonomy? Why or why not? If you agree with only parts of the proposals, please specify what you agree and disagree with. If you disagree with the proposals, please explain what you propose instead and why.

We agree the majority of the principles outlined in paragraphs 60.5.1 to 60.5.3 assist valuation practitioners in the development of a data taxonomy. We make some observations in respect of the data taxonomy section of the Exposure Draft, where we believe further clarity is required. Please refer to Appendix 1 for our detailed comments.

Question 8: Paragraphs 60.6.2 to 60.6.8 outline the specific requirements for the data-types listed above. Do you agree with these proposals? Why or why not? If you agree with only parts of the proposals, please specify what you agree and disagree with. If you disagree with the proposals, please explain what you propose instead and why.

¹ Committee of the Sponsoring Organisations of the Treadway Commission

We agree that paragraphs 60.6.2 to 60.6.8 detail parts of the specific requirements for the data types listed in the data types section of the Exposure Draft. However, we make extensive detailed observations in respect of the data section of the Exposure Draft, where we believe further clarity is required. Please refer to Appendix 1 for our detailed comments

Question 9: Paragraphs 60.7.1 to 60.7.6 outline the principles for controlling and aggregating data across an organisation. Do you agree with these proposals? Why or why not? If you agree with only parts of the proposals, please specify what you agree and disagree with. If you disagree with the proposals, please explain what you propose instead and why.

We agree with the principles outlined in paragraphs 60.7.1 to 60.7.6 for controlling and aggregating data across an organisation. We make some minor observations that would assist in providing further clarity. Please refer to Appendix 1 for our detailed comments.

Please contact Reinhard Dotzlaw at rdotzlaw@kpmg.ca or Colin Martin at colin.martin@kpmgifrg.com if you wish to discuss any of the issues raised in this letter.

Yours sincerely

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Question	Page	Paragraph	Comment
1	9	10.1	The objective mentions principles and procedures. However, we do not believe that the standard addresses procedures in a way which supports a practical application by valuation practitioners.
3	9	20.1	<p><i>"20.1- This Standard will be applied by all entities to valuations of financial instruments as defined in this Standard used for, but not limited to, financial, tax or regulatory reporting, except for...."</i></p> <p>We believe that the scope of the term "valuation" in this context should be clarified. Many financial reporting and regulatory values rely on models that utilise expectations of future cash flows, with similar data and input needs to fair values. The single most common would be an amortised cost measurement in financial reporting. It is not clear whether the scope of this standard would include amortised cost measurement within its scope and therefore whether an entity can be compliant with IVS 500 if it does not apply this standard to all measurements (including amortised cost amounts) in its financial reporting.</p> <p>It may have been the intention to limit the scope of IVS 500 to those bases of value as defined in IVS 104. If that is the case, it would be helpful if that was clearly stated.</p>
3	9	20.1	<p><i>"20.1- This Standard will be applied by all entities to valuations of financial instruments as defined in this Standard used for, but not limited to, financial, tax or regulatory reporting, except for: ...</i></p> <p><i>- the impairment of financial assets under relevant GAAP"</i></p> <p>We agree with this but believe that the standard should clarify some scoping points. For example:</p> <ul style="list-style-type: none"> — whether it would be applied to the calculations required for impairment of financial instruments (other than equity) that are held at fair value through other comprehensive income.

Question	Page	Paragraph	Comment
3	9	20.1	<p><i>"20.1- This Standard will be applied by all entities to valuations of financial instruments as defined in this Standard used for, but not limited to, financial, tax or regulatory reporting, except for: ...</i></p> <ul style="list-style-type: none"> - <i>equity instruments and contracts on such instruments if the measurement being undertaken is for the purpose of valuing a business or a business interest as outlined in IVS 200 Business and Business Interests"</i> <p>It would be useful if the scoping paragraphs above clearly distinguished between a business interest and a financial instrument subject to this standard. For example:</p> <ul style="list-style-type: none"> - would an acquisition of an interest using the equity method under IAS 28 <i>Investments in Associates and Joint Ventures</i> fall in this standard or IVS 200? - when would the acquisition of an investment level minority interest (say 5% equity stake) be considered a business interest (IVS 200) vs the acquisition of a financial instrument valued according to this standard?
4	9	30.2 & 30.3	<p><i>"A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity."</i></p> <p>One emerging market that is in need of valuation guidance is that of crypto currencies. In particular, there are questions as to whether some/any crypto assets are in fact financial instruments - for example, stable coins or security tokens. It would be useful to clearly include or exclude such assets from the scope of IVS 500 if they are determined to be financial instruments, so that entities are clear on the scope of compliance required.</p>

Question	Page	Paragraph	Comment
4	9	30.3(d) & 30.4(b)	<p><i>"a contract that will or may be settled in the entity's own equity instruments."</i></p> <p>It is noted that the definitions of financial asset and financial liability are simplifications of the definitions contained in IAS 32 <i>Financial Instruments: Presentation</i>. However, IFRS as a collective body of work contains much more information as to what is and is not a financial instrument. If it is the intention that the definition should be consistent with IFRSs, then IVS 500 should contain a cross reference to that material for entities to follow, should they require more detailed guidance. If consistency is not the intention, consider enhancing the definition with further definitions (for example, the concept of "entity" as it applies to groups).</p> <p>In addition, it was our understanding that the intent of the Board was to scope out stock compensation, but a literal reading of paragraph 30.4(b) would suggest that they are included in scope. We suggest adding stock compensation to the list in paragraph 20.1 if such contracts are meant to be excluded.</p>
4	10	30.6	<p><i>"Valuation risk is the risk that a financial instrument is mis-valued for its intended use. Factors contributing to valuation risk include...."</i></p> <p>We believe this list of contributing factors should also include management bias. In addition, there is no mention of assumptions in paragraph 30.6. Given the prominence of assumptions as one of the three pillars of the International Standard on Auditing (UK) 540 (Revised) <i>Auditing Accounting Estimates and Related Disclosures</i> ('ISA 540 (Revised)'), we believe these might merit inclusion.</p>
4	10	30.7	<p>We note that the definition implies that estimation uncertainty is at the heart of valuation uncertainty, but that this definition does not align with the 'Sources of Estimation Uncertainty' as set out in paragraphs 125 to 133 of IAS 1 <i>Presentation of Financial Statements</i>. There may be unintended consequences of having subtly different definitions. The Board should consider whether it is worth aligning the definitions.</p>

Question	Page	Paragraph	Comment
5	10	30.7	<p>We suggest that instead of, or in addition to, the two generic examples of valuation uncertainty it may be better to provide practical examples of how valuation risk may occur – for example, differences in model choice or model calibration among models which are considered market standard.</p>
6	10 - 16	50	<p>We noted that the “Governance” section does not include any mention of certain principles of IFRS 13 <i>Fair Value Measurement</i>. That could cause a problem for compliance with IVS 500 for IFRS reporters. For example:</p> <ul style="list-style-type: none"> — an entity shall measure the fair value of an asset or a liability using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest (IFRS 13.22); — asset/liability mirroring (IFRS 13.37); — non-performance risk (IFRS 13.42); and — making maximum use of observable data (IFRS 13.89). <p>Overall, we believe that there could be clearer linkage to the common valuation methods/approaches as outlined in IFRS 13.61 - 66 (market approach, income approach, cost approach). We expect these will be outlined in the Exposure Draft on “Methods and Models”. However, it could be argued that paragraph 50.3.2 does not make any kind of distinction between the three components as to which is most appropriate.</p> <p>We note that if financial reporting is the basis of valuation as per IVS 104, these matters should be considered as constraining parameters in the valuation.</p>
6	10	50.1	<p><i>“In developing valuations of financial instruments, the entity should implement processes that are:</i></p> <ul style="list-style-type: none"> - <i>systematic: there should be a process to develop financial instrument valuations”</i> <p>We suggest saying “systematic and repeatable”.</p>

Question	Page	Paragraph	Comment
6	10	50.1	<p><i>"In developing valuations of financial instruments, the entity should implement processes that are: ...</i></p> <p><i>- economically sound: the approach should be consistent with financial principles, the market or industry practice, the market environment and the requirements for which the financial instrument is being valued"</i></p> <p>While we do not disagree with the concept, the term “economically sound” could be mistaken for a concept of "undue cost". We suggest using the term "robust".</p>
6	11	50.2.1	<p><i>"Diversity: the involvement of multiple disciplines within the valuation process should ensure both that the procedure is free of bias and that the potential impact of information from different data sources is captured in the valuation;"</i></p> <p>We agree with this principle, but it suggests ‘more equates to better’ which may not be the case, especially in smaller organisations where all disciplines may have the same incentive towards bias. We believe this could be better framed in the context of the three lines of defence model and highlighting that all impacted second line functions should be considered within the control construct.</p> <p>We note that the term “diversity” may contradict the term “consistency”. We suggest the expression “objectivity” instead.</p>
6	11	50.3.1	<p>We note this section mentions “adjustments” to industry-standard valuation models/inputs to models. However, we believe the Standard should include principles on where such adjustments sit within the taxonomies in the Standard – for example, would an adjustment be considered a judgemental component or a model component?</p>
6	11	50.3.2	<p>When considering 'components of valuation', non-market inputs based on core trade economics are not mentioned. As part of good governance these should be considered. For example, consideration of booking approximation policies, processes and controls. The principle is noted at 60.5.3 so a description and cross reference would be useful.</p>

Question	Page	Paragraph	Comment
6	11	50.3.3	<p>We do not agree with the statement that <i>"a valuation in which there is a large judgemental component is one that is complex"</i>.</p> <p>Financial instruments which require significant judgement are often valued using simple approaches, whereas complex valuations are usually related to large model components (for example Monte Carlo simulations of complex derivatives). We do not believe that it is appropriate to link the level of valuation complexity with the size of the judgemental component.</p>
6	12	50.4	<p>Section 50.4 of the Exposure Draft discusses challenging and monitoring valuations. We believe there could be more focus for each role in respect of back-testing and calibration of valuation methods, models and inputs together with the appropriate role.</p>
6	12	50.4.1	<p>Consider adding "those charged with governance or oversight" alongside "Board of Directors" (not every entity may have a Board).</p>
6	12	50.4.2	<p>Paragraph 50.4.2 suggests that there should be one person who is responsible overall for the valuation process in an organisation. This may not always be the case – for example, when there is a valuation oversight committee that is responsible. We suggest including "single individual, group or committee of specific individuals who is....". This notion of an individual appears again in paragraph 60.7.3 in the context of data.</p>
6	13	50.4.4	<p><i>"Assessments should consider the vendors' experience and expertise...."</i></p> <p>A vendor assessment needs to consider more than just expertise and experience, i.e. one should also consider methodology reviews, assessment of vendor relationships, back-testing, systems of quality management, handling of price challenges, etc. We suggest more detail is added.</p>
6	13	50.5.1	<p>Under the heading "Reviewing" it could be made more explicit that the review includes consideration of both what was included in the valuation and, importantly, what was not included in the valuation.</p>

Question	Page	Paragraph	Comment
7	16	60	<p>The definition of data in this Exposure Draft is different to the definition of data in ISA 540 (Revised). ISA 540 (Revised) distinguishes between data which is information that can be obtained through direct observation, or from a party external to the entity and assumptions which involve judgement. (Refer to ISA 540 (Revised) A3 and A4 for more detail).</p> <p>We suggest that the Exposure Draft uses similar language.</p>
7	16	60.1	<p><i>"Data is integral to developing a fit-for-purpose valuation of a financial instrument. The careful selection of appropriate inputs to ensure objectivity and an absence of bias, coupled with the implementation of appropriate processes and controls over data, mitigates valuation risk."</i></p> <p>We believe that it would be clearer to state that there are two key risks relating to data: relevance and reliability. We are of the view that that an assessment of bias would be considered earlier than in the selection of inputs. Assessment of bias starts with the selection of the method of the valuation.</p>
7	16	60.1	<p><i>"Data is considered to be any input to a valuation process..."</i></p> <p>We suggest making a clear distinction between data and assumptions. Assumptions involve more judgement and the controls/governance around assumptions may be different from those for data. Assumptions are different to judgement based data.</p>
7	16	60.3	<p>In our experience, the distinction between static data and dynamic data is not as binary as noted in paragraph 60.3. For example, mean reversion parameters in models are "semi static" – i.e. they don't move for a long period of time and then adjust when models are recalibrated. We believe these are dynamic under this definition but might not move for a period of 5 years or more for example.</p>

Question	Page	Paragraph	Comment
7	17	60.4	<p><i>"While the Standard does not mandate the use of the taxonomy outlined in this section, any taxonomy developed and used by an entity should be consistent with the principles discussed in this section."</i></p> <p>If the use of the taxonomy outlined in Section 6.5 is not mandatory to comply with the standard, then we are unconvinced that it should be included in the standard at all. Its inclusion on a non-mandatory basis makes it unclear as to what the principles are to comply with the standard versus what is optional.</p>
7	17	60.5	We suggest using the term "relevance of data" in this section.
7	17	60.5.1	<p><i>"The quality of a valuation may be assessed by comparing the accuracy of its results with a theoretical standard of perfect information..."</i></p> <p>It would be useful to see an example of how this works in practice as it would help in improving understandability.</p>
7	17	60.5.1	<p><i>"Characteristic Continuum - Recent or contemporaneous, moving towards obsolete or inconsistent"</i></p> <p>The implication of the table is that current data is always better than historical data, however that seems to contradict the wording in paragraph 60.6.7 around historical data. While the other aspects of data may lie on a continuum, we believe that current vs historical data does not, and it will depend on the circumstances. For example, entities may be better suited to using historical data rather than current data where the current data is not representative of the market.</p> <p>Similarly, observed data is often better than judgemental, however this is not always the case. For example, observed data in an illiquid market is not always better than using a judgemental adjustment to data that reflects a liquid market.</p>
8	18	60.6	The <i>"Types of Data"</i> section begins with <i>"Internally sourced data"</i> . We believe that the Board should consider re-ordering that section such that "Market data" is listed first in this section. We would prefer that it is explicit that market observed data should be considered in preference to other sources of data when available, relevant and reliable.

Question	Page	Paragraph	Comment
8	18	60.6.2.1	<p><i>“Internal data is that which is derived from the entity’s own observed transactions...”</i></p> <p>We believe that data derived from an entity’s observed transaction in the market is an example of <i>“Market data”</i>. It follows then that the sentence which says that <i>“this data is by definition lower in reliability than external or public data”</i> is not correct.</p>
8	19	60.6.3.1	<p><i>“The quote must be binding and not indicative.”</i></p> <p>While we agree with this statement, further guidance could be provided that explains how this could be demonstrated – for example back-testing data from brokers providing <i>“executable quotes”</i> to demonstrate the entity is able to trade on those quotes from that vendor.</p>
8	19	60.6.3.1(i)	<p><i>“If the quote is not binding and is merely indicative, it is less reliable as an indication of value”</i></p> <p>We note that the ED makes it clear that market data should be <i>“captured directly from transactions or executable bona fide quotes”</i>. However, the statement above implies that non-binding quotes are still market data, just not as reliable as an indicator of value. If such quotes are not market data, it is unclear where they should be in taxonomy. If such quotes are market data, the Board should reconsider the statements made in the first paragraphs of 60.6.3.1.</p> <p>We understand that one should give priority to binding quotes over indicative quotes, but do not agree that indicative quotes should not be used at all. Sometimes these are the only source of information available. IFRS 13 <i>Fair Value Measurement</i> addresses this issue through levelling disclosure and day 1 gains and losses recognition rules, with fair values derived from such non-binding quotes treated as Level 3 measurements – indicating their reliability.</p>

Question	Page	Paragraph	Comment
8	19	60.6.3.1 (iii)	<p>Similar to the point above, regarding the use of a broker quote with a wide range, if a broker quote reflects actual current market transactions in an identical instrument, then it may be a Level 1 or Level 2 input as defined in IFRS 13 <i>Fair Value Measurement</i>. However, if a broker quote is an indicative price based on the broker's valuation models, then it is a Level 2 or Level 3 input, depending on the significance and observability of the inputs to the model.</p> <p>While we agree with the principle that broker quotes should reflect market conditions is clear and non-disputable, in practice it is one of the most difficult aspects to prove as brokers necessarily keep their valuations proprietary. If the objective of the standard is to provide not only principles but also guidance, this is an aspect where guidance may be very helpful.</p> <p>It would also be useful to clarify to what the expression 'range' refers to, for example the bid-offer spread.</p>
8	20	60.6.4.1	<p><i>“observable trade information from brokers or dealers that meet transaction criteria”.</i></p> <p>It is not clear what the phrase <i>“that meet transaction criteria”</i> means in the sentence.</p>
8	20	60.6.4.2	<p><i>“reliable and verifiable sources”</i></p> <p>It would be useful to clearly define what this expression means. In the context of vendor assessment under paragraph 50.4 the standard uses the term <i>“suitability”</i>. It would be helpful to understand the differences between reliable, verifiable and suitable. Further, it would be useful to cross reference the requirements of data sources under 60.6.4 with the role of the Developer vendor selection in paragraph 50.4.</p> <p>The standard refers to <i>“data reviews”</i> but it is not clear what sort of review is required.</p> <p>Other standards (e.g. ISA 540 (Revised) / AS 2501) use the expression <i>“relevance and reliability”</i>. It may be worthwhile considering aligning to this terminology consistently throughout the standard.</p>

Question	Page	Paragraph	Comment
8	20	60.6.4.3(i)	<p><i>"The source of trade data, which should be observable and verifiable."</i></p> <p>It is not clear how this relates to paragraph 60.6.4.2 where the standard says that <i>"All transaction data must be obtained from reliable and verifiable sources"</i>. It would be helpful to define these terms and use them consistently.</p>
8	22	60.6.5.4	Typo to be corrected, <i>"... how closely the it relates to..."</i>
8	22	60.6.6	<p><i>"Judgement-based data"</i></p> <p>The Exposure Draft defines judgement-based data in paragraphs 60.6.6.1 - 15. There is a difference in what is considered an assumption or data between this Exposure Draft and ISA 540 (Revised). We suggest that this difference is explicitly addressed or resolved by amending the definitions.</p>
8	22	60.6.6.1	<p>The Exposure Draft mentions interpolation as the <i>"development of judgment-based data"</i>. This would affect almost every valuation of an OTC derivative (e.g. bootstrapping to obtain a zero-coupon yield curve requires interpolation). We agree that the selection of yield curve nodes and inputs requires judgement and is market data. We also agree that the choice of the interpolation method needs to be well thought through, documented and tested. However, we consider this more to be a model choice rather than judgment applied to data.</p>
8	22	60.6.6.2	<p><i>"In the absence of market data for a specific financial instrument, a Developer may resort to using judgement-based data or proxies. The decision to use proxy or judgement-based data is based on the Developer's professional experience, knowledge and understanding of the valuation elements."</i></p> <p>Under ISA 540 (Revised) proxy data wouldn't automatically be an assumption. If it is externally observed data, then it would still be data. You would have to test the relevance (i.e. is it the right data to use for proxy?) but there wouldn't be any judgement involved in it. Again, alignment to ISA 540 definitions would be helpful.</p>

Question	Page	Paragraph	Comment
8	22	60.6.6.3	<p><i>“Proxy data should only be used if there is a lack of market, transaction and indicative data...”</i></p> <p>These terms have not been defined or explained in the Exposure Draft.</p>
8	23	60.6.6.11	<p>We believe the example provided on negative interest rates and lognormal interest rate models does relate to the discussion of proxy data. We believe this to be a matter of model choice and the adequacy of model selected. A more relevant example would be the usage of proxy C.D.S. curves in XVA calculations or liquidity adjustments in fixed income valuations.</p>
8	23	60.6.6.12	<p><i>“... where data is a proxy the reliability and associated ...”</i></p> <p>We believe the issue of using proxy data is a question of both reliability <u>and</u> relevance (i.e. how relevant a proxy is to the instrument being valued). For example, a proxy curve may be reliable and observable, but if it is not sufficiently similar to the data required to value an instrument it is not relevant for the valuation.</p>
8	23	60.6.6.13	<p>Paragraph 60.6.6.13 is a statement where we agree with the underlying principle, but in our experience these processes are kept proprietary by the third-party entity. If the objective of the standard is not only to stipulate principles but also to articulate procedures, this would be one aspect where practical guidance would be helpful for cases where institutions cannot fully comply with the principle due to practical limitations.</p>
8	24	60.6.7.2	<p>It is not clear how matrix pricing relates to time series data. In our experience matrix valuation describes pricing a financial instrument based on information derived from comparable financial instruments – for example, it is often used in Asset Backed Security valuations. However, the information used in matrix pricing is current and not historical. Therefore, in our view, the topic of matrix pricing relates more to the usage of proxy data rather than the usage of time series data.</p>

Question	Page	Paragraph	Comment
8	24	60.6.7.2	<p><i>“... have a non-linear relationship to the final valuation and as such are significantly sensitive...”</i></p> <p>We suggest making this statement neutral as non-linearity can go both ways and valuations can have both high and low sensitivities. The wording suggests that it is always high.</p>
8	25	60.6.7.2	<p><i>“... the integrity of the time-series data may [be] the largest determinant of valuation uncertainty.”</i></p> <p>It is difficult to determine how this statement is supported. We find it difficult to rank the different elements in valuation and determine which one is the “largest determinant”. In our view this varies instrument by instrument and we would therefore not support such a general statement.</p> <p>Also, noted a typo <i>“may [be] the largest determinant...”</i></p>
8	25	60.6.7.3	<p>We agree that both <i>“Basis”</i> and <i>“Volatility”</i> can be derived from time series. However, in many cases these parameters are derived from currently observable quotes/premiums (implied) rather than historical. We suggest using <i>“... data elements which may be mathematically derived...”</i></p>
8	27	60.7.5.2	<p><i>“Model inputs should prioritise high level market data (i.e., trades or executable quotes in active markets)”</i></p> <p>We suggest that if the terms in parenthesis are considered to be high level market data, this is officially made a definition.</p>

Question	Page	Paragraph	Comment
8	27	60.7.5.4.1	<p><i>"Data used to arrive at a fit-for-purpose valuation should be complete and cover all material aspects of a valuation. In the event this data is not materially complete, the impact should not be critical to the entity's ability to arrive at a fit-for-purpose valuation."</i></p> <p>The use of and interaction between the terms "complete", "materially complete" and "critical to the entity's ability" might cause some discussion in practice. We suggest more precise language is used that reflects the requirements for a statement of compliance with the standard.</p>