



TECHNICAL RELEASE

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ASSURANCE REPORTS ON BENCHMARKS AND INDICES

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1 INTRODUCTION

1.1 Introduction and overview of the reporting process

1. Benchmarks and indices are a fundamental part of the working of many markets. These indicators which are calculated on an hourly, daily, weekly, monthly, or other periodic basis or observed in real time underpin financial decision making worldwide. Their proper operation is important for the smooth running of markets and market confidence.
2. The confidence of users may be undermined where the basis of preparation of the relevant benchmark or index has inherent limitations. This may occur where:
 - key information is omitted or unavailable;
 - the benchmark or index is inherently susceptible to manipulation, for example because it is based on estimates, assumptions, exercise of professional judgement and/or forecast information and conflicts of interest are not appropriately managed or control systems are inadequate;
 - the basis of preparation is ambiguous, allowing for a variety of permitted applications at the expense of consistency and comparability; or
 - there is a lack of an alternative benchmark or index and users are therefore unable to easily switch to use a more appropriate benchmark if the original becomes inadequate
3. Assurance can give the user a view as to the reliability of the information. It cannot be a substitute for clear rules and guidance concerning the reporting of information by submitters, price reporting agencies and/or administrators with clearly delineated responsibilities. Without such clarity, there will always be the risk of an expectation gap between preparers, practitioners and users of the information which in turn is likely to impact market confidence.
4. The objective of this guidance is to assist practitioners in accepting, designing, planning, performing and reporting upon a benchmark or index assurance engagement. Practitioners may also wish to consider ICAEW's Assurance Sourcebook¹. The sourcebook covers respective responsibilities (described in further detail below), different levels of reporting, and different reporting relationships.

1.2 Users of this guidance

5. This guidance has been written for audit and assurance practitioners who will undertake to express an opinion on benchmark or index submissions and compilations.

¹ The ICAEW Assurance Sourcebook is available from the following link:
www.icaew.com/~media/Files/Technical/Audit-and-assurance/assurance/assurancesourcebooklinks.pdf

6. The guidance may also be of interest to:
 - Directors of companies and institutions which contribute to a benchmark, index or other reported price compilation.
 - Compilers and publishers of benchmarks and indices.
 - Price reporting agencies (PRAs) (price assessors and publishers)
 - Market authorities and government agencies interested in market security

7. The guidance is structured to allow the practitioner to design an engagement on a variety of benchmarks and indices. Key considerations common to all such engagements are within the sections 1 to 4 of the document. Further guidance is provided relating to specific types of benchmarks and indices and particular engagements in the sections that follow.

1.3 Respective responsibilities

8. The party that creates the requirement and formula or methodology for the benchmark or index assumes responsibility for the design and description of that measure. While they may invite comments from contributors, customers, users and other stakeholders, the final decision as to its basis of preparation rests with the party that sets or imposes the benchmark or index. The reliability of a benchmark or index will be heavily influenced by the basis of preparation. A benchmark or index based on relevant, robust information arising from actual transactions is more objective than one based on estimates or where the basis of preparation is open to interpretation which may affect the reliability of the benchmark or index.

9. The party that creates a benchmark or index may not have control over its use after it has been published. An index becomes a benchmark when it is used as a reference for something else, for example a contract may refer to an interest rate as a benchmark.

10. The contributors, compilers and publishers are responsible for preparing and compiling (in various combinations) information in accordance with the rules and guidance issued by the originating party. In some cases this will be the responsibility of PRAs, for those benchmarks or indices where information is gathered from external sources. Where rules or guidance are ambiguous, benchmarks and indices may be less reliable. In those circumstances, the contributor, PRA, or administrator sets out how they have interpreted those matters in the basis of preparation attached to the benchmark or index. That interpretation should be appropriate in the context of the rules and guidance and reflects the relevant facts and circumstances, to the best of the preparer's knowledge. The reported information must be understandable in the absence of any assurance.

11. The role of the assurance practitioner is to assess whether the information reported or assertion made is supported by the available evidence, whether this is the operating effectiveness of controls in meeting control objectives, or the fair statement of the organisation as to their compliance with a set of principles. Where insufficient evidence exists this may impact acceptance of an engagement or result in a qualified assurance conclusion. Practitioners do not assume the responsibilities of the reporting party or the party who created

the rules and guidance for the benchmark or index. Nor do practitioners determine the correct interpretation of ambiguous rules or guidance, although practitioners consider whether the interpretation applied is clear and available to the reader of the assurance report.

2 AGREEING THE ENGAGEMENT

2.1 Accepting and performing the assurance engagement

12. For any engagement a practitioner must have regard to the International Framework for Assurance Engagements² issued by the International Audit and Assurance Standards Board (IAASB) which includes pre-conditions for acceptance of an assurance engagement. As stated in paragraph 17 of the Framework:

‘A practitioner accepts an assurance engagement only where the practitioner’s preliminary knowledge of the engagement circumstances indicates that:

- (a) Relevant ethical requirements, such as independence and professional competence will be satisfied; and
- (b) The engagement exhibits all of the following characteristics:
 - i. The subject matter is *appropriate*;
 - ii. The criteria to be used are *suitable* and are available to the intended users;
 - iii. The practitioner has access to sufficient appropriate evidence to support the practitioner’s conclusion;
 - iv. The practitioner’s conclusion, in the form appropriate to either a reasonable assurance engagement or a limited assurance engagement, is to be contained in a written report; and
 - v. The practitioner is satisfied that there is a rational purpose for the engagement. If there is a significant limitation on the scope of the practitioner’s work...it may be unlikely that the engagement has a rational purpose.’

13. The subjective words ‘appropriate’ and ‘suitable’ are explained in more detail in paragraphs 33 and 36 respectively of the International Framework. Where there is a significant limitation on the scope of the practitioner’s work or the risk of an inappropriate association with the subject matter, for example, a rational purpose for the engagement may not exist.

14. In order to meet the precondition for suitable criteria³ (as described in paragraph 36 of the IAASB’s Framework) the methodology, guidelines and/or rules governing measurement of, submission to, compilation or assessment of the benchmark or index or reporting of a price will need to be relevant, sufficiently complete, reliable, free from bias as well as sufficiently clear and precise. Methodology, guidelines and rules which are without these characteristics will inherently undermine the quality of the benchmark, price or index and may impact the practitioner’s acceptance of any assurance engagement. A practitioner’s acceptance of an assurance engagement will therefore add a level of credibility to the guidance and rules. Where a practitioner is unable to conclude that the methodology, guidelines or rules

²www.ifac.org/sites/default/files/downloads/International_Framework_for_Assurance_Engagements.pdf

³See appendix 6 for further consideration of criteria.

are sufficiently clear and precise so as to be able to form criteria they should consider whether they should accept the engagement and, if they do accept the engagement, consider reporting their concerns to the party engaging them and the owner or sponsor of the benchmark, price or index if there is such a separate party. In such a situation, it might still be possible for the practitioner to opine on the controls and processes of the engaging party.

15. Notwithstanding the responsibility of the party who sets or imposes the benchmark, price or index for ensuring it is fit for purpose, practitioners should consider whether giving assurance in situations where the basis of preparation is not clearly stated, or appears likely to mislead unfamiliar users may convey to the reader an unwarranted level or reliability. Practitioners may decide that it is appropriate to draw the reader's attention to areas of perceived inherent limitation in the measurement or preparation of assured information, such as alternate measures available or factors impacting reliability (refer to 'Introduction and overview of the reporting process' for further examples).
16. In such circumstances practitioners may be asked to provide a separate advisory engagement to review the guidance and rules to assess where potential enhancements could be made to increase the underlying quality of the benchmark, price or index and make it more assure able. This would be requested by the preparer or sponsor depending on the benchmark or index structure.
17. This guidance does not cover such an engagement. Practitioners should refer to the ICAEW Assurance Sourcebook 2.4.4 *Consultancy services* for further considerations relevant to such an engagement, as well as section 4.2.1 *Professional Ethics and Independence*.
18. For submission based benchmarks and indices, assurance can provide increased confidence in the following ways:
 - Assurance carried out at the submitter level gives the administrator or compiler confidence that the benchmark or index it is preparing is based on the guidelines and rules it has set out. If public, it can give confidence to market participants, regulators and other interested parties.
 - Assurance carried out at the administrator or compiler level gives market participants and regulators confidence over the integrity of the process by which the benchmark has been prepared, although on its own does not provide assurance on inputs received from external submitters.
19. Figure 1 illustrates the basic process for preparing a benchmark. For a submission based benchmark used, for example, for many interest rate benchmarks (where the benchmark or index process is split between submitters and a compiler or administrator) , the middle process is effectively repeated at the compiler following the submissions being received. If assurance is performed at the submitters and the compiler, assurance is provided on the whole benchmark process. Assurance on a market benchmark does not necessarily provide assurance on the effective operation of the underlying market the benchmark tracking.

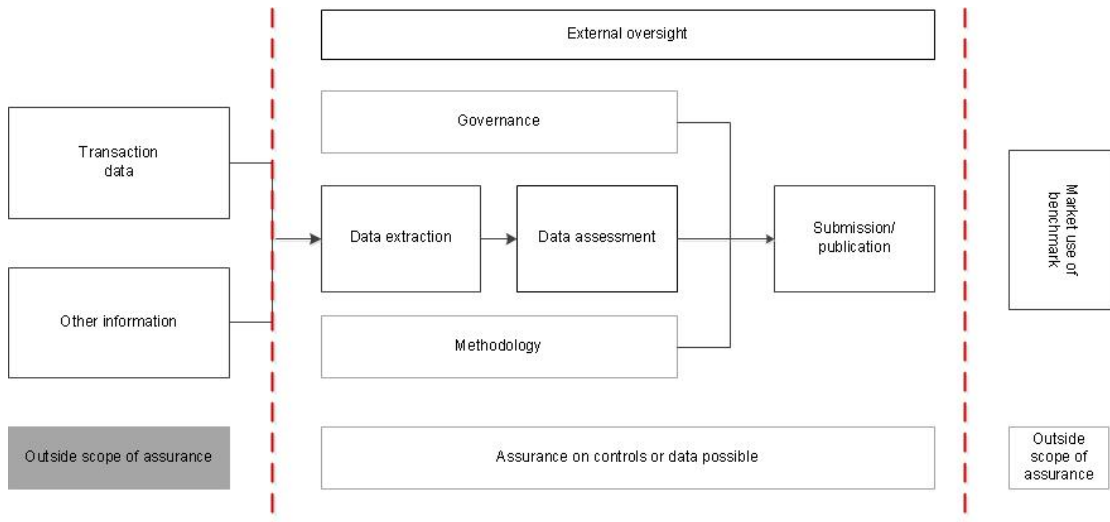


Figure 1

20. Where a benchmark, price or index is created through an assessment process (for example, that of a PRA) the assurance engagement takes place at the price reporter level where the assessment is made. This aims to give confidence that the PRA is being as transparent as possible in the information that they present to the market. In the case of an engagement over adherence by a price reporting agency to IOSCO's principle for oil price reporting agencies⁴ assurance gives the users confidence that the PRA's statement of how it has adhered with the principles fairly reflects the processes and procedures that they have in place to adhere to the requirements of the principles.
21. As such, the data and information (shown as left of the dotted line in figure 1, also described in this document as trade and market data) used in the assessment is not considered as part of an assurance engagement, as this is not subject to control by the PRA. The practitioner should keep in mind that a benchmark, price or index is an indicator of an underlying market, not of the validity or functioning of the underlying market. As such, there will be no assurance on underlying transactions or market information.
22. Generally, the perceived integrity of a benchmark, price or index will be affected by the level of assurance which is felt to be required over the end to end process from data extraction to publication. Work on data extraction by the practitioner will include considering whether the entities processes have completely and accurately captured the relevant available data when building the population of trade data which is used as the basis for a submission or price assessment. Depending upon the nature of the benchmark, price or index and the incentive or compulsion to participate in the benchmark, the possibility of and perceived need for assurance may become a cost of doing business. This may be absorbed by the ultimate benchmark users as the costs of assurance are passed on, or it may deter participation. This may raise questions about the wider utility of the benchmark if the benefits cannot be considered to outweigh the costs.
23. As with any audit or assurance engagement there may be an expectations gap between the work actually undertaken by the providers of the assurance

⁴ Refer to section six for further details.

and what the users perceive the assurance provides. Well defined terms of engagement with a clear description of work performed, and articulation of respective responsibilities of practitioners submitters, compliers, assessors or administrators, will help narrow any such expectations gap, especially if made public in the assurance report.

24. Given the varying nature of benchmarks and indices a variety of assurance conclusions may be possible and the example reporting in sections five and six and appendix four would have to be adapted to reflect this.

2.2 Types of engagement and assurance

25. The IAASB's International Framework for Assurance Engagements defines an 'assurance engagement' as *an engagement in which a practitioner expresses a conclusion designed to enhance the degree of confidence of the intended users (other than the responsible party) about the outcome of the evaluation of measurement of a subject matter against criteria* (paragraph 7).
26. A key question is whether the assurance should be on the submitted or published data, on the processes used to create or compile it, or both. There will be other areas where submitters, compilers, assessors or regulators would benefit from assurance work. For example, in the case of PRAs, IOSCO has concluded that assurance will be beneficial in considering the work done by PRAs to adhere to the IOSCO principles for oil price reporting agencies whose published price assessments are referenced in derivative contracts. This guidance is not designed to be an exhaustive list of the types of potential engagement, but will lay out what constitutes a base case of assurance engagements which could form the foundation of, and be complementary to other engagements using other relevant guidance.
27. There are many alternative ways of producing benchmarks, indices and price assessments, which can affect the design of the engagement. Interest rate benchmarks often use a daily submission process for example. With certain benchmarks, some controls over submissions may only be capable of contemporaneous observation. As a result, assurance on submission data might require work to be performed concurrently with submissions for use by the assurance provider (potentially by Internal Audit), rather than periodically. Assurance on the processes of compilation is likely to be able to be performed with more ease retrospectively (whether annually or periodically). However this will depend on the nature of the benchmark or index. Table 1 describes the different options for providing assurance on an index or benchmark based upon a submission and compilation process.

Table 1

Type of engagement	Assurance on submissions		Assurance on compilation	
	Process	Data	Process	Data
Subject matter	Systems and controls put in place to submit data	Submitted data	Systems and controls put in place to compile index	Published benchmark, index or reference rate
Subject matter information	Control objectives, design of control procedures, operation of control procedures.	Trade data including both underlying transaction data and wider market data, estimation/calculation methodology, control procedures.	Control objectives, design of control procedures, operation of control procedures	Data provided by submitters, estimation/calculation methodology, control procedures
Criteria	Rules on submission data controls established by administrator and/or regulator.	Rules on calculation or estimation of submissions established by administrator and/or regulator.	Rules on data compilation controls established by administrator and/or regulator.	Rules and guidelines relating to input data to be submitted and how the benchmark or index is compiled from submitted data.
Does not (on its own) provide assurance on	Controls over underlying market transactions.	Transactions or market information underpinning input data.	Controls in place at submitter.	Accuracy of data provided by submitters.

28. Another common method for producing benchmarks, indices and market price assessments involves an independent organisation, such as a commodity price reporting agency collecting market information and turning that into a benchmark, index or price assessment. Table 2 describes an engagement based upon adherence to the IOSCO principles for oil price reporting agencies.
29. Regulators or administrators may request other forms of assurance under their own powers if they wish. Compiling and contributing firms could also request private assurance engagements as desired; reporting in such an engagement could take the form of a long form, narrative report with no opinion or conclusion presented.
30. Assurance on this type of subject matter is covered by International Standard on Assurance Engagements 3000 (ISAE 3000)⁵. This standard provides a

⁵ In December 2013 the IAASB released its revised standard which is effective for assurance engagements where the assurance report is dated on or after 15 December 2015. Practitioners should bear the new standard in mind when planning and performing work.

framework for assurance on both data and systems. It also requires practitioners applying ISAE 3000 to comply with ethical and quality standards as described below. This guidance is based on ISAE 3000 and supplements it by being tailored specifically for providing assurance on benchmarks and indices.

Table 2

Type of engagement	Assurance on adherence to PRA principles	
	Process	Data
Subject matter	The PRA's detailed response outlining how their methodology, guidance and rules for the controls and processes surrounding the assessment and made public by the PRA.	Not applicable
Subject matter information	Control objectives, design of control procedures, and operation of control procedures.	Not applicable
Criteria	Management's response to the IOSCO principles for oil price reporting agencies	Not applicable
Does not (on its own) provide assurance on	Controls over underlying market transactions, accuracy of reported prices.	Not applicable

2.3 Quality control, ethics and risk management

International Standard on Quality Control 1⁶

31. This provides users of the assurance providers' opinion with reassurance that the work has been undertaken to a professional standard. It includes:
- Leadership responsibilities for quality within the firm – requiring establishment of a quality control regime
 - Ethical requirements – independence and objectivity (see below), dealing with conflicts of interest, and a duty to act with integrity and not be associated with anything misleading
 - Acceptance and continuance of client relationships and specific engagements – processes to consider the integrity of clients and that practitioners only accept work that they have the competence, capability, time and resources to perform
 - Human resources – to ensure that those carrying out the work have the necessary skills and experience
 - Engagement performance – policies are in place to perform the work in accordance with standards, legal and regulatory requirements, including consultation processes to deal with difficulties and resolve differences of opinion, carry out engagement quality control review and support opinions with necessary documentation
 - Monitoring – to provide reasonable assurance that all of the areas above are operating satisfactorily.

⁶ www.ifac.org/sites/default/files/downloads/a007-2010-iaasb-handbook-isqc-1.pdf It should also be noted that practitioners who are currently complying with ISQC (UK and Ireland) 1 will already be complying with ISQC 1.

The International Ethics Standards Board for Accountants' Code of Ethics⁷

32. The code sets out the standards of independence and objectivity required to perform this work.

Agreeing an engagement and risk management

33. Agreement of an engagement and risk management will be of primary priority for the different parties involved and provide a way of managing and reconciling their potential expectations. We consider the list of generally relevant parties to be the administrator or assessor, the compiler (where compilation is outsourced by the administrator), the submitter or contributor, the assurance practitioner and other users of the benchmark, including regulators.
34. For further information regarding the agreement of an engagement between parties and risk management considerations applicable to firms please see appendix one.

⁷ www.ifac.org/sites/default/files/publications/files/2012-IESBA-Handbook.pdf

3 PLANNING AND PERFORMING THE ENGAGEMENT

This section considers what will be required of the practitioner in order to obtain the required level of assurance and form an opinion on the submission to, compilation of or assessment of an index, benchmark or reported price. Where then benchmark or index forming the subject matter of the engagement is regulated, practitioners should have due regard to the requirements of regulation when planning and performing their work. Sections 5 and 6 respectively provide additional guidance specific to a submission/compilation process such as interest rates and the processes in respect of adherence to the IOSCO principles for oil PRAs.

3.1 Pre-engagement considerations and planning

35. Practitioners should plan and perform their work so as to provide a reasonable basis for their conclusion. Professional judgement is needed to determine the required nature, timing and extent of the tests to be carried out. Where the practitioner seeks to rely on the entities internal audit department they should refer to section 3.6.
36. The practitioners' work is planned so as to have a reasonable expectation of detecting, at the time the work is undertaken and with reference to a predetermined period agreed by the parties, significant deficiencies in respect of the control procedures or other predetermined criteria as described by the entity and tested in accordance with the terms of the engagement. Practitioners will also plan substantive procedures where required so as to have a reasonable expectation of assessing the accuracy and completeness of the transaction data which has been produced and used as part of the basis for calculating the submission by the submitter or the benchmark which has been compiled for publication or other dissemination to the users.
37. However, the work cannot be expected to detect all problems which may be considered significant from the point of view of specific users and the scope of the work may mean that all control procedures relevant to an individual user may not have been tested. Substantive testing is also subject to inherent limitation due to sampling techniques used by practitioners.
38. Practitioners would not be expected to assess the adequacy of the evaluation of controls performed by the directors (or responsible individual in the case of a regulated benchmark), unless they were seeking to rely on the assessment. It should also be considered that the directors' assessment may not formally take place depending on practice at the entity and any external requirements. This would be considered to be a separate directors' assessment done for the directors' own purposes and not part of an engagement to report on the entity's control procedures.
39. Prior to accepting the engagement practitioners should also consider the potential requirements for publication of the report, and ensure that this is taken into account as part of their engagement terms. Given the significant public interest in benchmarks, indices and reported prices we consider this to be something which practitioners will have due regard for.

40. In order to perform the agreed engagement, the practitioner should determine whether the following pre-conditions are present:
- The underlying subject matter (ie. the benchmark or index) is appropriate.
 - The criteria to be applied in the preparation of the subject matter information are suitable and will be available to the intended users.
 - The practitioner should be able to obtain the evidence needed to support the practitioner's conclusion.
 - The practitioner conclusion should be contained in a written report.
 - A rational purpose including that meaningful assurance can be obtained.
41. Where the entity is not considered by the practitioner to have sufficiently documented control procedures it may still be possible for the practitioner to report, but consideration would have to be given to the form and content of the report. In such circumstances the practitioner should consider appropriate use of agreed upon procedures and relevant inclusions within a letter of representation.
42. For an engagement on the statement of adherence to IOSCO PRA principles, professional judgement will be required for the practitioner to plan and perform their work to a sufficient level so as to be able to conclude whether management's assessment of adherence is or is not fairly stated. This could potentially include work as described above, but may also include different elements depending on the PRA's individual methodology and processes. IOSCO have acknowledged that there is no 'one size fits all' approach in this regard. Please refer to section six for more detailed consideration.

3.2 Establishing what may be of significance to the user (report addressee) for reporting purposes

43. Misstatements, including omissions, are considered to be significant to the user if they, individually or in the aggregate, could reasonably be expected to influence relevant decisions of intended users taken on the basis of the benchmark, index or reported price. The practitioner's consideration of what is significant in this regard is a matter of professional judgement, and is affected by the practitioner's perception of the common information needs of intended users as a group.
44. Significance is considered in the context of qualitative factors and, when applicable (as in the case of the compiler), quantitative factors. The relative importance of qualitative factors and quantitative factors in a particular engagement is a matter of professional judgement.
45. When planning and performing the engagement, the practitioner considers reporting requirements with respect to the fair presentation of the description, the suitability of the design of controls, the operating effectiveness of controls and the nature of work undertaken on trade and submission data or compiled data.

Processes and controls:

46. Matters of significance with respect to the processes and controls include primarily the consideration of **qualitative factors**. Qualitative factors **may** include such issues as:
- Whether the description includes the significant aspects of processing significant transactions.
 - Whether the description omits or distorts relevant information.
 - The ability of controls, as designed, to provide evidence to support an assurance opinion that control objectives would be achieved.
 - The nature of a misstatement (for example, the nature of observed deviations from a control when the subject matter information is a statement that the control is effective).
 - In case of periodic reporting on an underlying subject matter, the effect of an adjustment that affects past or current subject matter information or is likely to affect future subject matter information.
 - Whether the misstatement is the result of an intentional act or is unintentional.
47. Matters of significance with respect to the practitioner 's opinion on the operating effectiveness of controls includes the consideration of both quantitative and qualitative factors, for example, the tolerable rate and observed rate of deviation (a quantitative matter), and the nature and cause of any observed deviation (a qualitative matter).

Data

48. What is considered significant with respect to submissions or price reports is a matter of professional judgement depending on the nature of the data and the guidance and rules set out by the administrator or published by the PRA, including for example the degree of judgement involved in preparing the data.
49. In relation to the assessment over the compiled data (actual benchmark or index) it is possible that no misstatements should be tolerated where the calculation is a matter of fact rather than a range of possible outcomes.

3.3 Practitioners' procedures for assurance of processes and controls

Fairness of the description

50. It is expected that the directors or other responsible party will have documented the processes and controls surrounding and supporting the subject matter (e.g. the control objectives) and reviewed them regularly. Where possible, practitioners will use this documentation as a basis for their initial assessment and planning. Where controls and processes are not documented in such a way it is a matter of professional judgement whether adequate controls and processes exist so as to enable practitioners to perform work and draw a conclusion. Practitioner should consider this when accepting an engagement; in particular with regard to independence when constructing the form of the engagement and considering which controls are to be tested. Practitioners consider whether the control objectives are appropriate in the context of the benchmark, index or price report subject to assurance.

51. Practitioners should read the description of control procedures or other material such as a statement of adherence to the IOSCO PRA principles to gain an understanding of the representations made by the directors or other relevant individuals (eg regulated persons). After reading the description, the practitioners perform procedures to determine whether the description presents fairly, in all material respects, the control procedures or other activities that relate to the control objectives referred to by the directors which were in place as at the end of the relevant period.
52. To determine whether the description is fairly presented, the practitioners gain an understanding of the data being provided. Procedures to gain this understanding may include:
- discussing aspects of the control framework and relevant control procedures with management and other personnel;
 - determining who the users are and how the data being provided is likely to affect the users
 - reviewing standard terms of contracts with the user to gain an understanding of the entity's contractual obligations;
 - observing the procedures performed by relevant personnel;
 - reviewing policy and procedure manuals and other systems documentation, for example, flowcharts and narratives; and
 - performing walk-throughs of selected activities and control procedures.
53. Practitioners compare their understanding of the benchmark index or price provided to the users (customers) with the directors' representations made in their report to determine the fairness of the description. Fairly described control procedures do not omit or distort significant information that may affect the user's assessments of control risk.
54. Fairly described control procedures should include a complete set of associated control objectives that are developed based on the criteria. Further consideration of criteria to be included in the description is set out in appendix 6. If there are omissions or misstatements with regard to the control objectives, the practitioners should request the directors to amend the description. If it is not amended the practitioners consider the need to state that fact in their report.

Design of control procedures

55. As a part of their work, practitioners determine whether the control procedures are suitably designed. A control procedure is suitably designed if individually, or in combination with other control procedures, it is likely to prevent or detect errors that could result in the non-achievement of specified control objectives when the described control procedures are complied with satisfactorily.
56. The practitioners' assessment of the suitability of control procedure design may include:

- considering the linkage between the control procedures and the associated control objectives;
 - considering the ability of the control procedures to prevent or detect errors related to the control objectives;
 - performing walk-throughs of selected transactions and control procedures; and
 - performing further procedures, such as enquiry of appropriate entity personnel, inspection of documents and reports and observation of the application of specific control procedures, to determine whether they are suitably designed to achieve the specified control objectives and if they are operated as prescribed, by appropriately qualified or experienced persons.
 - considering the precision of the control, its frequency and timeliness.
57. Design suitability should also consider appropriateness of people, systems and processes in place in operation of the control procedure.
58. Where certain control procedures are reliant on generic control procedures executed by the entity in order to achieve control objectives (eg, controls over access to systems and segregation of duties), practitioners consider whether such complementary control procedures are described in the report made by the entity. If they are not and there is a failure or refusal to amend the description, the practitioners should consider adding an explanatory paragraph in their report to describe the required complementary control procedures and consider the implication for the practitioners' conclusion on the fairness of the description (see paragraphs 65 – 67).

Operating effectiveness

59. Practitioners perform tests of the relevant control procedures to obtain evidence over the operating effectiveness of the control procedures during a specified reporting period or at a point in time. Operating effectiveness is concerned with how a control procedure is applied, the consistency with which it is applied, and by whom it is applied. Practitioners determine the nature, timing and extent of the tests to be performed to form their conclusion on the operating effectiveness of the control procedures. Practitioners may wish to provide a further explanation of the tests that they have performed in an appendix to their report.
60. Where practitioners are unable to test a described control procedure because, for example, it relates to an exceptional event that did not occur during the period, they state the fact that no tests have been carried out and the reason in their description of tests. This will be reported as a limitation of scope.

Nature, timing and extent of tests

61. Tests of control procedures over operating effectiveness might include a combination of enquiry of the appropriate personnel, observation of the application of the control procedure, inspection of relevant documentation and

re-performance of the control procedure. Enquiry alone does not generally provide sufficient evidence to support a conclusion about the operating effectiveness of a specific control procedure.

62. The period of time over which practitioners perform tests of control procedures varies with the nature of the control procedures being tested and with the frequency of specific control procedures. Tests of operating effectiveness provide evidence that enables the practitioner to report on the entire period covered by the report. It may not be possible to obtain evidence of the effective operation of certain control procedures retrospectively and accordingly, practitioners test the operating effectiveness of such control procedures at various times throughout the reporting period.
63. Where there have been changes to control procedures to improve them or to address deficiencies during the period covered⁸, the practitioners evaluate the impact which the superseded control procedures had on the control objectives over the period covered. Where a change of control procedures occurs during the period, the practitioners agree with the directors whether it is possible for the control procedures to be tested before and after the change. The description of their tests clearly states which control procedures have been tested.
64. The number of control operations selected as a sample for testing depends on the frequency of performance (for example, quarterly, monthly, daily or multiple times a day), the nature (for example, manual or automated) of control procedures, and the practitioners' assessment of the system (including the risk of failure of the control procedure that is being tested). The sample size selected needs to be specific to reduce the sampling risk. An example table for setting sample sizes is given in Appendix 3.

Describing tests of operating effectiveness and exception reporting

65. Practitioners describe the control procedures that were tested, the control objectives they were intended to achieve, the tests carried out and the results of the tests in the assurance report. This information would typically be incorporated within the description of control procedures for example or contained within an attachment to the assurance report. The practitioners describe tests of operating effectiveness that provide sufficient information to support their conclusion as to whether the relevant control objectives have been achieved during the period.
66. In describing the results of the tests, practitioners include details and other information where relevant to the user. Test results are also described whether or not the practitioners have concluded that the results constitute an exception (see paragraphs 68 – 73).
67. Practitioners describe the nature, timing and extent of tests applied. In describing the nature of tests, the practitioners define the types of tests performed. In describing the extent of tests, the practitioners indicate whether the items tested represent a sample or all the items in the population. If

⁸ Control procedure changes may be required, for example, as a result of changes in regulation which may also change the control objectives.

sampling was used, it may be helpful to provide information on the sample size.

3.4 Reporting on description misstatements, design deficiencies or when control procedures are not operating effectively

68. Practitioners discuss with the directors or other relevant individual when they become aware that the control objectives are incomplete or inappropriate in light of the criteria in this guidance in order that the description may be amended to include the recommended control objective(s) (for example where the control objectives are based on externally imposed rules or principles that are insufficiently detailed to support an assurance opinion). If there is a refusal or failure to do so the practitioners add an explanation in the criteria and scope paragraph of the assurance report identifying the omitted or inappropriate control objective(s) to draw the attention of the user. In addition, the wording of the conclusion paragraph may also be modified.
69. Although practitioners may qualify their conclusion on the fairness of the description of control procedures or other response to the criteria, this does not necessarily affect the suitability of the design or operating effectiveness of the control procedures because the practitioners' conclusion relates only to the control objectives that are included in the engaging party's description. Practitioners note that it is the responsibility of the directors and not the practitioners to ensure the completeness and the reasonableness of control procedures or response.
70. With regard to consideration of control procedures specifically, where control procedures associated with stated control objectives are incomplete or inappropriate, practitioners also discuss this with the directors so that the directors may amend the description to include the associated control procedures. If the directors refuse or fail to amend the description, the practitioners add an explanatory paragraph preceding the conclusion to the report identifying the omitted or inappropriate control procedures to draw the attention of the user. In addition, the wording of the conclusion paragraph may be modified.
71. Where practitioners conclude that a set of control procedures are not suitably designed in relation to a specified control objective, they consider the design deficiencies in their overall assessment of the control procedures. If the practitioners determine that control procedures are not suitably designed to achieve a specified control objective, they add an explanatory paragraph preceding the conclusion to the report identifying the design deficiencies and modify the conclusion.
72. Where the practitioners' tests identify exceptions to the operating effectiveness of the control procedures, the practitioners consider whether this exception means that a control objective has not been achieved. In some cases deficiencies may be so pervasive that the practitioners modify their conclusion on the achievement of one or more control objective or issue an adverse opinion.
73. Where significant changes are introduced during the period covered in the report, the entity reports this fact. If practitioners become aware that the description on changes is missing, they request amendment the description.

However, the omission of information related to changes in the control procedure does not necessarily require a qualification of the conclusion on the fairness of the description, provided that the entity's description of control procedures is fair as at the date of the description.

Elements of the report that are not covered by the assurance report

74. A PRA, submitter or compiler may wish to present other information that is not a part of the description of internal controls in its report: for example, background information on the benchmark or index and the services they provide in relation to it. Where information of this nature is presented, it is should presented in a separate section of the report and made clear that it is not part of the description of the control procedures.
75. Where such other information is included in the report, this is outside the scope of the assurance opinion. The practitioner reads such information for consistency with their understanding of the entity. If inconsistencies are noted, the practitioner discusses these matters with the directors or responsible individuals and if necessary discloses in the report.

Considerations for uncorrected errors, fraud or illegal acts

76. In the course of performing procedures practitioners may become aware of uncorrected errors, fraud or illegal acts attributable to systems, management or employees that may affect users.
77. Unless clearly inconsequential, practitioners determine with input from the directors or responsible parties whether this information has been communicated onward to users (potentially the compiler, subscribers or regulators among others). If the directors have not communicated this information and are unwilling to do so, the practitioners inform the PRA, submitter or compiler's audit committee or other group of directors with equivalent authority. If the audit committee or other group does not respond appropriately, the practitioners consider whether to resign from the engagement. The practitioners are generally not required to confirm with the users that the PRA, submitter or compiler has communicated such information.

3.5 Quality of evidence

78. The same principles apply in evidence gathering for an assurance engagement as for a financial statement audit. The nature of testing would include an appropriate combination of inquiry, observation, inspection and re-performance.
79. Considerations in determining test selection include the reliability of the evidence the test will produce. For example:
 - Evidence is more reliable when it is obtained from independent sources outside the organisation.
 - Evidence that is generated internally is more reliable when the related controls applied by the organisation are effective.

- Evidence obtained directly by the practitioner eg observation of the application of a control, is more reliable than evidence obtained indirectly or by inference eg enquiry about the application of a control.
- Evidence is more reliable when documented, whether by paper, electronic, or other medium eg a timely written record of a meeting is more reliable than a subsequent oral representation of the matters discussed.
- Evidence provided by original documents is more reliable than evidence provided by photocopies or scanned documents.

The practitioner and engagement team will need to use judgement to decide on the procedures that will provide sufficient, appropriate evidence in the context of the assurance engagement.

3.6 Use of Internal Audit

The following section refers to requirements of the practitioner to rely upon the work of internal audit with regards to work on both processes and data. Practitioners should also consider ISA 610 *Using the work of Internal Auditors*.

80. A PRA, submitter, administrator or compiler may have an internal audit department that performs tests of control procedures as part of its audit plan. A practitioner may determine that it is effective and efficient to use the results of testing performed by internal auditors to alter the nature, timing or extent of the work they might otherwise have performed in forming their conclusion. When using the work of internal auditors, however, the practitioners consider whether the internal auditors are sufficiently involved in aggregate to be able to support their conclusion. Practitioners also make reference to the work of internal auditors in their report and attribute the performance of the tests and the results of tests to them where appropriate.

Obtaining an understanding of the Internal Audit Function

81. If the PRA, submitter or compiler has an internal audit function, practitioners obtain an understanding of the nature of the responsibilities of the internal audit function and of the activities performed in order to determine whether the internal audit function is likely to be relevant to the engagement.
82. The practitioner determines:
- (a) Whether the work of the internal auditors is likely to be adequate for purposes of the engagement; and
 - (b) If so, the planned effect of the work of the internal auditors on the nature, timing or extent of the practitioner's procedures.

Determining whether and to what extent to use the work of the Internal Auditors

83. In determining whether the work of the internal auditors is likely to be adequate for purposes of the engagement, the practitioner evaluates:
- (a) The objectivity of the internal audit function;
 - (b) The technical competence of the internal auditors;

- (c) Whether the work of the internal auditors is likely to be carried out with due professional care; and
 - (d) Whether there is likely to be effective communication between the internal auditors and the practitioner.
84. In determining the planned effect of the work of the internal auditors on the nature, timing or extent of the practitioner's procedures, the following should be considered:
- (a) The nature and scope of specific work performed, or to be performed, by the internal auditors;
 - (b) The significance of that work to the practitioner's conclusions; and
 - (c) The degree of subjectivity involved in the evaluation of the evidence gathered in support of those conclusions.

Using the work of Internal Audit Function

85. In order to use specific work of the internal auditors, practitioners evaluate and perform procedures (by re-performing some of the internal auditors work) on that work to determine its adequacy for the practitioner's purposes.
86. To determine the adequacy of specific work performed by the internal auditors for the purpose of practitioners, practitioners evaluate whether:
- (a) The work was performed by internal auditors with adequate technical training and proficiency;
 - (b) The work was properly supervised, reviewed and documented;
 - (c) Adequate evidence has been obtained to enable the internal auditors to draw reasonable conclusions;
 - (d) Conclusions reached are appropriate in the circumstances and any reports prepared by the internal auditors are consistent with the results of the work performed; and
 - (e) Exceptions relevant to the engagement or unusual matters disclosed by the internal auditors are properly resolved.

Effect on the assurance report

87. If the work of the internal audit function has been used in performing tests of controls, that part of the practitioner's assurance report that describes the practitioner's tests of controls and the results thereof includes a description of the internal auditor's work and of the practitioner's procedures with respect to that work.
88. If the work of the internal audit function has not been used, practitioners make no reference to that work in the part of the assurance report that contains the practitioner's opinion.

Outcome of the testing

89. If exceptions are noted or significant control deficiencies are identified, practitioners will use professional judgement to assess the impact and the implications on the assurance report. For further detail refer to section four.

90. Published prices, indices and benchmarks will generally not be subject to modification or republication to the market. However sharing exceptions or deficiencies with management and those charged with governance will help to prevent the issues occurring in future calculations.

3.7 Representations

Practitioners will obtain representations from the Directors' or senior management as those responsible for the company or other entity submitting to or compiling the benchmark or index or publishing the assessed price in addition to any other representations required by law or regulation.

91. In all engagements, practitioners should obtain written representations signed by the directors of the PRA, submitter or compiler who the practitioners believe are responsible for and knowledgeable, directly or through others in the PRA, submitter, compiler or administrator, about the matters covered in the representations. The refusal by the directors of the PRA, submitter, compiler or administrator to provide the written representations considered necessary by the practitioners constitutes a limitation on the scope of the engagement and may be considered in forming the practitioners' conclusion. The representation letter is normally dated on the day the directors' report is dated.

Example representations include:

- Their evaluation of the subject matter against the identified criteria.
- Their acknowledgement of responsibility for the subject matter.
- Confirmation that all the supporting documentation and information in respect of the subject matter has been made available.
- Disclosure of additional information:
- Appropriateness of assumptions used in judgements/estimates where there is a lack of objective data as per the guidance and rules of the benchmark price or index.
- Instances of non-compliance with laws and regulations or uncorrected errors that may affect the price, benchmark or index.
- [Knowledge of any acts by management or the market participants involved that could adversely affect the process or the achievement of the control objectives.]
- Design deficiencies in controls and instances when controls have not operated as described.
- Any subsequent events to the period covered up to the date of the practitioner's report that could have a significant effect.

3.8 Management Override of Controls

92. Management and those charged with governance need to implement a system of internal control designed to provide them with confidence that that the control objectives have been met.

93. The term 'management override' refers to the ability of management and/or those charged with governance to manipulate records and prepare fraudulent inputs to the creation of the price, benchmark or index by overriding these controls, even where the controls might otherwise appear to be operating effectively.
94. The ability to override controls puts management in a unique position to perpetrate, or conceal the effects of, fraud.
95. Although the risk of management override of controls will vary on an entity by entity basis, the risk is nevertheless present in all entities. The term 'management', includes those charged with governance in situations where those charged with governance take an active part in the management of the entity and have the ability either to override controls directly or to instruct management to do so.
96. In considering management override, practitioners therefore needs to be alert to the possibility that:
- those involved in management are perpetrating fraud for their own purposes and are attempting to conceal what they are doing from those charged with governance; and
 - those charged with governance (who may also be owners of the submitter or compiler) are perpetrating fraud in order to misrepresent their contribution to or role in the final price, benchmark or index.
97. Practitioners should consider whether the PRA, submitter, administrator or compiler has any controls to prevent, or detect and correct, such override (for example, a functioning whistle-blowing route). By definition, it is virtually impossible for a PRA, submitter or compiler to have controls in this area that will be totally effective but should there nevertheless be controls that minimise the risk, such as controls over the authorisation of data to be submitted from the submitter to the compiler and the adjustments made to the data in reaching a submission which is compliant with the compiler's definition of the benchmark or index. At the compiler or PRA such controls may be hierarchical review and checks before publication of the price, benchmark or index.
98. Practitioners also need to consider whether there are any particular risk factors that would affect the risk of management override. These may include incentives or pressures for individual submitters, assessors (reporters) or those responsible for compilation to misrepresent the data or information in order to:
- make personal gains based on the final price, benchmark or index position
 - meet expectations or targets;
 - to influence the final price, benchmark or index position for wider market reasons

Management override of controls

99. Due to the nature of the risk of management override of controls, substantive tests of detail are usually required in addition to work on controls and processes.
100. Fraudulent activity may involve intentional misstatement of estimates used to reach a final assessment, submission or compilation.
101. Practitioners need to be alert to the possibility that the view given by the price, submission, benchmark or index may be affected by management bias. The practitioner should evaluate whether the judgements and decisions made by management in making the estimates, even if they are individually reasonable, indicate a possible bias that may represent a risk of fraud or error.
102. Practitioners should perform a retrospective review of significant management judgements and assumptions reflected in the final outcome or information of prior periods and consider whether the outcome of estimates made previously by management provide an indication of the ability of management to make reliable estimates or highlight a tendency to bias in one direction or the other.

4 REPORTING AND DOCUMENTATION

4.1 The Assurance report

103. The content and structure of the report provided by the practitioner will vary depending on the level of assurance that is required and whether the practitioner is required to report to the entity submitting benchmark or index data or the entity compiling such data or assessing a price in line with prescribed principles.
104. It should be clearly stated that the assurance engagement and resulting report is unrelated to the financial statement audit.
105. Where assurance is required over data, this is inherently different in nature to work over processes and controls. As such, practitioners must perform a considered risk assessment with regards to the type of report they wish to issue on assurance provided over benchmark or index data. An example report on data is included within section five. All assurance opinions are subject to inherent limitations due to the use of sample testing. Data submitted to a benchmark or index (submission data) is discreet. Testing data from a submission will not provide evidence about the accuracy of a different submission period or relating to a different benchmark or index. As such practitioners cannot draw a conclusion about all submission data, based on the submissions tested, prohibiting a reasonable assurance opinion being issued unless testing covers each and every submission. This is different to a financial statement audit where errors in one period can often be subsequently reversed or be highlighted as a reconciliation difference. This should be considered carefully by practitioners to ensure that the expectations gap is managed as closely as possible.
106. Further options, such as performing a different scope of work, for example agreed upon procedures or a limited assurance report are discussed in appendix five.

4.2 Form and content of the assurance reports

107. The practitioners' conclusion is expressed in a written report attached to the directors' report or management's statement of controls (where provided). The title of the report includes the term 'assurance' to distinguish it from non-assurance engagements, for instance, agreed upon procedures engagements. The report draws the attention of the readers to the basis of the practitioners' work, ie. ISAE 3000 and this guidance.
108. The report by the practitioner reflects the agreement set out in the engagement letter. The report makes clear for whom it is prepared and who is entitled to rely upon it and for what purpose.
109. In the case of an assurance report on the submission of benchmark or index data, practitioners conclude on the fairness of the description and the design and operating effectiveness of control procedures in relation to a specified reporting period.
110. Control procedures have inherent limitations and accordingly errors and irregularities may occur and not be detected. Also control procedures cannot guarantee protection against fraudulent collusion especially on the part of

those holding positions of authority or trust. Practitioners refer to such inherent limitations in their report.

111. Where a practitioner is engaged to consider PRA principles, there will also be inherent limitations to the level of assurance which can be provided. This is considered in further detail in section 6.
112. Key elements of an assurance report are shown in the table below. Pro-forma reports on the internal controls and compilation of the data are available in Appendix 4 with some example qualifications. Section 5 and 6 include example reports for interest rate benchmarks and oil PRAs respectively.

Elements of practitioner's assurance report

- (a) A title indicating that the report is an assurance report.
- (b) Engaging parties.
- (c) Identification of the applicable engagement letter.
- (d) Restrictions on the use of the report and the replication of the report in whole or in part.
- (e) Limitation of the liability of the practitioner to the client.
- (f) An identification and description of the subject matter information and where appropriate the subject matter.
- (g) The identification of the responsible party and the respective responsibilities of the responsible party and the practitioners.
- (h) Reference to ISAE 3000 and this technical release.
- (i) Identification of the criteria against which the subject matter is evaluated or measured.
- (j) A summary of the work performed.
- (k) Inherent limitations associated with the evaluation/measurement of the subject matter against the criteria.
- (l) Where the criteria used to evaluate or measure the subject matter are available only to specific recipients of the assurance report, or are relevant only for a specific purpose, a statement restricting the use of the assurance report to those intended recipients or that purpose
- (m) The practitioner's conclusion in the agreed form. Where the conclusion is qualified the report includes a clear description of all reasons for the qualification(s).
- (n) The name and signature of the firm/practitioner and the location of the office performing the engagement.
- (o) The assurance report date.

113. The engagement letter confirms whether the assurance report may be recited or referred to in whole or in part in any other published document. This may also be stated in the report.

4.3 Reporting overall findings

Matters of significance which do not impact upon the assurance conclusion.

114. During the course of an assurance engagement, practitioners may come across matters that may not be sufficiently significant to affect the assurance conclusion, but may nevertheless be useful for management or other parties to the engagement to be aware of. Such matters may include errors, deficiencies and risks related to the subject matter but which is not material to the conclusion, recommendations, and comment on the status of matters that were included in a similar report to management in previous periods.
115. Matters for communication to management, the regulator, administrator or in the case of a submitter, the compiler do not necessarily require a qualification of the assurance conclusion. These matters may therefore be communicated in a separate management letter rather than in the assurance report.
116. Where the engagement is in connection with a regulated benchmark, practitioners must bear in mind their rights and duties to report issues to the relevant regulator, particularly if the assurance practitioner is also the entity's external auditor. Any existing channels of communication with the regulator regarding the client should be maintained and the guidelines for any assurance practitioner and regulator/supervisor relationship be followed.
117. The ability to report onwards from submitter to compiler, for example, via a form of management letter should be considered by practitioners when accepting an engagement.

4.4 Subsequent events:

118. In order to gain assurance that there have been no events subsequent to the submission of benchmark or index data by a submitter to a compiler, or publication of submissions after the publication of the benchmark practitioners shall consider an analysis of variances and compare the judgement taken and facts used by the submitter against actual data.
119. There may be potential adjustments or considerations made to future calculations after the review process. Practitioners should assess and document the effect of the identified subsequent events on the report. Consideration should be given to what happens if, after the practitioner signs the report, the directors at the submitter or compiler become aware of a breakdown in controls.

4.5 Working papers and records

120. Practitioners will plan and perform work in accordance with their professional judgement. This may give rise to various forms of working papers including;
 - Electronic working papers
 - Physical working papers
121. Practitioners should seek to maintain the same standards of confidentiality, safe custody and ownership in relation to working papers as with any other professional engagement. When considering the risk of management override

of controls and the practitioner's response to this risk, including the nature and extent of testing to be performed, it is important to ensure that the engagement working papers record the significant judgements made and the rationale for the practitioners' response.

5 INTEREST RATE BENCHMARK CONSIDERATIONS

This section sets out detailed control objectives for the contributing organisations to interest rate benchmarks (submitters) and to the compilers of the data to be published (compilers). These control objectives are for guidance only and are not intended to be exhaustive. It remains the responsibility of the directors to ensure that the described control objectives are sufficient to meet the expectations of the user and/or public.

5.1 Scope at the Submitter

Processes and controls

122. The performance of assurance work on processes and controls surrounding benchmarks and indices is most likely to provide reasonable assurance in all material respects on:
- The fairness of the description and the design and operating effectiveness of control procedures in relation to the submission of the benchmark or index for a specified reporting period at the submitter.
123. The practitioner may also consider the completeness of the controls to ensure that sufficient processes and controls have been designed to implement the relevant control objectives designed to fulfil the requirements of the rules. Where omissions are noted a qualified report may result.
124. Depending upon the specific nature of the benchmark rules the agreed assurance engagement is not likely to cover:
- The controls over the systems and the individual transactions that originate the data that will be used for the calculation, the recording process and risk management procedures for the origination of underlying transactions. The way in which this data is collected for the purposes of preparing the submission would be considered, for example the extraction of reports from the management information systems but not the accuracy of the underlying transactions.
 - The appropriateness or reasonableness of the basis of calculation provided by the compiler and used by the various submitters to determine their contribution to the benchmark or index. This will need to be determined at an industry level and it would depend upon the nature of the benchmark or index.
 - The validity of data submitted to the compiler. Thus would be considered as part of a separate assurance engagement. See paragraph 126 for more details.

Submitted data

125. Where appropriate, guidance and rules governing submission to the benchmark or index should have been laid down by the benchmark administrator, sponsor or compiler.

126. Assurance can be provided on individual submissions as a standalone assignment or combined with assurance on the process and controls over submissions. A standalone assignment would cover the calculation and estimation of a sample of submissions in accordance with the rules set by the administrator and with reference to underlying source data, for example from transactions. It would not be expected to require testing of the controls of validity of trade and market data used in calculating the submission or to provide assurance on underlying transactions which would involve a separate assignment. Such a separate assignment on underlying trade or market data may include understanding the controls and processes without requiring detailed testing of whether these controls have operated effectively throughout the period if a more substantive approach is taken to the assurance engagement. A combined engagement would cover both the effective operation of the controls and processes and the calculation of the submission to the benchmark.
127. The scope of work and type of assurance report capable of being issued will be a matter of professional judgement for practitioners. Where a report provides reasonable assurance on the processes and controls, and limited assurance on the submitted data, practitioners make this clear in the report.

5.2 Scope at the Compiler

Processes and controls

128. The performance of assurance work on processes and controls surrounding benchmarks and indices is most likely to provide reasonable assurance in all material respects on:
- The design and operating effectiveness of the relevant internal controls and processes around the benchmark or index calculation, and on the benchmark or index data produced by the compiler.
129. Depending upon the specific nature of the benchmark rules the agreed assurance engagement is not likely to cover:
- The validity of the data submitted to the compiler.
 - The appropriateness or reasonableness of the calculation used by compiler to determine the final benchmark or index to be published. This calculation will need to be determined at an industry level and it would depend upon the nature of the benchmark or index.
 - The validity of the final benchmark or index published by the compiler.

Compiled data

130. Where appropriate, guidance and rules governing compilation of the benchmark or index should have been laid down by the benchmark administrator, sponsor or compiler. The nature of the benchmark or index and the guidance and rules set out by the administrator, sponsor or compiler may mean that practitioners will only be able to provide limited assurance over compiled data.
131. Assurance can be provided on the compiled data as a standalone assignment or combined with assurance on the process and controls over compilation. A standalone assignment would cover the calculation and estimation of the

benchmark or index in accordance with the rules set by the administrator, sponsor or compiler. It may include understanding the controls and processes without requiring detailed testing of whether these controls have operated effectively throughout the period if a more substantive approach is taken to the assurance engagement. A combined engagement would cover both the effective operation of the controls and processes and the calculation of the compiled data.

132. The scope of work and type of assurance report capable of being issued will be dependent upon the structure and nature of the benchmark or index, including the method of compilation and calculation.

5.3 Control objectives

133. Each submitter and compiler will develop a set of control objectives designed to ensure that the data they submit or benchmarks or indices are subject to robust processes, are in accordance with required methodologies and comply with any external regulations or requirements. Underpinning the control objectives, the submitters and compilers will develop specific and detailed submission guidelines, procedures, processes and controls which seek to ensure that the control objectives are met.
134. Tables 3 and 4 set out, for submitters and compilers respectively, areas that the control framework is likely to cover and where detailed control procedures may be required. The control objectives set out are not an exhaustive list, but cover a range of areas and activities.

Table 3: Control objectives for submitters

Area/activity	Submitter should develop control objectives to cover, for example
Governance	Assessment of the data utilised to submit the interest rate (eg keep relevant records relating to the submission process), including periodic management review of the processes and controls.
	Policy and procedures over the interest rate benchmark submission process.
	Record retention.
	Personal responsibilities within each contributing organisations, including internal reporting lines and accountability (eg Supervisor of the calculation agents, Oversight Internal Committee, Internal Audit, Compliance and Legal...).
	Potential qualifications and relevant experience required of submitters/supervisors to perform the role (ie. 'approved persons'). Confirmation should be obtained from these individuals regarding compliance and confidentiality.
	Training requirements of the staff involved in preparing and reviewing the data for submission, including: <ul style="list-style-type: none"> • Regulatory responsibilities associated with the submission • Their potential role in interest rate benchmark determination. • Unacceptable behaviours (eg contact between calculation agent (eg traders) and the submitters). • Inputs to take into consideration when determining submissions. • How to use expert judgement within the framework of submission guidelines.
	Segregation of duties including physical separation of submitters from others
	Effective 'conflicts of interest' management and communication controls, to avoid inappropriate external influence over those submitting interest rate benchmark data.
	Suspicious submission reporting procedures to the supervisor/oversight committee for review.
	Disciplinary and/or whistle-blower procedures for attempts to manipulate or failing to report attempted manipulation.
	Periodic review of the policies/guidelines regarding interest rate benchmark submissions.

	Procedures for submitting queries to the benchmark administrator, and for dealing with any responses.
	Requirements for internal and external audits of the interest rate benchmark submission process.
Input Data	Information required to support input data for example recent transactions by the company, related market data or other third party information.
	Review of input data underlying the submission to ensure it is representative and consistent for potential adjustments such as: <ul style="list-style-type: none"> • Time (proximity of transactions to time of submission and the impact of market events between transactions and submission time). • Market events that may impact current levels. • Term structure. • Credit standards. • Non-representative transactions.
	The application of judgment, estimates and use of alternative sources of information to support the assessment of interest rate benchmark (especially during periods of limited activity).
	Documentation, authorisations and other controls over the adjustments made to the interest rate benchmark submission in the absence of relevant trades ('adjusted actual submissions').
	Completeness, accuracy and timely recording of trade data used to support the interest rate benchmark submission.
	Authorisation and evidence of trade data used to support the interest rate benchmark submission before it is sent to the compiler.
	Evidence required for any adjustments to the interest rate benchmark submission after the supervisor's review.
	Documentation and approval for new input data or changes to existing input data (including, for example, inherent reporting risk, reputational risk and regulatory risk and potential need for approval by the Oversight Committee).
	Recording and record keeping of communications between the administrator and supervisors.

Data analysis	Internal record keeping for all transactions that contribute to the interest rate benchmark submissions to facilitate corroboration/monitoring of submissions, including accuracy and accessibility of those records (eg transaction records and risk reports reflecting activities of the submitters).
	Review and approval of the data used in the interest rate benchmark submission.
	Identification of outliers through subsequent analysis of submitted data.
	Exception reporting procedures including communication to the oversight committee for the assessment of rectification and impact on the process.
Submission/ reporting	Reporting to the administrator in respect of the final interest rate benchmark submission is complete, accurate and provided within required timescales.
	For those submissions that involve a higher degree of subjectivity, documentation of the rationale and communication of this to the compiler.
	Review and approval of each submission.
	Reporting to other interested parties within the firm (eg internal audit, oversight committee...)
	Record keeping and document retention policies for evidence to support submissions.
Information technology	Restriction of access to systems and data.
	Integrity and resilience of the information processing environment.
	Maintenance and development of systems hardware and software.
	Recovery from processing interruptions.

Table 4 Control objectives for compilers

Area/activity	Compiler should develop control objectives to cover, for example
Governance	Internal systems and controls to calculate the precise data to be submitted (eg keep relevant records relating to the interest rate benchmark submission process) including periodic management review of the processes and controls.
	Establishment of personal responsibilities within the calculation agent, including internal reporting lines and accountability (eg Supervisor of the calculation agents, Oversight Internal Committee, Internal Audit, Compliance and Legal...).
	Potential qualifications and relevant experience required to the compilers/supervisors to perform the role, including requirements for individuals to agree to compliance and confidentiality requirements.
	Policies for regular training of the staff involved in preparing and reviewing the submitted data, including: <ul style="list-style-type: none"> • Regulatory responsibilities. • Their potential role in the benchmark or index calculation. • Methodology used for the calculation. • Unacceptable behaviours. • Inputs to take into consideration when performing the calculation.
	Segregation of duties
	Monitoring for suspicious submissions.
	Disciplinary and/or whistle-blower procedures for attempts to manipulate or failing to report attempted manipulation.
	Mechanisms to periodically review these policies/guidelines.
	Procedures for submitting queries to the contributing firms, and procedures to analyse their responses and implement them accordingly if necessary.
	Requirements for internal and external audits in the process.
Input Data	Completeness and accuracy of the number of submitters contributing to interest rate benchmark as per the guidelines/policy for each benchmark or index.

Ensuring that all required data has been obtained from each submitter and retained centrally for an appropriate period as per the established guidelines/policy.

Reviewing the submitter's data for unusual or unexpected submissions.

Inputting the data into the agreed system to perform the calculation.

Performing reconciliations of the original data received from the Submitters and the data entered in the system/model including documentation and approval of reconciliations.

Data analysis Re-calculations of the arithmetic mean applying the established thresholds for high and low (where relevant).

Review and approval of the final interest rate benchmark by the appropriate level of management prior to publishing.

Information technology Restricted access to systems and data.

Integrity and resilience of the information processing environment.

Resources given to maintenance and development of systems hardware and software.

Recovery from processing interruptions.

5.4 Nature, timing and extent of control tests

Submitter:

135. Evaluation of design of controls includes consideration of whether the submitter's controls are appropriately designed to achieve, as a minimum, the control objectives set out by the submitter.
136. Tests of control procedures over operating effectiveness might include a combination of enquiry of the appropriate personnel, observation of the application of the control procedure, inspection of relevant documentation and re-performance or walkthrough of the control procedure. Enquiry alone does not provide sufficient evidence to support a conclusion about the operating effectiveness of a specific control procedure.
137. Practitioners will need to obtain evidence on:
 - How the control is applied
 - The consistency with which the control was applied
 - By whom the control was applied.
138. Practitioners need to determine whether the controls to be tested depend upon other controls (ie. indirect controls) and whether it is necessary to obtain evidence supporting the effectiveness of those controls. In addition it determines whether the means of selecting items for testing are effective in meeting the objectives of the procedure.
139. Where possible, depending on the systems involved and the sophistication of the systems, the use of 'computer assisted audit techniques' (CAATs) could be developed for re-performance tests. This may enable recalculations of the benchmark or index over a selected period (eg rates versus trades on the day). Such techniques can be used to select sample transactions from key electronic files, to sort transactions with specific characteristics or to test entire populations rather than a sample
140. The period of time over which practitioners perform tests of control procedures varies with the nature of the control procedures being tested and with the frequency of specific control procedures. Tests of operating effectiveness provide evidence that enables the practitioners to report on the entire period covered by the report. Certain control procedures may not have evidence of their operation that can be tested at a later date and accordingly, practitioners test the operating effectiveness of such control procedures at various times throughout the reporting period.
141. Where changes to the control procedures have been implemented to improve them or to address deficiencies during the period covered, the practitioners evaluate the impact which the superseded control procedures had on the control objectives over the period covered. Where a change of control procedures occurs during the period, the practitioners agree with the directors whether it is possible for the control procedures to be tested before and after the change. The description of their tests clearly states which control procedures have been tested.

142. In the case of a reasonable assurance engagement, the sample sizes selected to conduct tests and collate evidence needed will not be different from those determined using the principles applicable for a financial statement audit, because the risk of material misstatement in the management assertion needs to be reduced to a similar acceptably low level.
143. The number of control operations selected as a sample for testing depends on the frequency of performance (for example, quarterly, monthly, daily or multiple times a day), the nature (for example, manual or automated) of control procedures, and the practitioners' assessment of the system (including the risk of failure of the control procedure that is being tested). For example, a control operating monthly may be tested between two and five times. Sample sizes are further considered in appendix three.
144. As the opinion will cover the operating effectiveness of controls throughout each period, sufficient appropriate evidence about the operation of controls during the current period is required. Knowledge of deviations from prior engagements may, however, lead practitioners to increase the extent of testing during the current period.

5.5 Practitioners' substantive procedures for assurance of submission data ('submissions') and compiled data ('compiled benchmark or index')

145. Due to the nature of this work, practitioners must perform a detailed and considered risk assessment on the type of report they are capable of issuing on assurance provided over benchmark or index data. An example report on data is included at the end of this section. All assurance opinions are subject to inherent limitations due to the use of sample testing. Input data submitted to a benchmark or index may be unique in that the practitioner cannot draw a conclusion about all submissions, based on the submissions tested. In these circumstances, it is likely that a reasonable assurance opinion being issued will not be possible unless testing covers an entire population. This should be considered carefully by the practitioner to ensure that any expectations gap, between the work actually undertaken by the practitioner and what the public and other financial information users perceive the assurance provides, is narrowed. Potential expectations gaps can be minimised through well-defined terms of engagement and clear reporting of practitioners' responsibilities against those of the submitter, compiler or administrator, and details of work performed.

Substantive procedures for input data and compiled data

146. Substantive procedures may be required depending on the terms of the engagement between the practitioner and the submitter or compiler and the regulator (if a tripartite agreement). Substantive procedures are required to provide assurance over data. Such procedures can be performed in addition to or instead of control procedures performed over processes.
147. The extent of substantive procedures will vary depending on the frequency with which assurance is being provided and the period to be covered. Depending on the structure of the engagement this could be on a periodic basis, such as annual or more frequently, or at a specified point in time. This is a matter to be decided between the parties to be mutually agreeable in-line with their needs and expectations.

148. Practitioners may be able to leverage the work of the submitter's or compiler's internal audit function if they consider the data outside of the controls processes. Using the work of internal audit is considered in greater detail in section 3.6 of this guidance.
149. Substantive procedures are subject to inherent limitations due to the use of sampling, particularly where there are significant variations in the subject matter tested. This will impact the level of assurance which is considered to be achievable by practitioners. Further guidance on the potential levels of assurance is explained in paragraphs 163 - 168 below.
150. Management override of controls is to be considered by practitioners as part of their substantive work. Management override of controls is considered in section 3.8.

Design of substantive procedures at the compiler

151. The compilation of benchmarks or indices varies greatly, ranging from a simple arithmetical derivation to complex calculations requiring expertise and specialist knowledge of the subject matter.
152. The practitioner must understand the way in which the benchmark or index is calculated using the submissions, but is not required to consider the appropriateness of the calculation or formula.
153. The practitioner will, on a sample basis check the inputs used in the compilation of the information to the data received from the submitters to assess the data being compiled against the criteria set by the benchmark sponsor or compiler. Practitioners determine the sample size and select sample items so as to reduce the sampling risk to an acceptably low level. If applicable based on professional judgement and taking into consideration the nature of the benchmark, practitioners will perform substantive analytical procedures (trend analysis) to give consideration to information (the published benchmark or index) which may be at higher risk of misstatement.
154. In engagements with a compiler, practitioners may recalculate the benchmark or index to ensure it is in accordance with the guidelines and rules as agreed by all parties including the benchmark sponsor and the regulators where applicable. There may be instances where a benchmark or index requires the compiler to exercise judgement as to which inputs are to be used or not used. This will require greater work and professional judgement on the part of practitioners, and be subject to greater inherent risk. Practitioners will consider the compiler's internal policies and procedures in this regard, and ensure that their judgement has been exercised in accordance with these policies and procedures.
155. Sample sizes to be used for substantive work over data will be a matter of judgement for practitioners.

Design of substantive procedures at the submitter

156. Design of substantive procedures will centre on the guidelines and rules set by the compiler (or by the benchmark administrator or sponsor if compilation is outsourced). However if practitioners believe the guidelines and rules are so broad so as to undermine the quality of the benchmark and create an

insurmountable expectations gap they should report as such concerns to the party engaging it and the sponsor or administrator of the benchmark or index. Insufficiently clear and precise guidelines and rules around compilation may prohibit practitioners from being able to provide an opinion on data.

157. In all engagements with a submitter, practitioners will consider submissions made to the benchmark or index to ensure they are made in accordance with the guidelines and rules as laid down by the administrator and agreed by all parties including the regulator where applicable. There may be instances where a benchmark or index requires the submitter to exercise judgement when deriving or calculating a submission. This will require greater work and professional judgement on the part of practitioners, and be subject to greater inherent risk. Practitioners will consider the submitter's internal policies and procedures in this regard, and ensure that their judgement has been exercised in accordance with these policies and procedures.
158. Due to the way in which benchmark or index submissions are calculated there will be differences in the reliability of submissions on a day to day basis.
159. In order to assist practitioners in applying professional judgement to what is considered to be sufficient and appropriate evidence regarding a submission it may be helpful to group submissions into broad categories. A practitioner can then devise a test to ensure that management correctly categorises their submissions. This could be achieved through detailed testing, the sample size to be determined in accordance with the practitioners' assessment of risk. It would be a matter of professional judgement for practitioners to decide what is appropriately categorised in line with the guidelines and rules set down by the benchmark or index administrator, sponsor or compiler.
160. The categories themselves have the potential for separate disclosure within the assurance report. The practitioner should consider separately commenting on each of the categories as each category requires a different level of assurance to be provided as the assurance is reliant on the level of evidence obtained.
161. It may be useful to consider the submissions in terms of the following broad categories:

Level 1

162. 'Level 1' submissions are based on actual current trade data without management adjustment or any degree of estimation. In order to validate such submissions practitioners will be able to vouch the submission to underlying source data. For the submission to be considered level one, current trade data being utilised must be within an appropriate period of the submission date or time depending on the frequency of publication of the benchmark or index, with no adjustments made by the submitter. It is not expected that there will generally be a high proportion of level one submissions where the benchmark rules are complex, for example like LIBOR.
163. Practitioners should perform testing of trade data surrounding the trade(s) from which the submission data was based ('cut-off') to ensure that it was valid and in accordance with the guidelines and rules laid down by the

administrator. This testing provides evidence of the quality of data being submitted.

164. Practitioners should consider the possibility that, if all submissions during the period were correctly categorised as level 1, there is potential for a reasonable assurance opinion to be provided.

Level 2

165. A level two submission is where it is based on trade data or information which is consistent with the benchmark or index guidelines and rules, but deviates on specific basis, for example, size of trade, date of the trade or counterparty or information from an independent third party such as broker. Practitioners will be required to exercise a greater level of professional judgement in such scenarios when considering the data or adjustments made to the data by management when calculating the submission. Practitioners could obtain evidence of recent trade data as observed in the marketplace, transactions in other related markets, third party offers received in the market or related markets.
166. Depending upon the degree of professional judgement being applied by, and the evidence available to, the submitter and the practitioner, the practitioner may not have the potential to provide a reasonable level of assurance over level two type submissions. In this case, the report should describe the process undertaken by the submitter and the judgements applied in forming the estimate. Practitioners will only be able to comment on the reasonableness of the judgement in light of the process performed by management.

Level 3

167. A level three submission is made to a benchmark or index when there is little or no observable evidence entirely, for example when a market has dried up, but the benchmark or index continues to be published. The submission is therefore based largely or entirely on management judgement and estimates in accordance with the guidelines and rules. Assurance may be limited to management's processes in making their judgements and not on judgements and estimates themselves.

5.6 Quality of evidence

168. As with controls based procedures, the same principles apply in evidence gathering for an assurance engagement as for a financial statement audit. The nature of testing would include a variety of testing to be performed by practitioners to corroborate submissions or compilations with appropriate evidence.
169. Considerations in determining a selection of items for testing include the reliability of the evidence the test is expected to produce. For example:
- Evidence is more reliable when it is obtained from independent sources outside the organisation (ie, externally verifiable trade data).
 - Evidence that is generated internally is more reliable when the related controls applied by the organisation which govern the processes surround the production of that data are effective.

- Evidence is more reliable where obtained directly by the practitioner eg, direct sight of corroborative evidence or independent recalculation and verification.
- Evidence is more reliable when formally documented, whether by paper, electronic, or other medium eg a timely written record of a meeting is more reliable than a subsequent oral representation of the matters discussed.
- Evidence provided by original documents is more reliable than evidence provided by photocopies or scanned documents.

170. The practitioner will need to use judgement to decide on the procedures that will provide sufficient, appropriate evidence in the context of the assurance engagement.

5.7 Submitter representations

171. As part of the substantive procedures the practitioner will obtain the following written representations from the individual submitter as at the date of the assurance report and retain a signed copy on the working papers:

- Management's evaluation of the subject matter (submissions) against the identified criteria.
- Acknowledgement of responsibility for the subject matter.
- Confirmation that all the supporting documentation and information in respect of the subject matter has been made available.
- Confirmation that the submitter has not been subjected to pressure or undue influence with regards to submissions made.

172. Additional representations may be requested, such as:

- Appropriateness of assumptions used in judgements and estimates where this is no trading to support submissions as per the guidance established by the administrator of the benchmark.
- Knowledge of any instances of non-compliance with laws and regulations or uncorrected errors that may affect the rate.
- Knowledge of any acts by management or the traders involved that could adversely affect the process or the achievement of the control objectives.
- Design deficiencies in controls and instances when controls have not operated as described.
- Any subsequent events to the period covered up to the date of the service auditor's report that could have a significant effect.

173. Practitioners should consider whether those making the representations can be expected to be well informed on the particular matters as well as obtaining corroborative evidence with regards to the nature of the submitter's representations made.

174. Additional representations should be obtained as necessary in line with specific regulatory and or legal requirements.

5.8 Transactions either side of the submission date or time

175. Given the nature of the assurance work under consideration it is likely that practitioners will be required to give consideration to transactions either side of the submission date or time. Should practitioners find evidence through this testing which could cause them to doubt the reliability of the submission made, it should be dealt with in accordance with the governance processes surrounding the benchmark or index.
176. Practitioners should also design appropriate procedures to corroborate submissions after publication of the benchmark or index and analyse variances, for example, if information is available by comparing the input data of a submitter against input data of other submitters.
177. Practitioners will consider potential adjustments which are made to future calculations by management following the review process.
178. Practitioners will assess and document the impact of the identified subsequent events on the report. Further guidance is provided in the section on reporting overall findings below.

5.9 Example assurance reports

179. When providing an assurance report practitioners must have regard to specific regulatory requirements or requirements of the administrator pertaining to that particular benchmark. We are aware that the UK Financial Conduct Authority (FCA) may adopt specific reporting language in relation to LIBOR submission assurance reporting and we encourage practitioners to give this special consideration and be aware of evolving regulatory requirements.

Example Limited Assurance Report on Submission Data

Independent practitioner’s assurance report to the directors of [name of entity] in respect of the submission of data to [name of compiler/administrator] for use in [name of benchmark or index] as at [date]

We have carried out a limited assurance engagement in accordance with the terms of our engagement letter dated [x] and further to the requirements of the [regulator], about whether the submissions made during the period XX/XX/XX to XX/XX/XX have been made in accordance with the guidelines and rules laid down by the [benchmark or index administrator/compiler].

This report is made solely to [submitter] [and [compiler/administrator/regulator] in accordance with the terms of our engagement letter. Our work has been undertaken so that we might state to the [submitter] [and [compiler/administrator/regulator] those matters we are required to state in an independent assurance report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the [submitter] [and [compiler/administrator/regulator]], for our work, for this report, or for the conclusion we have formed, save where expressly agreed in writing

Respective responsibilities of [submitter] and the Practitioner

The submitter is responsible, under the requirements of the arrangements governing their participation in the [benchmark or index] dated [x], for ensuring that submissions are made in accordance with the guidelines and rules laid down by the [benchmark or index] [administrator/compiler/regulator].

Our responsibilities for this engagement are established in the United Kingdom⁹ by our profession’s ethical guidance and are to undertake a limited assurance engagement and report in accordance with our engagement letter and the requirements of [regulation]. We report to you whether anything has come to our attention in carrying out our work (which is further described below) which suggests that in all material respects, submissions made during the period XX/XX/XX to XX/XX/XX have not been made in accordance with the guidelines and rules laid down by the [benchmark or index] [administrator/compiler/sponsor].

Our approach

We conducted our engagement in accordance with International Standard on Assurance Engagements 3000 issued by the IAASB and with regard to TECH 02/14 FSF issued by ICAEW [and the requirements of [regulator]]. We performed a limited assurance engagement as defined in the IAASB’s International Framework for Assurance Engagements and in accordance with TECH 02/FSF.

The objective of a limited assurance engagement is to perform such procedures on a sample basis as to obtain information and explanations which we consider necessary in order to provide us with sufficient appropriate evidence to express our conclusion on submissions being made in accordance with the guidelines and rules being laid down by the [benchmark or index] [administrator/compiler/sponsor].

⁹ This does not preclude users of this guidance from performing engagements outside of the United Kingdom.

Our engagement includes examination, on a test basis, of evidence relevant to the submissions made during the period defined above and their compliance with the aforementioned rules and guidelines.

[Summary of work undertaken, demonstrating application of the principles outlined in this guidance. See 'Performance of work and evidence to be sought by the practitioner).]

Inherent Limitations

We will report by exception if we are of the opinion, based on our professional judgement and experience, that the guidelines and rules laid down by the [benchmark or index] [administrator/compiler/regulator] are insufficiently clear and precise. Our ability to form a conclusion on submissions made to the [benchmark or index] is dependent upon there being guidelines and rules which are not so broad as to undermine the quality of the [benchmark or index].

A limited assurance engagement is more limited in scope than a reasonable assurance engagement and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in a reasonable assurance engagement. Accordingly, we do not express a positive opinion.

[Include basis for qualification paragraph where relevant.]

Conclusion

Based on the results of our procedures, [except for the matters described in the basis for qualifications paragraph above] nothing has come to our attention to indicate that in all material respects the submissions made during the period [XX to XX] have not been made in accordance with the guidelines and rules laid down by the [benchmark or index] [administrator/compiler/regulator].

[Matter 1:
Matter 2:]

[Name of firm]
Chartered Accountants
[Address]
[Date]

Example Reasonable Assurance Report on Compilation Data

Independent practitioner's assurance report to the directors of [name of entity] in respect of the compilation of [name of benchmark or index] as at [date]

We have carried out a reasonable assurance engagement in accordance with the terms of our engagement letter dated [X]

This report is made solely to [submitter] [and [regulator]] in accordance with the terms of our engagement letter. Our work has been undertaken so that we might state to the [submitter] [and [regulator]] those matters we are required to state in an independent assurance report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the [submitter] [and [regulator]] for our work, for this report, or for the conclusion we have formed, save where expressly agreed in writing..

Respective responsibilities of the [compiler] and the practitioner

As directors of the company, you are responsible for ensuring that the company compiles the [benchmark or index] data in accordance with [insert framework].

Our responsibilities for this engagement are established in the United Kingdom¹⁰ by our profession's ethical guidance and are to undertake a reasonable assurance engagement on the compilation of the [benchmark or index] data based on the submissions received and report in accordance with our engagement letter and the requirements of [regulation]. We report an opinion of on whether the [subject matter] has been prepared in accordance with our engagement letter, [the framework] [and the requirements of regulation] in all material respects during the period [XX to XX].

Our approach

We conducted our engagement in accordance with International Standard on Assurance Engagements 3000 and with regard to TECH 02/04FSF issued by ICAEW [and the requirements of [regulator]]. We performed a reasonable assurance engagement as defined in the IAASB's International Framework for Assurance Engagements and in accordance with TECH 02/FSF.

For the purpose of the engagement we have been provided by the directors with a schedule showing the company's compilation of benchmark or index data, which is attached as Appendix [] to this letter (the 'schedule'). The directors of the company remain solely responsible for the schedule.

The objective of a reasonable assurance engagement is to perform such procedures [on a sample basis] as to obtain information and explanations which we consider necessary in order to provide us with sufficient appropriate evidence to express a positive conclusion on [the schedule].

Inherent limitations

[The [benchmark or index] data used to compile this report has been obtained from returns submitted to [name of entity]. [Name of entity] has not tested the [benchmark

¹⁰ This does not preclude users of this guidance from performing engagements outside of the United Kingdom.

or index] data submitted and has relied on the accuracy of the data provided by management.

Conclusion

In our opinion, based on the submissions received [the schedule] has been prepared, in all material respects, in accordance with [the framework].

or

Except for [detail minor exceptions noted], in our opinion [the schedule] has been prepared, in all material aspects, in accordance with [the framework].

or

In our opinion [the schedule] has not been prepared in all material respects, in accordance with [the framework].

[insert details of issues leading to qualification of opinion]

Name of firm

Chartered Accountants

Location

Date

6 ASSURANCE ON IOSCO OIL PRA PRINCIPLES

This section provides potential considerations for the assurance practitioner when assessing whether to take on an engagement concerning adherence to certain principles by a price reporting agency and when designing procedures to allow them to perform the required work so as to be able to provide the requisite level of assurance.

180. This section considers the provision of assurance on a statement by a price reporting agency as to their adherence with the International Organisation of Securities Commissions (IOSCO) Principles for Oil Price Reporting Agencies (PRAs).
181. A practitioner will expect that in order to perform such an engagement, a statement of how the PRA has adhered (or not) to the IOSCO principles will be required. This serves the purpose of translating the principles into suitable criteria which is able to be subject to assurance.
182. This statement may be a longer form report supplied by the PRA which accompanies the assurance report, a table which is attached to the assurance report or another form as agreed between the PRA and practitioner. Appendix 1 to the example assurance report in this section illustrates how this statement might be presented.
183. Where a PRA does not supply such a statement of their adherence, a practitioner must consider whether to accept the engagement, and if so set out a response which shows their understanding of how the principles have been adhered to.
184. The example limited assurance report is accompanied by two appendices:
 - (i) The IOSCO Principles, an illustrative response that a PRA might make to address those principles and example procedures that a practitioner might perform in order to assess the management's statement; and
 - (ii) The list of price assessments/benchmarks to which the PRA's statement relates.
185. The illustrative PRA response and example assurance procedures provided are intended only to show how a report is presented and not to provide guidance on how a PRA should respond to the IOSCO principle, nor to act as a procedures manual for practitioners. Practitioners should use professional judgement and reasonableness when planning and performing an engagement, as articulated by IOSCO in their consideration of the scope and application of the principles;

“Although the principles articulate uniform expectations, the principles do not contemplate a “one-size-fits-all” method of implementation to achieve those expectations. For example, differences in methodological approach or in the specific measures implemented by PRAs to obtain bona fide data and other information are consistent with these principles, as long as the approaches and measures meet the objectives set out in the principles.

Nothing in these provisions is intended to restrict a PRA from adopting its own unique methodologies or from adapting their methodologies to changing market conditions.

Where certain measures are called for, a “reasonableness” standard is contemplated, including for example, with respect to the length of any explanations that are called for in daily assessments.”¹¹

186. As stated in the example assurance report, the validity and reliability of price assessments is dependent on both (i) those who submit information to the PRAs, for which the submitters are solely responsible, and (ii) the procedures performed by the PRAs to analyse that information.
187. Submitters of information are outside of the scope of the IOSCO principles. While the PRA may be expected to have processes to determine which information is used as inputs and the practitioner’s processes would cover those processes at the PRA, the processes used by and information provided by any submitter are outside the scope of an engagement to provide assurance on adherence with the IOSCO principles for oil PRAs.
188. Practitioners are also reminded of the ICAEW’s guidance in AAF 04/06 ‘Assurance engagements: Management of risk and liability’.
189. This does not preclude the PRA and the practitioner from tailoring the scope of an engagement to meet their specific requirements (for example, performance of a reasonable assurance engagement). Professional judgement is required to ensure that the structure of the engagement and extent of work performed meet the needs of the parties. The guidance on procedures in Appendix 1 to the example assurance report below is intended to be of illustrative assistance only in achieving this.

¹¹ IOSCO - Principles for Oil Price Reporting Agencies, pg 11 available from: www.iosco.org/library/pubdocs/pdf/IOSCOPD391.pdf.

Example Limited Assurance Report

Independent Practitioner’s Assurance Report to the directors of [Company name] (the “Company”) in respect of the Company’s statement of adherence to the Principles for Oil Price Reporting Agencies as at [date]

We have carried out a limited assurance engagement in respect of the Company’s detailed statement of adherence to the Principles for Oil Price Reporting Agencies published by the International Organization of Securities Commissions (excluding principle 2.20, the “PRA Principles”) for the price reports [list price reports]/ [listed in Appendix 2] [as at [date]¹²/during the period [date] to [date]].

This report is made solely to the Company in connection with principle 2.21 of the PRA Principles. Our work has been undertaken so that we might state to the directors those matters we are required to state in an independent assurance report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the directors and the Company for our work, for this report, or for the conclusion we have formed, save where expressly agreed in writing.

Respective responsibilities of the Company and the Practitioner

The directors are responsible for ensuring that the Company designs, implements and monitors compliance with policies and procedures that adhere with the PRA Principles. They are also responsible for preparing the statement of adherence to the PRA Principles, [attached in Appendix 1].

Our responsibilities for this engagement are established in the United Kingdom¹³ by our profession’s ethical guidance and are to undertake a limited assurance engagement and report in connection with the directors’ statement of adherence to the PRA Principles as at [date]. We report to you whether anything has come to our attention in carrying out our work (which is further described below) which suggests that the Company’s detailed statement of its policies and processes in respect of its adherence to the PRA Principles is not fairly stated, in all material respects.

Our approach

We conducted our engagement in accordance with International Standard on Assurance Engagements 3000 issued by the IAASB and with regard to TECH 02/14 FSF issued by ICAEW. We performed a limited assurance engagement as defined in the IAASB’s International Framework for Assurance Engagements and in accordance with TECH 02/FSF.

The objective of a limited assurance engagement is to perform such procedures on a sample basis so as to obtain information and explanations which we consider necessary in order to provide us with sufficient appropriate evidence to express our conclusion. The extent of procedures performed is more limited than for a reasonable assurance engagement, and therefore less assurance is obtained.

Our engagement includes examination, on a test basis, of evidence relevant to assessing the Company’s statement of their adherence to the PRA Principles, excluding Principle 2.20. Our procedures are described in Appendix 1.

¹² The ‘as at’ option for the engagement is included for the purposes of the year one engagement where PRAs will have been transitioning to full adherence to the principles and the practitioner will make their conclusion based on a single point in time. In subsequent engagements a practitioner may be able to conclude on a PRA’s adherence with the principles over a specified period. Where a PRA takes an incremental approach to adherence, the practitioner can consider this on a principle by principle basis and would document it as such in their report.

¹³ This does not preclude users of this guidance from performing engagements outside of the United Kingdom given the international status of the principles.

Our procedures were not sufficient to enable us to conclude on the design effectiveness or operation¹⁴ of policies or controls in place to address the PRA Principles and, accordingly, we do not express an opinion thereon.

Inherent limitations

The validity and reliability of price assessments is dependent on both (i) those who submit information to the PRAs, for which the submitters are solely responsible, and (ii) the procedures performed by the PRAs to analyse that information. Submitters of information are not subject to the PRA Principles and we are unable to comment on source data submitted by those parties.

Control procedures designed to address specified control objectives are subject to inherent limitations and, accordingly, errors or irregularities may occur and not be detected. Such control procedures cannot guarantee protection against (among other things) fraudulent collusion especially on the part of those holding positions of authority or trust. Furthermore, our conclusion is based on historical information and the projection of any information or conclusions in the attached report to any future periods would be inappropriate.

[Include Basis for Qualification paragraph, where relevant]

Conclusion

Based on the results of our procedures, *[except for the matters described in the Basis for Qualification paragraph above,]* nothing has come to our attention to indicate that Company's statement of adherence to the PRA principles as at *[date]* is not fairly stated, in all material respects.

[Name of firm]

Chartered Accountants

[Office]

[Date]

¹⁴ This paragraph may be needed where the design or documentation of the control system is insufficient through the period to provide sufficient evidence on its effectiveness or operation, for example where the system has changed during the period. This may be particularly relevant for a limited assurance opinion and it does not represent a qualification of a limited assurance opinion. If it is not, however, possible for the practitioners to design and undertake procedures to allow them to conclude on these matters, it may not be possible to provide an unqualified reasonable assurance opinion.

APPENDIX 1 TO EXAMPLE LIMITED ASSURANCE REPORT

IOSCO Principle	Illustrative PRA Detailed Response	Illustrative Practitioner’s Response
<p><i>Note to users of this guidance: the illustrative responses of PRAs and assurance practitioners provided herein are purely for illustrative purposes. Nothing contained within is intended to dictate or influence the way in which a PRA responds to the IOSCO principles, or the way in which a practitioner plans and performs the work required to reach their conclusion.</i></p>		
<p>1. Quality and Integrity of PRA Methodologies</p>		
<p>Methodology</p>		
<p>1.1 A PRA should formalize, document, and make public any methodology that it uses for a price assessment.</p>	<p>The [Board of Directors] approved [PRA]’s price assessment methodology on [date] and that methodology is available on our website at [insert address].</p>	<p>For each benchmark in scope, we have obtained a copy of [PRA’s] methodology that is used for price assessments, confirmed that it has been formalized as described in [Example PRA’s] response and have confirmed that it has been made publicly available on <i>[state method [Example PRA] uses to publish the methodology e.g. through the website]</i>.</p>
<p>1.2 A methodology should aim to achieve price assessments which are reliable indicators of oil market values, free from distortion and representative of the particular market to which they relate.</p>	<p>Refer responses in 1.3 below.</p>	<p>We have considered the depth and breadth of training, processes and review mechanisms amongst others for evidence to support the aims of the price assessments. See also responses to 1.3 to 1.6 below <i>[and any exceptions identified in those responses]</i>.</p>
<p>1.3 At a minimum, a methodology should contain and describe: a) All criteria and procedures that are used to develop an assessment including how the PRA uses the specific volume,</p>	<p>[PRA’s] methodologies contain and describe the following: a) All relevant criteria and procedures that are used to develop an assessment, including how they use;</p>	<p>For each benchmark in scope, we have obtained a copy of the methodology and have confirmed it is as described within the PRA’s response and includes at a minimum the requirements in principle 1.3 <i>[with the exception of – state any exceptions]</i>.</p>

APPENDIX 1 TO EXAMPLE LIMITED ASSURANCE REPORT

IOSCO Principle	Illustrative PRA Detailed Response	Illustrative Practitioner’s Response
<p>concluded and reported transactions, bids, offers and any other market information (collectively ‘market data’) in its assessment and/or assessment time periods (e.g., windows), why a specific reference unit is used (e.g., barrels of oil), how the PRA collects such market data, the guidelines that control the exercise of judgment by assessors and any other information, such as assumptions, models and/or extrapolation from collected data that are considered in making an assessment;</p> <p>b) Its procedures and practices that are designed to ensure consistency between its assessors in exercising their judgment;</p> <p>c) The relative importance that generally will be assigned to each criterion used in forming the price assessment (i.e., type of market data used, type of criterion used to guide judgement). [This is not intended to restrict the specific application of the relevant methodology but is to ensure the quality and integrity of the price assessment.]</p> <p>d) Criteria that identify the minimum amount</p>	<ul style="list-style-type: none"> • the specified volume • concluded and reported transactions, • bids, offers and • any other market information (collectively ‘market data’) in its assessment and/or assessment time periods. <p>[PRA’s] methodologies explain:</p> <ul style="list-style-type: none"> • why specific reference units are used, • how we collect market data, • the guidelines that control the exercise of judgment by reporters¹⁵ and • any other information considered in making an assessment; <p>b) [PRA] has in place training requirements and assessor peer and hierarchical review guidelines in order to seek consistency in reporters exercising their judgement.</p>	

¹⁵ The word ‘reporter’ is consistent with vocabulary used by the PRAs when describing their own business and taken to be equivalent to ‘assessor’ as used by IOSCO in this context. As the practitioner is assuring the fair presentation of the PRA’s detailed description of how they have adhered to the IOSCO principles the vocabulary used by the PRA will be reflected by the practitioner.

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<p>of transaction data (i.e., completed transactions) required for a particular price assessment (the “transaction data threshold”). If no such threshold exists, the reasons why a minimum threshold is not established should be explained, including procedures where there is no transaction data;</p> <p>e) Criteria that address the assessment periods where the submitted data fall below the methodology’s recommended transaction data threshold or the requisite PRA’s quality standards, including any alternative methods of assessment (e.g., theoretical estimation models). Those criteria should explain the procedures used where no transaction data exists;</p> <p>f) Criteria for timeliness of market data submissions and the means for such submissions (e.g., electronically, via telephone, etc.);</p> <p>g) Criteria and procedures that address assessment periods where one or more reporting entity submits market data that constitute a significant proportion of the total data upon which the assessment is based (i.e., key submitter dependency). The PRA should also define in its criteria and</p>	<p>c) [PRA]’s methodology lists the criterion used in the relevant price assessment in order of importance.</p> <p>d) [PRA]’s methodology states the transaction data threshold for the relevant benchmark, or an explanation as to why there is no threshold.</p> <p>e) [PRA]’s methodology details steps to be followed by the assessor where there is insufficient market data to meet the transaction data threshold for the relevant benchmark.</p> <p>f) [PRA]’s methodology states that data must be received [electronically or via phone] [between the hours of X and X GMT] in order to be accepted for the current [day’s] price assessment.</p> <p>g) [PRA]’s methodology defines a ‘significant’ proportion of assessment data as [...] and defines review processes where there is a significant individual provider of data.</p> <p>h) [PRA]’s methodology includes guidance for reporters on exclusion of transaction data, as well as review requirements for judgements taken in such exclusion.</p>	

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<p>procedures for what constitutes a “significant proportion” for each price assessment;</p> <p>h) Criteria according to which transaction data may be excluded from a price assessment.</p>		
<p>1.4 A PRA should describe and publish the:</p> <p>a) Rationale for adopting a particular methodology, including any price adjustment techniques and a justification of why the time period or window within which market data is accepted is a reliable indicator of physical market values;</p> <p>b) Procedure for internal review and approval of a given methodology, as well as the frequency of this review;</p> <p>c) Procedure for external review of a given methodology, including the procedures to gain market acceptance of the methodology through consultation with stakeholders on important changes to their price assessment processes.</p>	<p>[PRA]’s [methodology description] is published [on the website] and includes;</p> <p>a) Why the particular methodology is considered appropriate.</p> <p>b) The review process which applies to the methodology.</p> <p>c) The process for external stakeholders being able to review and feed into the new or changed methodology is published on [PRA]’s website under [Methodology Review Policy].</p>	<p>For each benchmark in scope, we have obtained a copy of [PRA]’s policies and procedures and confirm that they are as stated in the PRA response as set out to include the requirements in principle 1.4 <i>[with the exception of – state any exceptions noted if applicable]</i>.</p> <p>We have confirmed that the requirements of principle 1.4 have been made publicly available via the stated medium <i>[state method [PRA] uses to publish the methodology e.g. through the website]</i>.</p>

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Changes to a Methodology		
<p>1.5 A PRA should adopt and make public to stakeholders explicit procedures and rationale of any proposed material¹⁶ change in its methodology. Those procedures should be consistent with the overriding objective that a PRA must ensure the continued integrity of its price assessments and implement changes for good order of the particular market to which such changes relate. Such procedures should:</p> <p>a) Provide advance notice in a clear timeframe that gives stakeholders sufficient opportunity to analyse and comment on the impact of such proposed changes, having regard to the PRA’s assessment of the overall circumstances;</p> <p>b) Provide for stakeholders’ comments, and the PRA’s response to those comments, to be made accessible to all market stakeholders after any given consultation period, except where the commenter has requested confidentiality.</p>	<p>[PRA]’s procedures for dealing with material changes to a methodology form part of the [Methodology Review Policy].</p> <p>a) [PRA] informs stakeholders of the potential change to the relevant benchmark and states the period that the consultation is open until. Stakeholders are encouraged to comment via [Example PRA’s website].</p> <p>b) [PRA] publishes non-confidential responses to material change consultations received on the website for a period of [X] working days or until superseded.</p>	<p><i>[Where there have been no material changes to the methodology in the period under review:</i></p> <p>Through discussions with the [PRA] and a review of the [PRA]’s records, we have not identified any material changes to the methodology for each benchmark in scope in the period under review.</p> <p><i>Or where there are material changes to the methodology in the period:</i></p> <p>For [all / a sample¹⁷ of X] material methodology changes made in the period, we have obtained a copy of the supporting documentation and confirmed that the requirements of the policies as described in the PRA response have been met <i>[with the exception of – state any exceptions noted if applicable].</i></p>

¹⁶ Materiality should be defined by the PRA taking into consideration what would impact the decision making of their customers.

¹⁷ Practitioners should refer to existing ICAEW guidance on type and extent of testing when considering an appropriate sample size.

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<p>1.6 A PRA should engage in the routine¹⁸ examination of its methodologies for the purpose of ensuring that they reliably reflect the physical market under assessment. This should include a process for taking into account the views of relevant stakeholders.</p>	<p>[PRA]’s [Methodology Review Policy] states that methodologies are reviewed at least [annually] or when there is a material change to the physical market being assessed. The policy also sets out that stakeholders should be informed of potential changes [where material] and given a period of [X] working days to submit comments via [PRA’s website].</p>	<p>We have obtained a copy of the [PRA]’s policies and procedures and confirmed that it covers the requirements of principle 1.6 <i>[with the exception of – state any exceptions noted if applicable]</i>.</p> <p>From discussions with the Company, routine examination of the methodologies occurred on <i>[include dates for each benchmark as appropriate]</i>.</p>
Quality and Integrity of Price Assessments		
<p>2.1 A PRA should take measures that are intended to ensure the quality and integrity of the price assessment process.</p>	<p>[PRA]’s [methodology/policy] outlines measures intended to insure the quality and integrity of the price assessment process.</p>	<p>See responses to 2.2 to 2.20 below <i>[and any exceptions identified in those responses]</i>.</p>
Market Data used in Price Assessments		
<p>2.2 A PRA should:</p> <p>a) Specify with particularity the criteria that define the physical commodity that is the subject of a particular methodology;</p> <p>b) Utilize its market data, giving priority in the following order, where consistent with the PRA’s approach to ensuring the quality and integrity of a price assessment:</p>	<p>a) [PRA]’s methodology for [physical commodity] specifies the following criteria:</p> <ul style="list-style-type: none"> • Type of product • Location • Delivery date range [...] <p>b) [PRA]’s [Methodology/policy] requires</p>	<p>In respect of principles 2.2 and 2.3 below, for each benchmark within scope, we have selected a sample¹⁹ of [X] price assessments made and performed the following:</p> <p>Obtained a copy of [PRA]’s policies and procedures in this area and other supporting documentation for price</p>

¹⁸ What is considered to be ‘routine’ should be clearly defined by the PRA taking into consideration the nature of the price being assessed, the volume of users, market volatility and other such factors relevant to the effective assessment of the particular price.

¹⁹ Practitioners should refer to existing ICAEW guidance on type and extent of testing when considering an appropriate sample size.

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<p>1. Concluded and reported transactions; 2. Bids and offers; 3. Other market information.</p> <p>Nothing in this provision is intended to restrict a PRA’s flexibility in using market data consistent with its methodologies. However, if concluded transactions are not given priority, the reasons should be explained as called for in 2.3(b)</p> <p>c) Employ sufficient measures designed to use market data submitted and considered in a price assessment, which are bona fide, meaning that the parties submitting the market data have executed, or are prepared to execute, transactions generating such market data and the concluded transactions were executed at arms-length from each other. Particular attention should be made in this regard to inter-affiliate transactions;</p> <p>d) Establish and employ procedures to identify anomalous (i.e., in the context of a PRA’s methodology) or suspicious transaction data and keep records of decisions to exclude transaction data from the PRA’s price assessment process.</p> <p>e) Encourage parties that submit any</p>	<p>that where not counter to the methodology reporters give priority in the following order to:</p> <p>1. Concluded and reported transactions; 2. Bids and offers; 3. Other market information.</p> <p>c) [PRA]’s methodology outlines measures to be taken by assessor designed to assess the validity of market data. Such measures include:</p> <ul style="list-style-type: none"> • Cross verification • Checking the identities of sources • [...] <p>d) [PRA]’s methodology includes procedures to identify anomalous data and guidance for reporters on dealing with excluded data.</p> <p>e) [Example PRA] has standards for the provision of information from market sources. These standards are contained in the relevant market methodology.</p> <p>Within its policy documents [Example PRA] states to known and potential submitters their expectations for submitters to provide</p>	<p>assessments made;</p> <p>Performed a walk through test to confirm the policies and methodology in the PRA response have been complied with;</p> <p>Confirmed that the minimum requirements for each methodology and price assessment as set out in the principles in section 2.3 has been included and has been published.</p> <p>[The following exceptions were noted: <i>state any exceptions noted if applicable.</i>]</p>

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<p>market data (“submitters”) to submit all of their market data that falls within the PRA’s criteria for that assessment. PRAs should seek, so far as they are able and is reasonable, that data submitted are representative of the submitters’ actual concluded transactions.</p> <p>f) Employ a system of appropriate measures so that, to the extent possible, submitters comply with the PRA’s applicable quality and integrity standards for market data.</p>	<p>all of their market data and that this data is representative of the submitters actual concluded transactions.</p> <p>The relevant [policy/methodology] is presented to known submitters [...].f) [PRA] uses a range of policies to ensure that, to the extent possible; its quality and integrity standards for market data are followed by its sources. These include:</p> <p>Methodologies that require cross validation of data.</p> <p>[Internal audit/compliance...] check that validations are consistently performed.</p> <p>The relevant [policy/methodology] is presented to known submitters [...].Methodologies are freely available on the website and make clear the expectation that sources only provide data which meets its criteria.</p>	
<p>2.3 A PRA should describe and publish with each assessment, to the extent reasonable without delaying a price reporting deadline:</p> <p>a) A concise explanation, sufficient to facilitate a PRA subscriber’s or market authority’s ability to understand how the</p>	<p>a) and b) [PRA]’s [Publication Policy] requires, where reasonable, publication of high level explanations of how that [day’s] assessment was developed, and the extent and basis of any judgements taken.</p>	<p>Confirmed that the minimum requirements for each methodology and price assessment as set out in section 2.3 has been included and has been published as described in the PRA response.</p>

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<p>assessment was developed, including, at a minimum, the size and liquidity of the physical market being assessed (meaning the number and volume of transactions submitted), the range and average volume and range and average of price, and indicative percentages of each type of market data that have been considered in an assessment; terms referring to the pricing methodology should be included (e.g., “transaction-based”, “spread-based” or interpolated/extrapolated”);</p> <p>b) A concise explanation of the extent to which and the basis upon which judgment (e.g., exclusions of data which otherwise conformed to the requirements of the relevant methodology for that assessment, basing prices on spreads or interpolation/extrapolation, or weighting bids or offers higher than concluded transactions etc.), if any, was used in establishing an assessment.</p>		
Integrity of the Reporting Process		
<p>2.4 A PRA should:</p> <p>a) Specify the criteria that define who may submit market data to the PRA;</p> <p>b) Have quality control procedures to</p>	<p>a) [PRA] outlines in its [methodology/policy] [...] may submit.</p> <p>b) [PRA]’s [methodology/policy] sets out guidance for reporters to assist them in</p>	<p>For each benchmark in scope, we have obtained a copy of [Example PRA]’s policies and procedures in respect of the integrity of the reporting process and have confirmed that they include the requirements in</p>

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<p>evaluate the identity of a submitter and any employee(s) of a submitter who report market data and the authorization of such person(s) to report market data on behalf of a submitter;</p> <p>c) Specify the criteria applied to employees of a submitter who are permitted to submit market data to a PRA on behalf of a submitter; encourage submitters to submit transaction data from back office functions and seek corroborating data from other sources where transaction data is received directly from a trader;</p> <p>d) Implement internal controls and written procedures to identify communications between submitters and assessors that attempt to influence an assessment for the benefit of any trading position (whether of the submitter, its employees or any third party), attempt to cause an assessor to violate the PRA's rules or guidelines or identify submitters that engage in a pattern of submitting anomalous or suspicious transaction data. Procedures should include provision for escalation by the PRA of inquiry within the submitter’s company.</p>	<p>cross verifying data supplied to seek assurance that the submitter is authorized.</p> <p>c) [PRA] includes in its [methodology/policy] and in its methodology the criteria applied to its sources.</p> <p>Such criterion requires individuals who provide information to be identified to the reporter as in possession of relevant market data. Such data will only be accepted in line with cross verification practices as stated in the methodology and [Methodology/policy].</p> <p>The [Methodology/policy] requires that reporters make reasonable efforts to identify sources with the aim of ensuring the integrity of data received.</p> <p>The [Methodology/policy] and methodology has criteria that states where possible the submitters should provide information from back office functions and requires the PRA reporters to corroborate data prior to use in an assessment.</p> <p>d) [PRA]’s [Methodology/policy] details the relevant actions reporters should take should they feel subject to an</p>	<p>principle 2.4.</p> <p>We have performed a walk through test for a sample²⁰ of [X] instances to confirm that the policies and procedures are in place during the period under review.</p> <p>[The following exceptions were noted: <i>state any exceptions noted if applicable.</i>]</p>

²⁰ Practitioners should refer to existing ICAEW guidance on type and extent of testing when considering an appropriate sample size.

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<p>Controls should include cross-checking market indicators to validate submitted information.</p>	<p>inappropriate attempt to influence an assessment. The policy also offers guidance to reviews on signs of potential undue influence.</p>	
Assessors		
<p>2.5 A PRA should adopt and have explicit internal rules and guidelines for selecting assessors, including their minimum level of training, experience and skills, as well as the process for periodic review of their competence.</p>	<p>[PRA]’s [assessor job specification] details minimum levels of experience and skills required to be an assessor.</p> <p>[PRA]’s [Human Resources Policy - Reporters] details training requirements for individuals and the frequency with which reporters must be subject to review.</p>	<p>We have obtained a copy of [PRA]’s policies and procedures in respect of reporters and assessments and have confirmed that they are as described in the response which includes the requirements in principles 2.5, 2.6 and 2.7.</p>
<p>2.6 A PRA should have arrangements to ensure its assessments can be produced on a consistent and regular basis.</p>	<p>[PRA]’s methodologies and internal methodology notes provide granular detail of how an assessment is made. The methodology details review policies which seek to ensure consistency between reporters.</p>	<p>We have performed walk through tests as set out below:</p> <p>For a sample of [X] reporters recruited in the period, we have obtained supporting documentation to confirm the requirements of principle 2.5 have been met.</p>
<p>2.7 A PRA should maintain continuity and succession planning in respect of its assessors in order to ensure that assessments are made consistently and by employees who possess the relevant levels of expertise.</p>	<p>[PRA]’s organisational structure details the number of reporters working in each commodity. [Example PRA] has a business continuity plan which includes details of [cross skilled reporters...].</p>	<p>For a sample of reporters not recruited in the period, we have obtained supporting documentation to confirm an on-going periodic review of their competence takes place.</p> <p>For a sample of [X] benchmarks we have confirmed that assessments have been</p>

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		<p>produced on a regular and consistent basis.</p> <p>Obtained documentary support to evidence the continuity and succession planning in respect of its reporters.</p> <p>[The following exceptions were noted: <i>state any exceptions noted if applicable.</i>]</p>
Supervision of Assessors		
<p>2.8 A PRA should institute internal control procedures to ensure the integrity and reliability of assessments. At a minimum, such internal controls and procedures should require:</p> <p>a) The ongoing supervision of individual assessors to ensure that the methodology was properly applied;</p> <p>b) Procedures for internal sign-off by a supervisor prior to releasing prices for dissemination to the market.</p>	<p>a) [PRA]’s organisational structure demonstrates its reporting lines and supervisory relationships.</p> <p>b) [PRA]’s methodology denotes the level of sign off required for the relevant benchmark. Sign offs are recorded via [price assessment checklist] and retained for a minimum of five years.</p>	<p>We have obtained a copy of [PRA]’s policies and procedures and have confirmed that they are as described in the response which includes the requirements in principle 2.8.</p> <p>For a sample²¹ of [X] price assessments in the period under review, we have obtained documentary support to evidence the on-going supervision of individual reporters and the internal sign off prior to releasing prices to the market.</p> <p>[The following exceptions were noted: <i>state any exceptions.</i>]</p>

²¹ Practitioners should refer to existing ICAEW guidance on type and extent of testing when considering an appropriate sample size.

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Audit Trails		
<p>2.9 A PRA should have rules and procedures in place to document contemporaneously relevant information, including:</p> <p>a) All market data [that was used in the assessment]²²;</p> <p>b) The judgments that are made by assessors in reaching each price assessment;</p> <p>c) Whether an assessment excluded a particular transaction, which otherwise conformed to the requirements of the relevant methodology for that assessment and the rationale for doing so;</p> <p>d) The identity of each assessor and of any other person who submitted or otherwise generated any of the above information.</p> <p>2.10 A PRA should have rules and procedures in place to ensure that an audit</p>	<p>[PRA] operates its business in line with its [Record Retention Policy]. This requires that the assessor records as a minimum:</p> <ul style="list-style-type: none"> • The market data that was used, • The source of that data • Any key judgements made by the reporter(s), such that the judgement is able to be understood by another assessor or supervisor • Details of any transactions that were excluded which conformed to the requirements of the relevant methodology for that assessment and the rationale for doing so • The identity of each assessor and of any other person who submitted or otherwise generated any of the above information. • [...] <p>Records as above are kept for a minimum</p>	<p>We have obtained a copy of [PRA]’s policies and procedures and have confirmed that they are as described in the PRA response which includes the requirements in principles 2.9 and 2.10.</p> <p>For a sample of [X] price assessments in the period under review, we have obtained the supporting audit trail and confirmed it includes the requirements of the principles set out in 2.9.</p> <p>For a sample of [X] price assessments made in the period 5 years prior to the period under review, we have obtained the supporting audit trail and confirmed it includes the requirements of the polices as set out in the PRA response to principle 2.10.</p> <p>[The following exceptions were noted: <i>state any exceptions noted if applicable.</i>]</p> <p><i>Practitioners should consider relevant</i></p>

²² This principle requires clarification to ensure it is practicable, both for the PRA to implement and the Practitioner to assure. ‘All market data’ must be qualified to become a tangible, objective concept.

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trail of relevant information is retained for at least five (5) years ²³ in order to document the construction of its assessments.	of five years. Electronic daily entries are backed up to a server in [location] and server back-ups are to be retained for a period of [number] years.	<i>transitional provisions which may be required with regards to documentation retention over a period as part of an initial engagement.</i>
Conflicts of Interest		
2.11 A PRA should document, implement and enforce comprehensive policies and procedures for the identification, disclosure, management and avoidance of conflicts of interest and the protection of integrity and independence of assessments. The policies and procedures should be kept up to date.	[Example PRA] sets out in its [Conflicts of Interest Policy] procedures to identify, disclose, manage and avoid conflicts of interest. These procedures seek to maintain the integrity and independence of assessments. The [Conflicts of Interest Policy] is reviewed annually, or whenever a new material business relationship is entered into.	We have obtained a copy of [Example PRA]’s policies and procedures in respect of potential conflicts of interest and have confirmed that they are consistent with the PRA response [with the exception of – state any exceptions noted if applicable]. For a sample of [X] potential conflicts of interest identified in the period, we have obtained documentary support to evidence the resolution and conclusion of potential conflicts of interest in accordance with the minimum policies and procedures set out in the PRA response.
2.12 At a minimum, those policies and procedures should [be designed to]: a) Ensure ²⁴ that price assessments are not influenced by the existence of, or potential for, a commercial or personal business relationship or interest between the PRA (or its affiliates), its personnel, clients, any	[Example PRA]’s [Conflicts of Interest Policy] includes measures that; a) Reporters declare to the business commercial, personal and business relationships which may affect their assessments on an [annual] basis, or at the time of the PRA entering into a	The policies and procedures were last reviewed on [date].

²³ Practitioners should take into account transitional adjustments needed for engagements within the first five years following the introduction of the principles. Practitioners should also consider the age of the benchmark when performing such look-back testing.

²⁴ Due to the way in which assurance work is planned and performed, there are inherent limitations to the certainty of the conclusion a practitioner is able to reach. ‘Ensuring’ suggests absolute certainty, which is beyond the practitioner’s ability; a practitioner will be limited to planning and performing work to assess that the policies and procedures put in place by the PRA ‘seek to ensure’...

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<p>market participant or persons connected with them;</p> <p>b) Ensure that PRA personnel’s personal interests and business connections are not permitted to compromise the PRA’s functions, including outside employment, travel, and acceptance of entertainment, gifts and hospitality provided by PRA clients or other oil market participants;</p> <p>c) Ensure, in respect of identified conflicts, appropriate segregation of functions within the PRA by way of supervision, compensation, systems access and information flows.</p> <p>d) Protect the confidentiality of information submitted to or produced by the PRA, subject to the disclosure obligations of the PRA;</p> <p>e) Prohibit PRA managers, assessors and other employees from contributing to a price assessment by way of engaging in bids, offers and trades on either a personal basis or on behalf of market participants.</p> <p>f) Effectively address identified conflicts of interest which may exist between its price assessment business (including all staff who perform or otherwise participate in</p>	<p>material new commercial relationship.</p> <p>b) Reporters may not accept hospitality or gifts above the value of [£X] without consulting the [Compliance Manager]. Such entertainment, gifts and hospitality accepted are logged by the [Compliance Manager], with confirmation that there is no conflict of interest.</p> <p>c) [Example PRA]’s organisational structure sets out how functions are segregated to avoid conflicts.</p> <p>d) [Example PRA’s] [Confidentiality and Data Policy] details how staff handle information. Data handling forms part of required training upon commencing employments with [Example PRA].</p> <p>e) Employees must not participate in the market that they assess.</p> <p>f) Identified conflicts of interest are recorded on a register by the [Compliance Manager] and reviewed by [the board] to mitigate conflicts.</p>	

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price assessment responsibilities), and any other business of the PRA.		
2.13 There is no principle 2.13	Not applicable.	Not applicable.
2.14 A PRA should ensure that its other business operations have in place appropriate ²⁵ procedures and mechanisms designed to minimise the likelihood that conflicts of interest will affect the integrity of price assessments.	[PRA] is performs other business functions of [...]. The [Conflicts of Interest Policy] is communicated to all employees [via the intranet]. The PRA [Compliance Manager] is the central contact point for queries relation to potential and actual conflicts of interests. His/her details are available [via the intranet].	Through discussions with [PRA] and a review of [PRA]’s records, [PRA] has communicated its policies and procedures to all employees of [PRA], including its other business operations via <i>[insert method of communication by [Example PRA]]</i> .
2.15 A PRA should ensure it has appropriate segregated reporting lines amongst its managers, assessors and other employees (as appropriate) and from the appropriate managers to the PRA’s most senior level management and its Board (if any), designed to ensure (i) the PRA satisfactorily implements the requirements listed in these principles; and (ii) that responsibilities are clearly defined and do not conflict or cause a perception of conflict.	[PRA] uses an organisational structure to illustrate reporting lines from board to employee level. The organisational structure is reviewed by the [Compliance Manager].	We have reviewed the following segregated reporting lines designed to satisfy the requirements in principle 2.15, as described in the PRA response: <i>[insert detail]</i> We have the examined job descriptions and employment contracts of [sample of roles] for evidence that organisational structure and reporting lines are followed in practice. <i>[insert detail of sample]</i>

²⁵ Appropriateness’ is by its nature a subjective concept; as such a practitioner will not be able to conclude on adherence with the principle, but simply that the PRA has processes and procedures in place.

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<p>2.16 A PRA should disclose to its stakeholders as soon as it becomes aware of a conflict of interest arising from the ownership of the PRA.</p>	<p>[PRA’s] [Conflicts of Interest Policy] details the process for disclosure of conflicts of interest arising from ownership.</p> <p>[PRA] will disclose [via the agreed medium] to stakeholders [as soon as practicable] after becoming aware of a conflict of interest (as defined within the above principles).</p>	<p>Through discussions with [PRA] and a review of [PRA]’s records, we have <i>[delete as applicable]</i>: not identified any conflicts of interest arising from the ownership of the PRA that require disclosure to stakeholders.</p> <p><i>or</i> We have identified [X] conflicts of interest arising from the ownership of the PRA that require disclosure to stakeholders] <i>[insert detail]</i>.</p> <p>For a sample²⁶ of [X] conflicts identified in the period, we have checked that these have been disclosed to stakeholders in accordance with the policies described in the PRA response.</p> <p>The following exceptions were noted: <i>[state any exceptions]</i></p>
Complaints		
<p>2.17 A PRA should have in place and publish written procedures for receiving, investigating and retaining records concerning complaints made about a PRA’s assessment process.</p>	<p>[PRA] details procedures for dealing with complaints in its [Complaints Policy] which is available on its website at [...]</p>	<p>We have obtained a copy of [PRA]’s policies and procedures on receiving, investigating and retaining records concerning complaints and confirmed that these have been made publicly available via <i>[insert method used by [PRA]] as stated in the PRA response.</i></p>

²⁶ Practitioners should refer to existing ICAEW guidance on type and extent of testing when considering an appropriate sample size.

APPENDIX 1 TO EXAMPLE LIMITED ASSURANCE REPORT

IOSCO Principle	Illustrative PRA Detailed Response	Illustrative Practitioner’s Response
<p>2.18 Among other things, such complaint mechanisms should [be designed to] ensure²⁷ that:</p> <p>a) A PRA should have in place a mechanism detailed in a written complaints handling policy, by which its subscribers may submit complaints on whether a specific price assessment is representative of market value, proposed price assessment changes, applications of methodology in relation to a specific price assessment and other editorial decisions in relation to price assessment processes;</p> <p>b) A PRA should ensure that its written complaints handling policy includes, among other things, the process and target timetable for handling of complaints;</p> <p>c) Formal complaints made against a PRA and its personnel are investigated by that PRA in a timely and fair manner;</p> <p>d) The inquiry is conducted independently of any personnel who may be involved in the subject of the complaint;</p>	<p>Formal complaints to [PRA] may be submitted in the following forms [...].</p> <p>Our complaints policy states that:</p> <ul style="list-style-type: none"> • Formal, complaints are to be sent to the specified address]. This includes complaints as to specific price assessments. • Complaints are to be logged and then allocated promptly to a specific member of staff, who is not directly connected to the subject of the complaint. • A response shall be sent to the complainant within [X hours] of receipt, even if only to say complaint has been received and is under consideration. • Where a complainant is not satisfied with the way a complaint has been handled then they can request that the complaint is sent for arbitration to an independent third party within [X] months of the original complaint. 	<p>We have confirmed that the policies and procedures include the requirements as set out in the PRA response [<i>with the exception of – state any exceptions</i>].</p> <p>Through discussions with [PRA] and a review of [PRA]’s records, [no/X] complaints were received in the period under review.</p> <p>[<i>Include if applicable:</i></p> <p>For a sample of [X] complaints received, we have obtained supporting documentation and performed a walk through test to confirm the requirements set out in the policies designed to fulfil the requirements of principle 2.18 have been followed.</p> <p>The following exceptions were noted: <i>state any exceptions noted if applicable.</i>]</p>

²⁷ As with principle 2.12 above due to the way in which assurance work is planned and performed, there are inherent limitations to the certainty of the conclusion a practitioner is able to reach. ‘Ensuring’ suggests absolute certainty, which is beyond the practitioner’s ability; a practitioner will be limited to planning and performing work to assess that the policies and procedures put in place by the PRA ‘seek to ensure’...

APPENDIX 1 TO EXAMPLE LIMITED ASSURANCE REPORT

IOSCO Principle	Illustrative PRA Detailed Response	Illustrative Practitioner’s Response
<p>e) A PRA aims to complete its investigation promptly;</p> <p>f) A PRA advises the complainant and any other relevant parties of the outcome of the investigation in writing and within a reasonable period;</p> <p>g) There is recourse to an independent third party appointed by the PRA should a complainant be dissatisfied with the way a complaint has been handled by the relevant PRA or the PRA’s decision in the situation no later than six (6) months from the time of the original complaint;</p> <p>h) All documents relating to a complaint, including those submitted by the complainant as well as a PRA’s own record, are retained for a minimum of five (5) years.</p>	<ul style="list-style-type: none"> • [PRA] has a policy of sending such requests to [Example Independent Third Party Co] within [X days] of receipt of such a request. • [PRA] files complaint documentation [...] This documentation is retained for at least 5 years. 	
<p>2.19 Disputes as to daily pricing determinations, which are not formal complaints, shall be resolved by the PRA with reference to its standard appropriate procedures. If a complaint results in a change in price, that should be communicated to the market as soon as possible.</p>	<p>[PRA’s] [Complaints Policy] details the process employees are to follow when dealing with a dispute, as well as the relevant training provided in order to better equip employees to handle disputes.</p> <p>The [Complaints Policy] details that where a formal complaint (see 2.18 above) results in a change in price, that price is</p>	<p>We have reviewed the disputes and complaints processes in place, as well as the training which [reporters/editors] must have for dealing with enquiries, disputes and complaints. <i>[Include if applicable]</i></p> <p>For a sample²⁸ of [X] formal complaints, we performed a walk through test to confirm these had been resolved as described in</p>

²⁸ Practitioners should refer to existing ICAEW guidance on type and extent of testing when considering an appropriate sample size.

APPENDIX 1 TO EXAMPLE LIMITED ASSURANCE REPORT

IOSCO Principle	Illustrative PRA Detailed Response	Illustrative Practitioner’s Response
	communicated to the market within [X] hours of the determination of the corrected price.	the PRA response and that any changes were published as soon as possible. The following exceptions were noted:[<i>insert details</i>]
Cooperation with Regulatory Authorities		
2.20 Audit trails, other documentation required by these principles and all other relevant information shall be readily available to market authorities in carrying out their regulatory duties and handed over without delay in accordance with applicable law.	Out of scope for the purpose of this assurance engagement. Refer 2.10.	This is a statement of intent and as such it is not possible to objectively test it.
External Auditing		
2.21 A PRA should appoint an independent, external auditor with appropriate experience and capability to review and report on the PRA’s adherence to its stated methodology criteria and with the requirements of the principles. The first resulting audit should be completed within one year of the publication of the principles by IOSCO and its results published within fifteen months of the publication of the principles. Subsequent audits should take place annual and be published three months after each audit is completed with further interim audits carried out as appropriate.	<p>[PRA] engaged [Example Firm LLP] as their auditor with the signed and dated engagement contract retained by the individual responsible for Example PRA’s adherence to the principles.</p> <p>The results of the engagement will be published on [PRA’s] website accessed at [.....]</p>	This principle is covered by this report.

[APPENDIX 2 TO EXAMPLE LIMITED ASSURANCE REPORT – LIST OF PRICE REPORTS COVERED BY THIS REPORT]

[Price report 1

Price report 2

Price report 3...]

Glossary

Assurance engagement

An engagement in which a practitioner expresses a conclusion designed to enhance the degree of confidence intended users other than the responsible party about the outcome of the evaluation or measurement of a subject matter against criteria. The outcome of the evaluation or measurement of a subject matter is the information that results from applying the criteria.

Agreed upon Procedures (AUPs)

An agreed upon procedures engagement is one in which a practitioner is engaged to carry out those procedures to which the practitioner and the entity and any appropriate third parties have agreed and report on factual findings.

Benchmark

A commercial or published composite price assessment, distributed regularly to the public and widely used as a reference price in determining the amount payable pursuant to financial instruments or contracts that are material in size and scope.

Benchmark data

The published benchmark or index that is shared with the market, publically or to paid subscribers.

Calculation agent

Entity responsible for the calculation of the benchmark or index based on an outsourcing agreement with the administrator.

CFTC

The United States Commodity Futures Trading Commission

Compiler

Entity which either through calculation or other process involving management judgement produces a published (publicly or on a subscription basis) benchmark or index for use and reference by market participants.

FCA

The Financial Conduct Authority

FSF

The ICAEW Financial Services Faculty. Technical releases issued by FSF are numbered ICAEW nn/YY FSF where nn is a sequential number and YY is the year of issue eg, ICAEW 01/13 FSF.

IAASB

The International Auditing and Assurance Standards Board of the International Federation of Accountants

ICAEW

Institute of Chartered Accountants in England and Wales

IESBA

International Ethics Standards Board for Accountants of the International Federation of Accountants

Index

A basket of instruments or constituents that is maintained by a set of rules.

IOSCO

International Organisation of Securities Commissions

LIBOR

London Inter-Bank Offered Rate

Limited assurance

A limited assurance engagement results in a negative form of expression of the practitioner's conclusion, as the risk is greater than for a reasonable assurance engagement.

Market Data

Data which is used to inform the submitter or price assessor in reaching a judgement as to the appropriate submission or price, including transaction data and other data from market sources.

Practitioner

Professional accountants in public practice providing assurance.

PRA

Price reporting agency

Reasonable assurance

A reasonable assurance engagement results in a positive form of expression of the practitioner's conclusion, requiring a higher standard of evidence than a limited assurance engagement.

Submission data

Final, approved data that is sent to a compiler or administrator of a benchmark or index for the purpose of calculating benchmark data (see above definition).

Submitter

An entity which, either voluntary or through regulatory or other compulsion, contributes data to a benchmark or index, either in raw form or following adjustment by management.

Transaction data

Used to inform the submitter in making their submission and provides the basis for the submission. Includes data from actual trading. A subset of market data described above.

Appendix 1 – Risk management considerations

Acceptance

The primary users of this appendix, which outlines key considerations in developing the structure of an assurance engagement, and the delivery of assurance engagements, are those practitioners who carry out assurance engagements (practitioners) and those who instruct the practitioners to carry out the service.

It is important that there is a clear understanding and agreement concerning the scope and purpose of the engagement between the practitioner and the submitter, compiler, administrator or PRA and, if applicable, the users that are party to the engagement.

Practitioners consider whether the engagement team collectively possesses the necessary professional competencies having regard to the nature of the assignment. As part of the engagement acceptance process practitioners also consider relevant ethical requirements.

In carrying out an assurance engagement, chartered accountants are subject to ethical guidance as laid down by ICAEW in its ethical code. The requirements in the ethical code include, among other things, adherence to the Fundamental Principles in all of their professional and business activities. When conducting an assurance engagement, there are additional requirements in Independence for Assurance Engagements within the code. This applies to all assurance engagements outside the scope of audit and is in compliance with the Code of Ethics established by the International Federation of Accountants (IFAC) and the International Ethics Standards Board for Accountants (IESBA).

The practitioners' adherence to the independence requirements involves an assessment of likely threats to independence and, where necessary, the application of safeguards. For example, the provision of assistance to a submitter in preparing its report may result in a self-review threat if the impact of the assistance on the matter being reported on is highly subjective and material. The subjectivity of the report proposed to be issued will also be relevant. If other than insignificant threats are identified, safeguards need to be considered. These might include:

- the use of independent teams, where appropriate; or
- an independent review of the key judgements on the engagement.

The assurance report may be received by a range of persons who are not party to the engagement. Practitioners do not intend to assume responsibility to persons who are not party to the engagement, but legal actions from such persons may nonetheless occur. Practitioners therefore need to apply appropriate engagement acceptance procedures in order to assess the risks associated with taking on a particular engagement and accordingly whether to do so and, if so, on what terms. Where the practitioners do accept such an engagement, suitably rigorous internal risk management policies are applied to manage any increased level of risk. Relevant steps for managing professional liability are covered below.

Managing professional liability

Depending on the engagement circumstances practitioners enter into one or a combination of the following arrangements:

- A tri-partite or multi-partite engagement contract with the PRA, submitter, administrator or compiler and the users (which may include a regulator), accepting that they owe a duty of care not only to the organisation, but also to those users, including provisions limiting liability if appropriate (recognising that such a contract may not be achievable where the users are numerous). This is potentially more appropriate for 'closed' benchmarks, which are used within a specific industry to inform decision making and business and activity, but are not publicly available ie, pay to participate benchmarks.

- An engagement with the PRA, submitter, administrator or compiler with the facility for users (including regulators) to enjoy a duty of care from the practitioners if they accept the relevant terms of the engagement letter previously agreed with the submitter or compiler as if they had signed that letter when originally issued, including the same provisions limiting liability²⁹.
- An engagement with the PRA, submitter, administrator or compiler alone but before allowing the users access to the assurance report, require the customers
 - To acknowledge in writing that the practitioners owe the users no duty of care and
 - To agree in writing that no claims may be brought against the practitioner by the users
- An engagement with the PRA, submitter, administrator or compiler alone disclaiming any liability or duty to others (including users) by notice in the assurance report. Practitioners also consider supporting this disclaimer with an indemnity from the submitter or compiler to apply where a third party claim is made (recognising that such an indemnity may not be attractive commercially, may not be effective if the submitter or compiler is not financially stable, and may not prevent a claim. See letter for engagement section below for further information.

It is also open to practitioners to consider with their legal advisers the use of the Contract (Rights of Third Parties) Act 1999 to manage the risk of liability to third parties. The arrangements above do not prevent users taking legal action against the submitter or compiler.

Practitioners may become aware of other third parties that are not users of the output from the PRA, submitter, administrator or compiler, such as market participants who may also request the assurance report. The PRA, submitter, administrator or compiler the third party may approach the practitioners for consent to make the assurance report available to such third parties, as the engagement contract agreed with the PRA, submitter, administrator or compiler contains disclosure and use restrictions. The assurance report is not prepared for third parties or with their interests or needs in mind, and the practitioners may decline this request.

The practitioners will have set out the purpose of their report in the assurance report, and will have included a disclaimer of liability to third parties in line with the above in that report. If the request is not declined, the practitioners will advise the third party that the assurance report was not prepared for the third party or the third party's benefit, that consent to their report being made available to a third party will only be given if the third party agrees that the third party should not rely on the report and acknowledges in writing that the practitioners owe the third party no duty of care and agrees that no claims may be brought against the practitioners by the third party in relation to the report.

Where the practitioner is also appointed the statutory auditor of the entity, the practitioner may wish to include a statement in their engagement letter and report that the assurance report is separate from their opinion on the statutory accounts of the entity, which is prepared for a different purpose.

Letter of engagement

Prior to accepting the engagement, practitioners establish that the directors of the PRA, submitter, administrator or compiler acknowledge in writing their responsibility on behalf of the PRA, submitter, administrator or compiler for the design and operation of effective internal controls over its activities to achieve control objectives.

Practitioners agree on the terms of engagement with the parties to the engagement in accordance with the contractual relationship as discussed in paragraph seven above. To avoid

²⁹ This will require the consent of the submitter, the compiler or PRA (original addressees), ideally in the engagement letter.

misunderstandings, the agreed terms are recorded in writing in an engagement letter. Example extracts from an engagement letter for an assurance report on internal controls of a submitter or compiler are given in appendix two for illustrative purposes. Practitioners apply their own judgement to develop suitable wording for their engagement letters to reflect the guidance in this Technical Release and their own particular circumstances. Where the engaging parties include users (for example, a regulator or administrator), the nature and the content of an engagement letter may differ from the example extracts.

The written terms of the practitioners' engagement include:

- the agreed use of the report and the extent to which, the context in which, and the basis on which, the report may be made available by the directors to users;
- the directors' and the practitioner's respective responsibilities for the different elements of the report;
- the scope of the work to be performed by the practitioner;
- reliance upon the work performed by internal auditors at the submitter, compiler, administrator or PRA
- a reference to the likely need for management representations;
- an explanation of the inherent limitations of the work, and for whom the work is being undertaken;
- limitations to the liability of the practitioner, including an appropriate liability cap and clarification that the work is separate from any audit of the entity's financial statements (where applicable); and
- provisions for an indemnity if considered appropriate.

Illustrative paragraphs can be found in appendix two.

In particular, practitioners may exclude liability in respect of any loss or damage caused by, or arising from fraudulent acts, misrepresentation, concealment of information or deliberate default on the part of the PRA, submitter, administrator or compiler, their directors, employees or agents.

If, before the completion of the engagement, practitioners receive a request to change an assurance engagement to a non-assurance or limited assurance engagement or to change, for instance, the scope of the engagement, the practitioners consider whether this has reasonable justification. Engagement parties' misunderstanding concerning the nature of the engagement or a change in circumstances that affects the users' requirements is likely to justify such a request. Where accepting a request for a change, the practitioners do not disregard evidence that was already obtained prior to the change, and the details of the change should be documented and agreed in writing with the parties to the engagement letter.

Use and distribution of the practitioners report

The practitioner is associated with a price, benchmark or index when reporting on such information or consenting to the use of the practitioner's name in a professional connection with respect to a price, benchmark or index. If the practitioner learns that the PRA, submitter, administrator or compiler (or any other party) is inappropriately using the practitioners name in association with a price, benchmark or index, the practitioner requires the PRA, submitter, administrator or compiler (or the other party) to cease doing so. The practitioner may also consider what other steps may be needed, such as informing any known parties that may have received the report that inappropriately uses the practitioner's name and seeking legal advice.

Electronic publication of the report

If price, benchmark or index information is published, on the PRA, submitter, administrator or compiler's website or by other electronic means, which includes a report by the practitioner or is otherwise connected to the practitioner, the PRA, submitter, administrator or compiler must inform the practitioner of the electronic publication and get their consent before it occurs and ensure that it presents the price, benchmark or index information (and practitioners report) properly. The practitioner has the right to withhold consent to the publication of [the assurance report or] the price, benchmark or index information if they are to be published in an inappropriate manner.

The PRA, submitter, administrator or compiler must set up controls to prevent or detect quickly any changes to electronically published information. The practitioner is not responsible for reviewing these controls nor for keeping the information under review after it is first published. The PRA, submitter, administrator or compiler is responsible for the maintenance and integrity of electronically published information, and the practitioner will accept no responsibility for changes made to (assured) information after their report has been signed.

Appendix 2 – Example paragraphs which may be considered necessary within the letter of engagement

These extracts are provided for illustrative purposes only. Practitioners apply their own judgement to develop suitable wording for their engagement letters to reflect the guidance in this Technical Release and their own particular circumstances.

Responsibilities of directors

The board of directors ('the Directors') of [name of entity] in relation to which the practitioners' assurance report is to be provided ('the Organisation') are and shall be responsible for the design, implementation and operation of control procedures that provide adequate level of control over [the submission process] [the compilation process]/ the statement of adherence to [the PRA principles]. The Directors' responsibilities are and shall include:

- acceptance of responsibility for internal controls;
- evaluation of the effectiveness of the organisation's control procedures using suitable criteria;
- supporting their evaluation with sufficient evidence, including documentation; and
- providing a written report of the effectiveness of the [submitter, compiler or PRA] organisation's [internal controls] for the relevant period.

In drafting this report the Directors have regard to, as a minimum, the criteria specified within the Technical Release Tech 02/14FSF issued by ICAEW but they may add to these to the extent that this is considered appropriate.

Responsibilities of practitioners

It is our responsibility to form an independent conclusion, based on the work carried out in relation to the control procedures of the Organisation's [assessment] [submission] [compilation] function carried out at the specified business units of the Organisation [located at []] as described in the Directors' report and report this to the Directors.

Scope of the practitioners' work

This section would also describe any specific procedures as required in order to add clarity to the conclusion.

We conduct our work in accordance with the procedures set out in Tech 02/14FSF, issued by ICAEW. Our work will include enquiries of management, together with tests of certain specific control procedures which will be set out in an appendix to our report.

In reaching our conclusion, the criteria against which the control procedures are to be evaluated are the internal control objectives developed for organisations as set out within the Tech 02/14FSF issued by ICAEW.

Any work already performed in connection with this engagement before the date of this letter will also be governed by the terms and conditions of this letter.

We may seek written representations from the Directors in relation to matters on which independent corroboration is not available. We shall seek confirmation from the Directors that any significant matters of which we should be aware have been brought to our attention.

Inherent limitations

The Directors acknowledge that control procedures designed to address specified control objectives are subject to inherent limitations and, accordingly, errors or irregularities may occur and not be detected. Such procedures cannot guarantee protection against fraudulent collusion especially on the part of those holding positions of authority or trust. Furthermore, the opinion set out in our report will be based on historical information and the projection of any information or conclusions in our report to any future periods will be inappropriate.

Use of our report

Our report will, subject to the permitted disclosures set out in this letter, be made solely for the use of the Directors of the Organisation, and solely for the purpose of reporting on the internal controls of the Organisation, in accordance with these terms of our engagement.

Our work will be undertaken so that we might report to the Directors those matters that we have agreed to state to them in our report and for no other purpose.

Our report will be issued on the basis that it must not be recited or referred to or disclosed, in whole or in part, in any other document or to any other party, without the express prior written permission of the practitioners.

To the fullest extent permitted by law, we do not and will not accept or assume responsibility to anyone other than the Directors as a body and the Organisation for our work, for our report or for the opinions we will have formed.

Liability provisions

Practitioners may wish to seek independent legal advice on language that addresses both the matters covered in the illustrative wording set out in this Liability section together with any related matters such as provisions indicating that liability does not extend to consequential losses. Practitioners may also consider any applicable independence requirements.

We will perform the engagement with reasonable skill and care and acknowledge that we will be liable to the Directors as a body and the Organisation for losses, damages, costs or expenses ('losses') suffered by the Directors as a body and the Organisation as a result of our breach of contract, negligence, fraud or other deliberate breach of duty. Our liability shall be subject to the following provisions:

- We will not be so liable if such losses are due to the provision of false, misleading or incomplete information or documentation or due to the acts or omissions of any person other than us, except where, on the basis of the enquiries normally undertaken by us within the scope set out in these terms of engagement, it would have been reasonable for us to discover such defects;
- We accept liability without limit for the consequences of our own fraud or other deliberate breach of duty and for any other liability which it is not permitted by law to limit or exclude.

Our opinion on the [subject matter] is separate from our opinion on the statutory accounts of the Organisation on which we reported on [date], which are prepared for a different purpose. Our audit report in relation to the statutory accounts of the Organisation was made solely to the Organisation's members, as a body, in accordance with [Chapter 3 of Part 16 of the Companies Act 2006]. To the fullest extent permitted by law, we do not accept or assume any responsibility to anyone other than the Organisation and the Organisation's members as a body, for our audit work, for our audit report, or for the opinions we have formed in respect of that audit.

Appendix 3 - Extent of testing

For an assurance engagement providing reasonable assurance, the sample sizes will be similar to the sample sizes used for assurance provided on audits of financial statements. Professional judgement will be required in assessing the extent of testing required to reach a limited assurance conclusion depending on the quality of available evidence amongst other factors.

The nature of testing will be a matter of professional judgement, but will include and appropriate combination of inquiry, observation, inspection and re-performance. Inquiry alone will be insufficient.

Controls

Depending on the nature of the price, benchmark or index, but in particular where a submitter makes or a compiler receives daily submissions, there will be a heavy reliance on the systems that produce the data.

There is likely to be a combination of automated and manual controls (ie where estimates have to be calculated due to absence of trading data).

- a) Automated controls
- General IT controls.
 - Testing of the control activities within the systems involved in producing the data.

- b) Manual controls

These will vary depending upon:

- Frequency of the control
- Individuals/locations performing the control
- Existence of central monitoring/review function.
- Expected deviation of the control (ie. in year one for the engagement, there may have been an absence of controls and significant loss of credibility in the benchmark or index, the higher number in the range will be tested).

Frequency of control	Assumed population of control occurrences	Number of items to test
Annual	1	1
Quarterly	4	2
Monthly	12	2 to 5
Weekly	52	5,10,15*
Daily	250	20,30,40*
Multiple times per day	Over 250	25,45,60*

*items for low, moderate and high risk

It is not expected that the controls testing will cover controls over the transaction origination, recording and risk management which provide the data for submission.

Data

The extent of testing when considering data is a matter of professional judgement for the practitioner based on their assessment of risk.

Appendix 4 – Example generic assurance report

Reasonable assurance reporting on the controls

Independent practitioners' assurance report on internal controls to the directors of [name of entity] and the [administrator/regulator]

Use of report

We have carried out a [reasonable/limited] assurance report in accordance with the terms of our engagement letter dated [X] [and further to the requirements of the [regulator]]. This report is made solely for the use of the directors, as a body, of [name of entity] and the [regulator], and solely for the purpose of reporting on the internal controls of [name of entity], in accordance with the terms of our engagement letter dated [date] [and attached as appendix []].

Our work has been undertaken so that we might report to the directors those matters that we have agreed to state to them in this report and for no other purpose. Our report must not be recited or referred to in whole or in part in any other document nor made available, copied or recited to any other party, in any circumstances, without our express prior written permission except that we acknowledge that our report will be provided to the [administrator/regulator]. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the directors as a body, [name of entity] and the [administrator/regulator] for our work, for this report or for the conclusions we have formed.

Subject matter

This report covers solely the internal controls of [name of entity] as described in [your report/the directors' control objectives in place] as at [date]. Internal controls are processes designed to provide reasonable assurance regarding the level of control over the [submission/compilation/assessment] of [benchmark/index/price report] data produced by [name of entity].

Respective responsibilities of the entity and practitioner

The directors' are responsible for []. Our responsibility is to form an independent conclusion, based on the work carried out in relation to the control procedures of [name of entity]'s [benchmark or index] [submissions/compilation] as described in [your report/the directors' control objectives in place] and report this to you as the directors of [name of entity].

Our approach

We conducted our engagement in accordance with International Standard on Assurance Engagement (ISAE) 3000 and ICAEW Technical Release Tech 02/14FSF. The criteria against which the control procedures were evaluated are the internal control objectives as set out within Tech 02/14FSF and identified by the directors as relevant control objectives relating to the level of control over [the submission of data to the [benchmark, index or price report]]. Our work was based upon obtaining an understanding of the control procedures as described on page [] to [] in the report by the directors, and evaluating the directors' assertions as described on page [] to [] in the same report to obtain reasonable assurance so as to form our conclusion. Our work also included tests of specific control procedures, to obtain evidence about their effectiveness in meeting the related control objectives. The nature, timing and extent of the tests we applied are detailed on pages [] to [].

Inherent limitations

Control procedures designed to address specified control objectives are subject to inherent limitations and, accordingly, errors or irregularities may occur and not be detected. Such control procedures cannot guarantee protection against (among other things) fraudulent collusion especially on the part of those holding positions of authority or trust. Furthermore, our conclusion is based on historical information and the projection of any information or conclusions in the attached report to any future periods would be inappropriate.

ISAE 3000 requires that we obtain reasonable rather than absolute assurance that the [XX] are free from material misstatement. As you are aware, there are inherent limitations in the assurance process, including, for example, selective testing and the possibility that collusion or forgery may preclude the detection of material misstatements, fraud, and illegal acts. Accordingly, a material misstatement may remain undetected. Also, a reasonable assurance engagement is not designed to detect misstatements that are immaterial to [XX].

Conclusion

In our opinion, in all material respects:

- the accompanying report by the directors describes fairly the control procedures that relate to the control objectives referred to above which were in place as at [date];
- the control procedures described on pages [] to [] were suitably designed such that there is reasonable, but not absolute, assurance that the specified control objectives would have been achieved if the described control procedures were complied with satisfactorily; and
- the control procedures that were tested, as set out in the attachment to this report, were operating with sufficient effectiveness for us to obtain reasonable, but not absolute, assurance that the related control objectives were achieved in the period [x] to [y].

Name of firm
Chartered Accountants
Location
Date

Examples of explanatory paragraphs and qualification wording

(a) Description misstatements

Appendix X specifies a minimum set of control objectives for inclusion in the directors' reports. Exceptionally, in the event that the directors decide not to include a particular control objective in their report then their report explains the fact and the reasons for the omission. Where directors fail or refuse to disclose the omission, or the practitioners consider the justification being unsatisfactory, the practitioners disclose the fact and qualify their opinion. For example:

We draw attention to page [x] of the report by the directors which sets out the control objectives. One of the control objectives, [specify], in TECH 02/14 FSF, is not included in the directors' report and no reason for the omission is explained.

Except for the matter referred to above concerning the fairness of the description of control procedures, in our opinion, ...

The refusal or failure of the directors to amend incomplete or inappropriate descriptions of control procedures or control objectives, may lead to the description of internal controls being considered not fair. Where the practitioners consider that this merits qualification, this might be phrased as follows:

The report by the directors states, on page [x], that [XX]. Our work indicates that whilst this is the procedure for [XX], ...

Except for the matter referred to above concerning the fairness of the description of control procedures, in our opinion, ...

(b) Design deficiencies

Design deficiencies may, for example, result either from a key control being absent or from control procedures that do not prevent or detect errors as described. The following is an example of wording that may be appropriate where practitioners qualify their opinion on the control design due to the absence of a key control.

As explained on page [x] of the report by the directors that six monthly reconciliations of [XX] are undertaken. The reconciliation procedures did not however include a control for follow up of reconciling items and for independent review and approval of the reconciliations.

Except for the matter referred to above concerning the control design, in our opinion, ...

(c) Exceptions to operating effectiveness

Tests of operating effectiveness carried out by practitioners in relation to specific control procedures are detailed either (a) adjacent to the relevant control procedures in the report by the directors or (b) in an appendix to the assurance report. Where the results of the tests identify an exception to the control procedures, this is reported after the test, and the practitioners consider whether the exceptions affect the achievement of the control objective. Where the achievement of the control objective deserves qualification the practitioners insert an explanatory paragraph with appropriate reference and modify their opinion.

On page [x] of the report by the directors it is stated that six monthly reconciliations of [XX] are undertaken and that there is a process for following up reconciling items. Our tests of operating effectiveness indicated that there were a significant number of reconciling items that were not being resolved on a timely basis in accordance with the organisation's policy.

Except for the matter referred to above concerning the operating effectiveness of the control procedures, in our opinion, ...

Where the results of the practitioners' tests of operational effectiveness and the deficiency have been integrated and fully explained into the report by the directors the practitioners may alternatively consider cross-referring their qualification to where these details may be found. For example:

Except for the matter explained on page [z] concerning the follow up of reconciling items on [XX] reconciliations, the control procedures tested, as set out [on pages [x] to [y] of the report by the directors/ in the attachment to this report], in our opinion, ...

In addition, any exceptions identified when performing the operating effectiveness control procedures may call into question whether the specific control has been appropriately designed and implemented.

Appendix 5 – Comparisons of forms of reporting

As noted in sections five and six the template reports drafted for the PRA or submitter and compiler are assurance reports. There are alternative forms of report that could be provided which are summarised below.

Agreed upon procedures	Nature of Report	Advantages	Disadvantages
<p>The exact scope of work (eg, type of test, sample sizes etc) is agreed by the [administrator/regulator], entity and the practitioner.</p> <p><i>or</i></p> <p>the practitioner follows the exact scope of work set out in the guidance produced by the regulator, or other relevant guidance, that have previously been agreed by the practitioner or representative body.</p> <p>The practitioner then undertakes these procedures and reports the results.</p>	<p>A detailed report setting out the work undertaken (or making reference to the scope of work set out in the engagement letter or making reference to the source of any pre-agreed procedures) and the results of the testing.</p>	<ul style="list-style-type: none"> • Clarity about the scope, nature and extent of the testing agreed at the outset. • Regulator can set out the overall template for the report in the light of its requirements. • Any exceptions that are identified are set out in the report. • The regulator and other potential users of the report are able to reach an informed judgement based on the information provided in the report. • Simple engagement from the practitioner’s perspective and therefore, all other things being equal, cheaper than other options. • Professional guidance in place in the form of International Standard on Related Services (ISRS) 4400, Engagement to perform agreed-upon procedures regarding financial information 	<ul style="list-style-type: none"> • Time needs to be set aside to agree the scope, nature and extent of work upfront. • The practitioner will only complete the required work and will not undertake additional procedures even if they identify errors (unless this is required by the scope of work). • No conclusion is given. Therefore the user of the report is left to interpret the results and make a judgement. • The user of the report may not have the time/skills/ resources to interpret the report/reach a judgement

Agreed-upon procedures may be the most appropriate type of engagement if the user of the report wants to set the procedures to maintain consistency in the way that practitioners carry out the work:

- obtain the results over compliance with the terms and conditions at the lowest cost (although this can be expensive if the procedures are long and involved);
- ensure consistency in the scope, nature and extent of work undertaken by practitioners; and/or
- receive a report setting out details of the work undertaken, the findings and all of the exceptions noted.

Agreed-upon procedures is unlikely to be the most appropriate type of engagement when the user of the report:

- wants an assurance ‘opinion’ from a practitioner; and/or
- wants practitioners to apply their judgement in determining the scope, nature and extent of the work required to provide an assurance opinion on the data or processes in place.

Limited Assurance	Nature of Report	Advantages	Disadvantages
<p>The scope of work is agreed by the [administrator/regulator], entity and the practitioner <i>or</i> the practitioner follows the scope of work set out in the guidance produced by the regulator, or other relevant guidance, that have previously been agreed by the practitioner or representative body.</p> <p>The practitioner then undertakes these procedures and provides a 'limited assurance' conclusion.</p>	<p>A 'limited assurance' conclusion in the form of a negative assurance statement (eg, 'having carried out the procedures stated (either as set out in the engagement letter or in accordance with an agreed framework), nothing has come to our attention to suggest that the benchmark or index has not been correctly compiled from the submitted data.</p>	<ul style="list-style-type: none"> • Where the exact scope of work has been agreed, everyone is clear as to the scope, nature and extent of the testing that is undertaken as this is agreed at the outset. However, this does not preclude or mitigate the need for the practitioners from performing other procedures in order to gather sufficient evidence to reach their conclusion. • The practitioner provides a conclusion in the form of a negative assurance statement. There is no need to 'interpret' the results, unless there is a qualified conclusion. • Professional guidance in place in the form of International Standard on Assurance Engagements (ISAE) 3000, Assurance engagements other than audits or reviews of historical financial information. • May be cheaper than a 'reasonable assurance' engagement. 	<ul style="list-style-type: none"> • 'Limited assurance' engagements can take various forms (some guidance is available in ISAE 3000). These can range from being similar to agreed-upon procedures work, through to engagements that are very similar to reasonable assurance. • As a result, such 'limited assurance' engagements can be difficult to agree in practice and agreed-upon procedures or a 'reasonable assurance' engagement may be more appropriate. • Requires 'materiality' to be set or agreed by the user of the report, so that practitioners can determine the scope, nature and extent of the testing with the expectations of the user of the report in mind. • The user of the report simply receives a conclusion, rather than a detailed report, unless additional reporting is specified (eg, details of all exceptions identified). • Readers of the report may not know the exact scope, nature or extent of the work undertaken by the practitioner, unless the engagement letter is provided or additional reporting is specified. • May be more expensive than an agreed-upon procedures engagement.

A 'limited assurance' engagement may be most appropriate type of engagement where the user of the report wants to:

- obtain a conclusion from a practitioner and/or
- the engagement involves a high degrees of judgement, there is insufficient evidence available to provide a reasonable assurance conclusion or for cost-benefit reasons.

Reasonable Assurance	Nature of Report	Advantages	Disadvantages
<p>The overall scope of work (or a minimum scope of work) is agreed by the [administrator/regulator], entity and the practitioner (including materiality levels) or</p> <p>The practitioner follows the overall scope of work (or a minimum scope of work) set out in the guidance produced by the regulator or other relevant guidance, that have previously been agreed by the practitioner or representative body, but the practitioner determines the exact scope, nature and extent of the procedures required to support their opinion.</p> <p>The practitioner then undertakes these procedures and provides a positive conclusion.</p>	<p>A conclusion in the form of a positive assurance conclusion eg, ‘In our opinion, [the schedule] has been prepared, in all material respects, in accordance with [the framework].’</p> <p>While a template wording can be suggested, it should be for the practitioner to determine the exact wording of their conclusion which reflects their judgement and is linked to the work actually carried out.</p>	<ul style="list-style-type: none"> • The user is provided with a positive conclusion (or otherwise). • The practitioner has determined the appropriate scope, nature and extent of testing necessary to reach their conclusion. • Professional guidance in place in the form of International Standard on Assurance Engagements (ISAE) 3000, Assurance engagements other than audits or reviews of historical financial information. • No need to ‘interpret’ the results, unless there is a qualified opinion. 	<ul style="list-style-type: none"> • As each practitioner is responsible for determining the exact scope, nature and extent of testing required to support their conclusion there is potential for inconsistency between the amounts of work undertaken by different practitioners. • Requires ‘materiality’ to be set or agreed by the user of the report, so that practitioners can determine the scope, nature and extent of the testing with the expectations of the user in mind. • The user simply receives a conclusion, rather than a detailed report, unless additional reporting is specified (eg, details of all exceptions identified). • Readers of the report may not know the exact scope, nature or extent of the work undertaken by the practitioner, unless the engagement letter is attached or additional reporting is specified. • To reach a positive conclusion typically requires additional procedures to be undertaken by the practitioner. This type of engagement can therefore be more expensive.

A ‘reasonable assurance’ engagement may be the most appropriate type of engagement when the user of the report wants to:

- obtain a conclusion from an practitioner; and/or
- allow the practitioners to apply their judgement in determining the scope, nature and extent of the work required to provide a conclusion.

A ‘reasonable assurance’ engagement is unlikely to be the most appropriate type of engagement when the user of the report wants to:

- ensure that the scope, nature and extent of testing is the same for all entities (although it is possible to specify minimum requirements);
- understand exactly what amount of testing has been undertaken by the practitioner (although additional disclosures may be provided);
- be provided with details of all exceptions (although it is possible to request additional disclosures in respect of this);
- avoid being involved in setting a materiality level; and/or minimise the costs associated with obtaining the required assurance.

Appendix 6 – Criteria

The practitioner assesses the suitability of criteria for the purpose of a specific assurance engagement.

Suitable criteria as set out in the IAASB Assurance Framework exhibit the following characteristics:

- **Relevance:** relevant criteria contribute to conclusions that assist decision making by the intended users of the assurance report.
- **Completeness:** criteria are sufficiently complete when relevant factors that could affect the conclusions in the context of the engagement circumstances are not omitted. Complete criteria include, where relevant, benchmarks for presentation and disclosure.
- **Reliability:** reliable criteria allow reasonably consistent evaluation or measurement of the subject matter including, where relevant, presentation and disclosure, when used in similar circumstances by similarly qualified practitioners.
- **Neutrality:** neutral criteria contribute to conclusions that are free from bias.
- **Understandability:** understandable criteria contribute to conclusions that are clear, comprehensive and not subject to significantly different interpretations.

Established criteria tend to be formal in nature, but the degree of formality depends on the subject matter. Criteria in areas such as compliance with legal or regulatory requirements may be widely recognised, either because they are available to the public or because there is an established standard, for example, ISO/IEC 27001³⁰ (information security management) and the COSO framework³¹ (internal control). Performance criteria may be set out in contractual arrangements as agreed with the users. It is not unusual for established criteria to be customised to meet users' needs.

The practitioner considers the suitability of the criteria, even where established criteria are available, to ensure their relevance to the needs of the intended users of the assurance report.

³⁰ www.iso.org/iso/catalogue_detail?csnumber=42103

³¹ www.coso.org/documents/coso_framework_body_v6.pdf