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**FEE ISSUES PAPER  
PRINCIPLES OF ASSURANCE:  
FUNDAMENTAL THEORETICAL ISSUES  
WITH RESPECT TO ASSURANCE IN  
ASSURANCE ENGAGEMENTS**

**April 2003**

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**FEE ISSUES PAPER**

**PRINCIPLES OF ASSURANCE:**

FUNDAMENTAL THEORETICAL ISSUES WITH RESPECT TO ASSURANCE IN ASSURANCE ENGAGEMENTS

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## **PREFACE**

On 21 March 2003, the Council of FEE approved the publication of an Issues Paper “Principles of Assurance: Fundamental theoretical issues with respect to assurance in assurance engagements”. It sets out the results of a major 18 month research project performed by a sub-group of the FEE Auditing Working Party. It is unusual for FEE to publish this type of research work and for that reason an abridged version is also being made available to provide the reader with the main arguments developed in the full paper.

### ***A proposed solution to the moderate level assurance problem***

The original purpose of the FEE project was to make a contribution to the long-running efforts of the International Auditing Practices Committee (IAPC) to develop a general standard on assurance engagements. The IAPC Standard ISAE 100 established a distinction between high and moderate level assurance engagements but did not provide any standards for moderate level engagements. However, progress in this area was thought to be urgently needed if the auditing profession was to make an effective contribution to emerging issues such as sustainability reporting.

The FEE Issues Paper concludes that standard setters should reject the distinction between high and moderate level assurance. International Standards on Auditing (ISAs) are already based on the concept of “reasonable assurance” and it is argued that this concept should be the basis for all assurance standards. Where auditors or assurance providers limit the assurance they obtain, the nature of the relevant limitations should be clearly understood and communicated. They should also try to ensure that users understand that what constitutes reasonable assurance depends on the context and the subject matter involved.

The International Auditing and Assurance Standards Board (IAASB), which succeeded the IAPC, appears to have reached similar conclusions at its meeting in the week of 17 March 2003, when it agreed to issue new exposure drafts on assurance engagements.

### ***Implications of the FEE Issues Paper***

As well as providing a way forward in relation to sustainability and other areas of reporting outside financial statements, the ideas in the FEE Issues Paper are also relevant to other current policy issues related to the audit expectations gap and standards of professional scepticism. In particular, it challenges those who might place misguided demands on auditors to provide “unreasonable assurance” in relation to fraud.

More significantly, the development of the Issues Paper shows how fundamental analysis can help provide potential solutions to practical auditing and assurance issues and demonstrates the potential benefits to the IAASB of developing a conceptual framework. Accounting standard setters, including the International Accounting Standards Board, have long made use of such frameworks and FEE continues to encourage the IAASB to do the same.

The Issues Paper does not present a complete conceptual framework but it does indicate what such a framework might look like and therefore it will be a primary source of ideas for FEE as it develops its responses to policy issues in auditing and assurance and seeks to meet public expectations that:

- International Standards on Auditing to be adopted in the EU should be principle-based;
- IAASB standard setting should be responsive to change, efficient and transparent; and
- Communications by auditors should be clear and not perpetuate expectations gap issues.

It is also expected that FEE will draw on the thinking in the Issues Paper in preparing its responses to IAASB consultations and in developing its positions in other areas of work such as sustainability and capital markets reporting.

Finally, on behalf of the FEE Council, I would like to express our gratitude to the sub-group responsible for the work and, in particular, to the Institut der Wirtschaftsprüfer in Deutschland for its major contribution to this project.

David Devlin  
FEE President  
22 April 2003

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## ABSTRACT

### *Background and Objective*

The lack of a general consensus in the International Auditing Practices Committee (IAPC), which was succeeded by the International Auditing and Assurance Standards Board, or IAASB, for the issuance of a standard for moderate assurance engagements hinders the development of further standards and guidance for assurance engagements in relation to subject matter other than historical financial statements. Although the IAASB issued a Study in 2002 entitled “The Determination and Communication of Levels of Assurance Other Than High” that deals with a number of the issues involved, continuing debate about many of these issues indicates that further investigation of the conceptual issues is warranted.

The primary purpose of this FEE Issues Paper “Principles of Assurance: Fundamental Theoretical Issues with Respect to Assurance in Assurance Engagements” is to identify and examine, and discuss possible solutions to, significant theoretical issues associated with the determination of assurance in assurance engagements. The Paper serves as a basis for a review of the major theoretical issues underlying the determination of levels of assurance, and hence for FEE deliberations of future exposure drafts of IAASB pronouncements in this area, and seeks to contribute to the basis for future academic research in the area of assurance engagements. Moreover, this Paper also seeks to demonstrate to regulatory authorities, such as the EU Commission, the efforts by the European profession to establish a firm theoretical foundation for the development of useful standards and guidance in this area.

### *Specific Major Conclusions of the Paper*

#### *Assurance Engagements*

- The primary distinguishing characteristic of assurance engagements is the issuance of an overall conclusion or opinion by the practitioner with a certain level of assurance about particular assertions with respect to subject matter using identified criteria based upon evidence obtained in an engagement process.
- Differentiating between direct and indirect engagements is not as useful as differentiating between engagements in which the practitioner measures the subject matter directly as opposed to engagements in which the practitioner examines measurements undertaken by the responsible party.

#### *Levels of Assurance*

- The appropriate assurance perspective for assurance standards to take is that of the assurance obtained by the practitioner.
- High and moderate assurance represent mutually exclusive terms across engagement types and the terms high and moderate assurance reflect absolute rather than relative notions.
- The term reasonable assurance appears to represent a relative term whose content depends upon the circumstances.

- Reasonable assurance varies not only across different subject matter, criteria, evidence, and engagement processes, but also across jurisdictional boundaries and within jurisdictions over time.
- The term “limited assurance” appears to be associated with engagements in which the decision was taken to obtain less assurance than otherwise could have been reasonable to obtain.

### *Suitability of the Elements of an Assurance Engagement*

- A synthesis of ethical considerations, information or communications theory and measurement theory appears to provide the appropriate tools with which to analyse the suitability of assertions (which are information) generated by an engagement; this context leads to the application of the concept of “validity” and a redefinition and distinction of the concepts “reliability” and “credibility”.
- Subject matter cannot be measured directly; a practitioner measures the indicants of properties possessed by subject matter and uses the manifested outcomes of these measurements to determine whether the subject matter possesses those properties and manifestations thereof predicated by those properties essential to being a member of a particular class of subject matter.
- In essence, assurance engagements represent property ascription and hence a classification exercise.
- Subject matter is deemed to be suitable when the application of given criteria to that subject matter generate suitable assertions; such assertions are suitable if they are both valuable to users and satisfy applicable ethical requirements.
- Criteria are deemed to be suitable when their application with respect to specific given subject matter generates suitable assertions; one cannot speak of the suitability of criteria or of subject matter in isolation.
- Evidence is a form of information, generated by the application of the criteria on the subject matter, that contributes to the confirmation or refutation of assertions about events and circumstances in connection with that subject matter; there are different evidence concepts that can be applied in determining the nature of evidence.
- The evidence required in an engagement and hence the nature of an engagement depends upon the acceptable presumptions that a practitioner may entertain in performing the engagement; ultimately, the reasonableness of making these presumptions is determined by their acceptance by engagement stakeholders and by practitioner capabilities.
- An assurance engagement is an information system that conveys information from the practitioner to users; the engagement process is a part of this system.
- A suitable engagement process is predicated upon suitable engagement management and a suitable engagement system and environment.

- The primary focus of those who set standards for assurance engagements ought to be the development of the required elements for a suitable engagement system for given environments and the development of standards and guidance for suitable engagement processes in this context.
- The suitability of the assertions, generated by the application of the criteria to the subject matter and leading to the acquisition of evidence in the engagement process to support those assertions with a certain level of assurance, is a continuum, where the required threshold level for a particular engagement is determined by circumstances of the engagement in light of user needs.

### *General and Reporting Conclusions*

- High and moderate assurance do not appear to represent useful concepts for assurance engagements in which practitioners are required to exercise considerable professional judgement.
- Assurance engagements ought to be categorised into those leading to the acquisition of reasonable assurance and those leading to the acquisition of limited assurance.
- A systematic analysis of reporting requirements for assurance engagements needs to be performed by both academics and standard setters.

The primary overall conclusions of this Paper are:

1. that considerable academic research needs to be done for assurance engagements, which suggests that cooperation between standard setters and academics needs to be improved; and
2. the accounting profession in Europe and worldwide and standard setters need to undertake renewed efforts to develop and agree a conceptual framework for assurance engagements that will serve as a foundation for future standard setting and guidance in this area.

## FEE ISSUES PAPER

### PRINCIPLES OF ASSURANCE:

FUNDAMENTAL THEORETICAL ISSUES WITH RESPECT TO ASSURANCE IN ASSURANCE ENGAGEMENTS

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## 1. BACKGROUND

- (1) The International Auditing Practices Committee, or “IAPC”, (succeeded by the International Auditing and Assurance Standards Board, or “IAASB”) started a project in late 1993 that led to the issuance of ISA 100 “Assurance Engagements” in June 2000. Nevertheless, at that time the IAPC recognised that ISA 100 was incomplete due to the lack of guidance on so-called moderate assurance engagements. The lack of a consensus for the issuance of a standard in this area hinders the development of further standards and guidance for assurance engagements in relation to subject matter other than historical financial statements. Although the IAASB issued a Study in 2002 entitled “The Determination and Communication of Levels of Assurance Other Than High” that deals with a number of the issues involved, continuing debate about many of these issues indicates that further investigation of the conceptual issues is warranted.

## 2. OBJECTIVES AND SCOPE OF THIS FEE ISSUES PAPER

- (2) The primary purpose of this FEE Issues Paper “Principles of Assurance: Fundamental Theoretical Issues with Respect to Assurance in Assurance Engagements” is to identify and examine, and discuss possible solutions to, the significant theoretical issues associated with the determination of assurance in assurance engagements – but by no means in a conclusive manner. ***This Paper is an abridged version of the original Paper: readers wishing to obtain a more thorough treatment of the issues supporting the conclusions in this abridged version are directed towards the unabridged version of the Paper.*** Consequently, the Paper serves as a basis for a review of the major theoretical issues underlying the determination of levels of assurance, and hence for FEE deliberations on future exposure drafts of IAASB pronouncements in this area. The FEE Paper will in part build upon the results of the IAASB Study and propose a number of recommendations to the IAASB.
- (3) Further objectives of the Issues Paper include the identification and examination of a limited number of additional critical related issues within ISA 100 and to contribute to the basis for future academic research in the area of assurance engagements. Moreover, this Paper also seeks to demonstrate to regulatory authorities, such as the EU Commission, the efforts by the European profession to establish a firm theoretical foundation for the development of useful standards and guidance in this area that reflect the public interest.
- (4) The unabridged version of the Paper contains the detailed analysis underlying the conclusions expressed in this summary. There are three levels of analysis that need to be considered with respect to proposed or existing standards:
  1. Theoretical consistency (does it make logical sense?)
  2. Practicality (can it be done in practice from a technical point of view?)
  3. Political feasibility (will it be approved?).

The Paper addresses all three levels, but in the first instance focuses upon theoretical consistency before considering practical or political constraints.

- (5) While this Paper may contain many thoughts and analyses that might be original, it is not meant to be a treatise on the individual issues, nor does it purport to be a complete and consistent treatment of the issues addressed. Rather, it represents an attempt to identify some of the issues involved and to derive proposals for possible solutions based on

analyses presented in the discussion. The unabridged version of the Paper does not refer to primary sources in all cases, but builds on work already done in certain areas by referring to secondary sources. It is hoped, however, that the Paper will prompt additional empirical and theoretical academic research on the issues identified as well as influence standard setting in this area.

- (6) The scope of this Paper is confined to issues in relation to standards on audits of financial statements and other assurance and attestation engagements – it does not address issues in relation to codes of ethics. Hence, this Paper generally does not cover ethics or independence issues, which, while important, go beyond of the scope of the fundamental issues being addressed. However, independence or other ethical issues are mentioned where these arise.
- (7) Since International Standards on Auditing, including ISA 100 “Assurance Engagements”, are written in English, the analysis of the nomenclature used to describe different concepts is limited to those English terms and is performed in an Anglo-Saxon context. Readers from jurisdictions whose official languages are not English are cautioned that attempts to directly translate these terms (e.g., “reasonable”, “limited assurance” etc.) into other languages are often associated with shifts in meaning that do not do justice to the meaning of the terms in English.

### **3. THE TOOLS APPLIED IN THE PAPER TO ANALYSE THE ISSUES**

- (8) The unabridged version of the FEE Issues Paper begins by reviewing the tools that applied in analysing assurance in assurance engagements. In particular, logic (especially classical logic) is a primary tool for the analysis of the issues involved. Furthermore, microeconomics (particularly information economics, including decision theory and components thereof, such as game theory and agency theory) should form the basis for the determination of the objectives of assurance engagements and hence assurance. The analyses of the elements of assurance engagements (subject matter, criteria, etc.) is performed by applying measurement theory (and metaphysical argument and epistemology, where relevant), information theory, and to the extent relevant, the qualitative characteristics of accounting information in accounting theory.
- (9) To the extent that auditing and assurance theory offer tools for these analyses, these should be applied, but it should be recognised that, given the continuing debate in these areas, in their current state these theories are unlikely to provide the solutions needed. Because assurance engagements are not performed in a legal vacuum, the effects of legal frameworks on the performance of, on the standard setting for and on the development of concepts for such engagements, need to be examined briefly where relevant.

#### **3.A. *The Economic Basis for Assurance vs. Other Engagements***

- (10) The existence of assurance engagements as defined below (paragraphs 10 to 16) begs the question as to why these are carried out rather than other engagements. While there may be a number of factors involved, the underlying factor appears to be economic. Assurance rather than other engagements are performed in certain circumstances because users are willing to pay or exert political or economic pressure to have responsible parties pay for the risk reduction associated with the issuance of an overall professional opinion by the practitioner on the conformity of the subject matter with the identified suitable criteria.

## 4. PRACTITIONERS' ASSOCIATION WITH SUBJECT MATTER

### 4.A. *Types of Subject Matter*

- (11) There are a number of different types of subject matter with which a professional accountant may become associated, and there is a fundamental dichotomy between information or data and other kinds of subject matter. This dichotomy becomes important in the subsequent analysis of the nature of subject matter. Subsequent analysis in the Paper focuses on the association of practitioners with subject matter due to their provision of services as part of a professional engagement (as opposed to other kinds of association, such as commercial engagements not involving professional judgement).

### 4.B. *Types of Professional Engagements*

- (12) This Paper identifies three kinds of professional engagements (termed “advice or consulting”, “construction” and “attestation”), with some engagements representing a combination of these. However, such combinations do not affect the nature of the engagement type within the combined engagement – that is, if an attestation engagement is embedded within a consulting engagement, this does not change the attestation engagement component to a consulting engagement. Consequently, the attestation engagement within the consulting engagement remains subject to standards for attestation engagements in these circumstances. There may be legal or professional requirements in some jurisdictions limiting or prohibiting the combination of certain kinds of engagements (e.g., the preparation and audit of financial statements).
- (13) The identification of three different kinds of professional engagements is predicated upon distinguishing them from one another. The key differences between the three types of engagements are subtle. Consulting or advisory engagements may include the provision of a report containing the identification of issues and their analysis and conclusions, professional opinions and recommendations with respect to the issues in relation to the subject matter. However, an advisory or consulting engagement is neither primarily directed towards the performance of procedures on the subject matter to gain evidence to support findings, nor reporting the findings resulting from the evidence derived from those procedures. Hence in a purely advisory or consulting engagement (e.g., tax advice) the practitioner provides professional advice in relation to subject matter and may provide recommendations about alternative courses of action, but is neither engaged in constructive activities in relation to, nor the provision of an evidence-based attestation report on, the subject matter.
- (14) In a constructive engagement the practitioner needs to apply due care in the performance of the engagement. The engagement implicitly includes an opinion towards the recipient of the construction that what the practitioner has constructed meets the terms of engagement. However, the emphasis in this case is on satisfying the terms of engagement through the construction rather than on the provision of an opinion about the construction. Hence, in a constructive engagement the practitioner designs, constructs or implements the subject matter or executes the operations thereof (e.g., design or construction of IT configurations, implementation of an accounting system, the execution of bookkeeping functions, preparation or compilation of financial statements).

- (15) In contrast, in an attestation engagement, the issuance of the report itself is the objective and hence an expression of the engagement performed. In an attestation engagement the practitioner is engaged to issue a report of findings in relation to the subject matter based on the evidence obtained from procedures performed in relation to that subject matter. Attestation engagements can be categorised as either assurance or agreed-upon procedures engagements. Assurance engagements can be distinguished from agreed-upon procedures engagements in that assurance engagements involve the issuance of a report that includes the expression of an opinion or conclusion with a certain level of assurance on the conformity of the subject matter with identified suitable criteria. Agreed-upon procedures engagements, on the other hand, contain only findings in relation to the subject matter based on procedures that the practitioner has performed on that subject matter without the expression of such an opinion or conclusion.

#### **4.C. *Direct vs. Indirect Engagements***

- (16) Another angle from which assurance engagements can be categorised is whether they are direct or indirect (“attest”) engagements. In a direct engagement the practitioner expresses a conclusion or opinion directly on subject matter based upon a direct evaluation of the subject matter against suitable criteria, irrespective of whether the responsible party has made a written assertion in relation to the subject matter. In an indirect engagement, the practitioner expresses a conclusion or opinion on the reliability of or that enhances the credibility of a written assertion by the responsible party in relation to the subject matter. This distinction is in fact arbitrary and hence not useful in categorising assurance engagements because the application of the criteria to the subject matter essentially generates the assertions (whether explicit or implicit).
- (17) This Paper recommends that standard setters review and perhaps reconsider their division of assurance engagements into direct and indirect (attest) engagements, and consider the use of a categorisation based on measurement vs. remeasurement for the following reasons. From a practitioner’s point of view, there is fundamentally no difference between an engagement in which the responsible party has made an explicit assertion without having undertaken the measurement to support that assertion, and an engagement in which the responsible party has performed no measurements and made no explicit assertions. Both of these engagements are, however, substantially different from those engagements in which the practitioner examines whether the measurements by the responsible party actually support the assertions (whether explicit or implicit).
- (18) However, it should be recognised that engagements involving direct measurement rather than remeasurement may be associated with self-review problems. As noted, such independence considerations are not within the scope of this Paper.

## 5. THE EXISTENCE AND NATURE OF LEVELS OF ASSURANCE

### 5.A. *The Nature of Assurance*

- (19) Since assurance in relation to the performance of assurance engagements is an artificial concept developed by accountants to help describe the nature of the engagements being performed, the nature of assurance can only be determined by reference to its purpose within the context of assurance engagements. Overall, assurance appears to be related to the provision of confidence, certainty and security with respect to something to someone. There appears to be three different perspectives of assurance: that obtained by the practitioner, that expressed in the practitioner's report and that attributed by the user. The existence of the so-called expectations gap suggests that these three perspectives are not the same.
- (20) Auditing literature has divided the expectations gap into the performance gap (resulting from either deficient performance or deficient standards) and the reasonableness gap resulting from unreasonable user expectations. While current literature has recognised that these gaps change over time, it does not yet appear to have been recognised that the component gaps could, in certain circumstances, invert. For example, legal requirements or professional standards could be set that require auditors to perform to a standard that goes beyond what can reasonably be expected of an audit (e.g., a requirement to audit unauditably subject matter or apply criteria that are not suitable for the engagement).
- (21) However, individual practitioners are not necessarily in a position to ascertain or determine the assurance attributed by users to a practitioner's report, and professional standards determine the assurance expressed in a practitioner's report. Consequently, this Paper recommends that the assurance obtained by the practitioner in the course of the engagement be used as the basis for analysis of assurance in the Paper and for standard setting generally. In this context, as a matter of nomenclature, the term credibility ought to be restricted to the assurance attributed by the user.
- (22) Given that under the economic basis for assurance engagements noted above, the purpose of assurance engagements is risk reduction from the point of view of the user, but the assurance perspective taken is the assurance obtained by the practitioner, the assurance obtained by the practitioner appears to be related to the practitioner's exercise of risk reduction in the performance of the engagement. Standard setters have generally not taken a consistent approach in defining the assurance perspective (whether user, report or practitioner) – in fact, some individual standard setters have been inconsistent between or even within standards that they have issued. There does not appear to be a consistent approach to defining the assurance perspective in academic literature addressing assurance or auditing engagements either.
- (23) Standard setters have generally not taken a consistent approach to defining engagement or audit risk. In applying a Bayesian perspective, some include only the risk of incorrect acceptance, whereas others include the risk of incorrect rejection. Some standard setters have not been consistent in this matter between or even within standards that they have issued. While there is some academic support for the inclusion of the risk of incorrect rejection in the definition of audit or engagement risk, this support does not appear to represent the majority view at the present time and does not yet appear to have been systematically and thoroughly developed as a concept.

- (24) Standard setters appear to recognise that there is some kind of connection between audit or engagement risk and assurance, and in some cases even recognise a tenuous inverse relationship between them, but appear to be hesitant about directly linking the two concepts. With few exceptions, academic literature, on the other hand, appears to recognise a direct inverse relationship between audit or engagement risk and assurance, whereby assurance represents the mathematical complement of a Bayesian expression of risk (i.e., assurance = 100 % minus risk).
- (25) Academic literature – particularly in the legal profession – has begun the process of refining the understanding of uncertainty in the context of assurance by adding elements of so-called Baconian probabilities (ordinal probability scales expressed in narrative terms that stress the importance of eliminative and variative inductive methods by means of which evidential tests are used not to support but to eliminate alternative hypotheses) and vagueness (i.e., indeterminate concepts leading to degrees of truth rather than a truth-false dichotomy due to so-called “fuzzy” logic or subject matter), which challenge a traditional Bayesian risk perspective. At this stage, academics do not appear to have investigated how or whether so-called Taleb distributions (which have the property that many small profits are mixed with occasional large losses) may influence auditor behaviour with respect to risk. Furthermore, academics have begun to question whether engagement risk is separable from the uncertainties associated with the subject matter or criteria of the engagement.
- (26) Overall, given general academic support for the exclusion of the risk of incorrect rejection from the definition of audit or engagement risk and the direct mathematical linkage that most academics appear to make between assurance and risk, this Paper works with a Bayesian definition of engagement risk that encompasses only the risk of incorrect acceptance and is the mathematical complement (i.e., is inversely related) to assurance. Furthermore, because the inseparability of engagement risk from the uncertainty associated with the subject matter or criteria has not yet become a part of orthodox audit theory, this Paper assumes that engagement risk is separable unless the issue of separability directly affects the analysis at hand.
- (27) The issues involving separability and the inclusion of the risk of incorrect rejection require further academic research. The other concepts addressed by academics (Baconian probabilities, vagueness and Taleb distributions) have not yet been investigated systematically enough in an assurance engagement context so that their implications for such engagements can be determined. Hence, this Paper does not address these issues in subsequent analyses, but recognises that further academic research in these areas is needed.
- (28) By applying nonparametric mathematical methods to a Bayesian definition of risk and assurance, assurance is fundamentally a quantitative concept (“levels of assurance”). Such a Bayesian portrayal of risk and hence assurance is a useful tool to determine the fundamental nature of assurance. However, because practitioners are unable to assign specific numerical values to the assurance obtained in an assurance engagement in practice, in standard setting a combination of nonparametric mathematical methods and narrative definitions are required to describe the relationship between different levels of assurance.
- (29) Hence, in a risk-based concept of assurance, assurance can be described as a continuum ranging from 0 % (the natural minimum) to 100 % (the natural maximum) with a natural mid-point (50 %). Given the inability of practitioners to assign specific numerical values to the assurance obtained, an ordinal scale of assurance with narrative descriptions (e.g.,

“high”, “moderate” and “low”) can be applied. The most useful perspective to define the nature of this kind of ordinal scale is that these different levels of assurance are exclusive (do not overlap), absolute (i.e., are not relative) and obey the rule of transitivity (if high is greater than moderate and moderate is greater than low, then high must be greater than low) – both within certain types of engagements across different specific engagements and across different types of engagements.

### **5.B. Reasonable vs. High Assurance**

- (30) The previous discussion about the relative meaning of terms used to describe an ordinal scale of assurance (“high”, “moderate” and “low”) begs the question as to the meaning of “reasonable assurance” in this context. A review of the dictionary and legal views of the meaning of the term “reasonable” suggests that “reasonable” is a relative term whose level depends upon the circumstances or the end in view. The following represents an abridged analysis of the description of the meaning “reasonable” and “high assurance” – both by standards setters and in a legal context – both at an international level (in the ISA and the IAASB Study) and in the major common law jurisdictions that have had the most effect on the contents of ISA 100 (the U.S., Canada and the U.K.).
- (31) A review of the meaning of “reasonable” and “high” assurance in these contexts indicates that while standard setters have not always been consistent in their use of these terms (both among standard setters, and, in some cases, between standards issued by individual standards setters), generally the term “reasonable assurance” appears to be associated is a relative concept based upon what is reasonable in a particular set of circumstances. This view appears to be supported by the view of the courts in the major common law jurisdictions. In contrast, unless it is defined in terms of reasonability, the term “high assurance” reflects an absolute concept that does not vary with the circumstances.
- (32) The review of the meaning of “reasonable” and “high” assurance in these contexts also indicates that the claim made in ISA 100, that in certain circumstances “absolute” assurance is attainable, appears to be spurious since professional accountants are not in a position to completely eliminate the possibility of error – even where that possibility is exceedingly low.
- (33) The concepts of reasonable and high assurance in relation to the legal concept of “beyond any reasonable doubt” and the expression “virtual certainty” also need to be examined. It appears that the criminal courts seek a greater quantity and quality (credible and reliable) of evidence in a much more stringent evaluation process of past events than is generally obtained for a financial statement audit. Compared to criminal legal processes, in audits of financial statements a decreased likelihood of an inappropriate unqualified opinion – both due to a lower level of assurance and less precision – is sacrificed for timeliness, so that the financial statements can be provided to users in audited form before they lose their relevance to those users.
- (34) Furthermore, in a Bayesian context high assurance appears to represent a level of assurance that is less than that represented by virtual certainty and beyond any reasonable doubt. Hence, in a Bayesian context, beyond any reasonable doubt appears to represent a level of assurance that exceeds that which is termed as “high”, but falls short of virtual certainty. Furthermore, beyond any reasonable doubt appears to represent an absolute concept in that, regardless of the circumstances of the case, the level of assurance below which a person cannot be convicted is at a very high level.



- (35) There are also differences between the criminal courts and audits of financial statements associated with the presumptions made and the onus or burden of proof. While, under the presumption of innocence, the courts need conclusive evidence to overturn that presumption to find someone guilty of a crime beyond any reasonable doubt, auditing standards appear to claim a more neutral stance with respect to management's honesty, which eases the burden of obtaining evidence to support the opinion that the financial statements are not materially misstated. Nevertheless, from a logical point of view, the burden of persuasion that the financial statements are not materially misstated ought to be borne by management, which is responsible for their preparation, rather than by the auditor. However, this does not relieve the auditor from the burden of persuasion that sufficient appropriate audit evidence was obtained to support the audit opinion.
- (36) Furthermore, whether or not explicitly stated in the auditing standards, in the major common law jurisdictions auditors appear to be able to rely on management's good faith to some extent with respect to fraud, since, in the absence of evidence to the contrary, auditors may generally presume that accounting records and documentation are genuine. This reliance, however, is limited by the results of the analysis of fraud risk factors and of any audit procedures performed during the course of the audit, and the attitude of professional scepticism, by means of which the auditor remains alert to evidence contrary to this presumption. This reinforces the previous conclusion that, unless there are exceptional circumstances, it appears that reasonable assurance in an audit of financial statements would ordinarily be construed as representing a level of assurance lower than beyond any reasonable doubt.
- (37) The fact that auditors are ordinarily required to obtain only reasonable assurance to support their audit opinion, rather than to meet a criminal standard of proof so that they believe beyond any reasonable doubt that the financial statements are not materially misstated, implies that auditors are ordinarily able to issue their audit report with an unqualified opinion even when they may still retain some reasonable doubt. This means that auditors are generally not required to dispel every reasonable doubt that the financial statements are not materially misstated.
- (38) An examination of the terms "probable", "more likely than not", the "preponderance of the evidence", "clear and convincing evidence", "persuasive" and "conclusive" suggests that in many cases auditors are only in a position to obtain persuasive evidence that more closely reflects the standard of proof required by the common law courts in civil cases ("the preponderance of the evidence") rather than "conclusive" or "clear and convincing evidence". The latter represents a lower standard than beyond any reasonable doubt, but higher than the preponderance of the evidence. Consequently, the concept of reasonable assurance appears to extend from "beyond any reasonable doubt" to "preponderance of the evidence" based upon the circumstances in a particular context.
- (39) From a Bayesian perspective, the concept of reasonable assurance applies to situations in which the level of certainty is just probable or more likely than not, which can be considered equivalent to the legal concept of preponderance of the evidence. High assurance, on the other hand, which represents a level of assurance less than beyond any reasonable doubt but greater than just more likely than not, appears to be equivalent to the legal concept of clear and convincing evidence, or, from a Bayesian perspective, highly probable.

- (40) Since audit evidence need only be persuasive rather than conclusive or convincing to obtain reasonable assurance, in certain circumstances, auditors are in a position to issue unqualified audit opinions even for cases in which there is more than just reasonable doubt that the financial statements are not materially misstated. This is primarily due to the limitations of audit evidence caused by the nature of the criteria applied (the accounting frameworks), which suggests that engagement risk is not separable from the uncertainties associated with the application of the criteria to the subject matter.

### ***5.C. Moderate Assurance vs. High and Reasonable Assurance***

- (41) Moderate assurance generally appears to be associated with a level of assurance that is less than high but greater than low. An investigation of the definition of moderate assurance in the ISA and national auditing and assurance or attestation standards suggests that standard setters in the major common law jurisdictions appear to have taken a procedural approach to delineate moderate from high assurance. The IAASB concurs for reviews of financial statements, but could not come to an agreement on whether this is appropriate for other moderate assurance engagements. With respect to other matters (such as engagement risk, assurance perspective, the meaning of the terminology applied, and absolute vs. relative concepts of moderate assurance) there does not appear to be consensus among these standard setters – indeed, it appears that the standard setters themselves had difficulty in reaching internally consistent positions on these matters.
- (42) It is interesting to note that none of the standard setters addresses professional scepticism or the presumptions of the practitioner with respect to management, even though these may be as relevant to reviews and moderate assurance engagements as to audits and high assurance engagements. Furthermore, practitioners tend to view moderate assurance as representing an absolute concept that is clearly below high and tends not to fall below 50 %, the balance of the probabilities.
- (43) Consequently, based on this and the definitions and usage of these terms, “probable”, “more likely than not”, and the “preponderance of the evidence” appear to represent absolute concepts that fall within the range of the moderate assurance concept. The same appears to apply to the term “plausible”. The term “limited assurance”, on the other hand, appears to be associated with the intentional limitation of the assurance obtained by means of a reduction in work effort that would have otherwise been necessary to obtain more (i.e., “reasonable”) assurance.

### ***5.D. The Implications for Concepts Associated with Levels of Assurance***

- (44) The previous discussion leads to the question as to what determines whether reasonable assurance has been obtained. It appears that the level of assurance that would be construed as being reasonable depends upon the specific circumstances of the engagement – i.e., the subject matter, criteria, engagement process and evidence involved in the engagement. This implies that what is reasonable assurance for one engagement or type of engagement, may not be so for another. The courts are likely to regard a higher level of assurance as being reasonable for circumstances in which high quality evidence is readily available compared to those circumstances in which it is not. It is also conceivable that if superior processes are readily available, the courts may view the level of assurance obtained by means of an inferior process leading to less assurance as not reasonable in the circumstances.

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- (45) However, in those cases where standards or regulatory requirements do not stipulate otherwise, practitioners could scope out assertions so that it is possible to obtain a higher level of assurance than might otherwise be the case. The risk associated with the removal of assertions from the scope of an engagement is, the more assertions that are removed from the scope, the less likely the remaining scope of the engagement is still meaningful to users. In certain jurisdictions, the courts may limit the degree to which assertions may be scoped out of engagements not required by statute or regulation.
- (46) In any case, practitioners cannot afford to ignore court decisions on the basis for their liability in professional practice. Since courts in local jurisdictions ultimately determine auditor liability based upon that court's interpretation of reasonability, reasonable assurance will vary among jurisdictions. Furthermore, while international standards will substantially harmonise audit and assurance engagement practice in conjunction with international firm practice, local courts are able to and do reach decisions at variance with these standards and practices. Consequently, until national legal systems have been harmonised, there will be non-statutory and non-regulatory legal limitations on the degree of harmonisation that international auditing or assurance standards can accomplish. For this reason, countries with a long history of well-developed legal systems have tended to implement the ISA or incorporate them into their standard setting processes rather than to adopt them directly.
- (47) In conclusion, while there are different levels of assurance that can be described in different ways, it is useful to attempt to summarise in a diagram the relationship between these different levels and their descriptions so as to clarify these relationships.

Diagram I

Level of certainty (lower bound)	legal standard of proof	Level of assurance	
		(absolute scale)	(relative scale)
absolute certainty (100%)	no doubt	absolute	“unreasonable” assurance in all circumstances
virtual certainty	remote possibility of doubt	extremely high	
	beyond any reasonable doubt	very high	
highly probable	clear and convincing evidence (reasonable doubt)	high	
probable	preponderance of the evidence (considerable doubt)	moderate	
more likely than not (> 50%)			
balance of the probabilities (50%)		low	
more unlikely than not (<50%)	(substantial doubt)	low	
improbable		low	
complete uncertainty (0%)		non-existent	

(48) The Diagram takes a Bayesian perspective of assurance. A Baconian view of assurance would simply remove the far left column and thereby not associate the ordinal strength of the evidence supporting the decision taken with specific ranges or descriptions of probability.

- (49) In accordance with the findings noted above, from a Bayesian perspective reasonable assurance represents a relative concept with a lower bound at a level of certainty corresponding to more likely than not (or as the legal profession would say, the preponderance of the evidence). The need for the lower bound to reasonable assurance arises from the concept of a scope limitation – i.e., there are circumstances where insufficient evidence leads to the inability to reach a conclusion or opinion. The placement of reasonable assurance on the ordinal scale encompassing beyond any reasonable doubt, clear and convincing evidence and the preponderance of the evidence would depend upon the circumstances of the engagement.
- (50) In essence, reasonable assurance is the level of assurance that can reasonably be obtained within the confines of what can reasonably be expected from a certain kind of engagement. From a Bayesian perspective, high and moderate assurance, on the other hand represent absolute concepts, with high meaning at least highly probable (clear and convincing evidence) and moderate ranging from more likely than not to probable (the preponderance of the evidence).
- (51) The range depicted by reasonable assurance does not represent the range of assurance that is acceptably termed “reasonable” for a specific engagement for particular circumstances. Rather, it represents the acceptable range of reasonable assurance across all kinds of engagements for all possible circumstances. For a particular engagement in certain circumstances, what would be construed as “reasonable assurance” would certainly represent a range, the lower bound of which would represent assurance that is not sufficiently reasonable and the upper bound of which would represent assurance which is unreasonably high, but this range may be quite narrow. For example, it is conceivable that for certain kinds of engagements with a very narrow scope, precise subject matter, definitive criteria, and a comprehensive engagement process an extremely high level of assurance would be regarded as reasonable (beyond any reasonable doubt). For other kinds of engagements, the assurance that would be regarded as reasonable may not be more than moderate (i.e., the preponderance of the evidence).
- (52) On the other hand, for specific engagements in certain circumstances that cover a variety of both explicit and implicit assertions within a single conclusion, the range of reasonable assurance may be quite broad. For example, the level of assurance obtained on the audit of cash balances at year-end in an audit of financial statements may be significantly greater than that obtained for assertions encompassing revenue recognition issues requiring considerable professional judgement or for implicit assertions with respect to the absence of material misstatements due to management fraud.
- (53) The concept of “limited assurance”, which is not depicted in the diagram, also represents a relative concept – but one that is relative to reasonable assurance, since this Paper concludes that limited assurance represents the intentional acquisition of a lower level of assurance than that which could reasonably be obtained (reasonable assurance). Furthermore, it is conceivable that the range of assertions covered by the objectives of a limited assurance engagement might be more limited than for an engagement designed to obtain reasonable assurance. In short, limited assurance simply ranks lower than reasonable assurance due to the decision to obtain less evidence. Nevertheless, it should be noted that it is difficult to compare limited assurance for engagements with different scopes (e.g., when particular assertions are scoped out of the engagement objectives for the purposes of the limited assurance engagement).

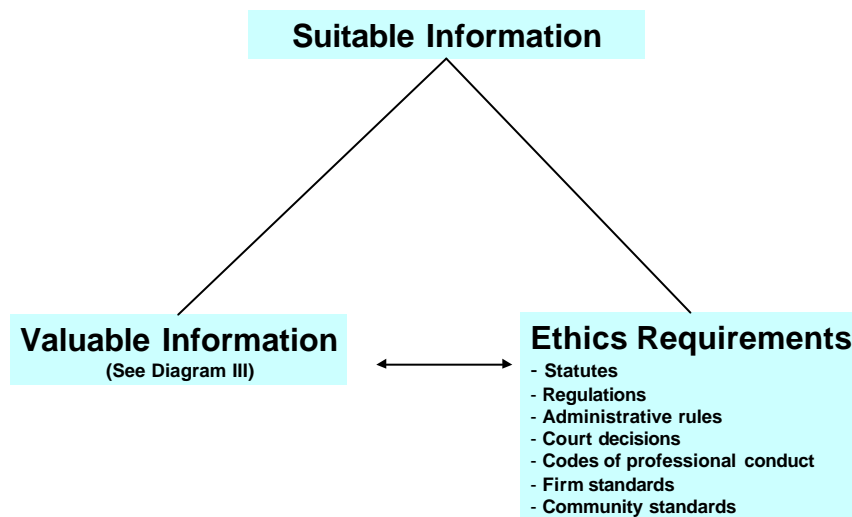
## 6. ISSUES IN RELATION TO SUBJECT MATTER, CRITERIA, EVIDENCE AND ENGAGEMENT PROCESS

### 6.A. *Characteristics of the Elements of an Assurance Engagement*

- (54) A prerequisite for an assurance engagement is that its elements – that is, the relevant subject matter, criteria, evidence and engagement process – are suitable for that engagement. Consequently, the practitioner must be able to reach a decision as to whether or not these elements are suitable for the purposes of that engagement.
- (55) It is apparent that decision theory would provide the basis for determining that decision process. Such a decision process would require evidence about the characteristics of these elements for the determination of their suitability. Since evidence is information, sufficient and appropriate information about whether the characteristics of the elements are suitable is required. The key point here is the need for *information* in adequate quantity and quality about the characteristics of these elements.
- (56) The determination of the costs and value of information under information theory establishes the link to decision theory. Ultimately, then, it is the value and cost of the information about the characteristics of the elements that will allow the practitioner to determine whether these are suitable to perform the engagement. This suggests that information theory and other treatments of the qualitative characteristics of information (such as for accounting information) can serve as a basis for establishing the criteria for the determination of whether the information obtained is of adequate quality – that is whether it displays the required qualitative attributes.
- (57) Some concepts in information theory may be useful to the determination of the suitability of information. Furthermore, a comparison of the qualitative characteristics of accounting information to the concepts used in information theory determines that some of these concepts can be applied for the determination of the suitability of engagement elements. The various conceptual frameworks for accounting differ in some important details. The concepts applied in the IFAC Discussion Paper on risk management for accounting systems in an e-business environment takes an information processing and evidential approach to these issues.
- (58) The approaches used by standard setters to determine the required characteristics for the elements of assurance or attestation engagements (or for their assertions generated or for the criteria applied) were also compared and synthesized. The accounting and assurance or attestation approaches have a number of similarities, but also contain important differences. Furthermore, there are significant differences in the approaches used by attestation and assurance standards to describe such qualitative characteristics.
- (59) The fact that the information theory, accounting frameworks and assurance and attestation standards contain significant differences is indicative that no consensus has been reached among academics or standards setters about the nature of the qualitative characteristics of information or engagement elements. However, all of these approaches are ultimately rooted in measurement theory – especially as conceived by the behavioural sciences. Consequently, any such analysis needs to touch upon the criteria for determining measurement process validity (including reliability) and practicality.

- (60) Measurement theory includes very sophisticated approaches for dealing with the qualitative characteristics of measurement and the problems associated with such measurement. In a synthesis of information theory, accounting frameworks and assurance and attestations standards, it appears that measurement theory as adjusted for the context in which accounting practitioners work appears to provide the most appropriate basis for the determination of the qualitative characteristics of information.
- (61) The next step would be an overall synthesis of measurement theory with the other approaches. The results are depicted in the following diagrams. The first diagram (Diagram II) depicts the fundamental factors determining the *suitability* of information.

Diagram II



- (62) The diagram above clarifies that there are ethical considerations that govern the association of the practitioner with subject matter or information beyond sheer value to the user. The profession would not favour its practitioners being associated with subject matter or information of a criminal nature or of a nature unbecoming the profession, and the profession and other authorities promulgate codes of professional conduct that prescribe ethical conduct in this regard. Furthermore, ethical considerations and considerations of value are not completely independent of one another. For example, it is unlikely that a profession would deem it ethical to perform an assurance engagement in which it was clear before engagement acceptance that it would not be of value (i.e., not be meaningful) to users by meeting user purposes.
- (63) The fundamental other issue is what makes information *valuable* to users (see Diagram III). Generally, information's *marginal benefits* must exceed its *marginal costs* (i.e., net marginal benefits make information valuable to users). Of course, the costs may not just be out-of-pocket financial outflows, but may also represent opportunity costs measured in other than monetary terms. The cost incurred in obtaining information is guided by the principle of *economy* (obtaining the desired *beneficial information* at minimum cost).

- (64) The *cost* of acquiring the desired information under the principle of *economy* results from the product of the *effort expended* to obtain that information and the *efficiency* of that effort (the cost per unit of effort). In an assurance engagement the effort expended by a practitioner in a particular engagement would depend upon the *resources available* to that practitioner (a constraint not unrelated to the price that users or responsible parties are willing to pay for that information) and the *effectiveness* of the effort in acquiring the desired information. The *effectiveness* of the effort expended to acquire the desired information is in turn dependent upon the *practicality* (after removing the concept of interpretability, which is subsumed under understandability in this Paper, *practicality* refers to the ease and speed with which procedures can be applied in relation to specific evidence) of the procedures applied and the *accessibility* (the degree to which evidence is susceptible to evidence gathering procedures). The *accessibility* of evidence relates to its *traceability* (the degree to which the practitioner can detect the evidence and its sources), *measurability* (the degree to which the practitioner can measure the information – see the following discussion on validity), and its *assessability* (the degree to which the practitioner can understand and evaluate the evidence for the purposes of the engagement – see the following discussion on *understandability*) to an expert party unrelated to the responsible party within a reasonable period of time.
- (65) The *efficiency of the effort* expended by the practitioner in an assurance engagement is determined by the *practitioner cost profile* (the cost associated with certain procedures performed in expending the effort for a particular practitioner) and the *convenience of that effort* (the ease with which these procedures can be performed in the circumstances of that particular engagement).
- (66) Often, however, the costs of assurance engagements to users are not transparent to them, since the users may have succeeded in exerting pressure so that the responsible party is obliged to bear the costs of providing the information (example: statutory audits of financial statements). This thought, however, does not address the economic issue of the incidence of the costs – that is, who ultimately bears the costs, since the responsible party (or even the users) may be in position to pass these costs on to other parties. The issue of incidence of costs goes beyond the scope of this Paper, since it is primarily an economic analysis, but it must be kept in mind when judging information based on its *marginal benefits* vs. *marginal costs* for a particular engagement.
- (67) However, although practitioners are directly concerned about their livelihood and hence the costs of such engagements to users or the responsible party (i.e., the prices that practitioners can charge for assurance engagements and the degree of preparation expected of the responsible party), these costs are usually measured in monetary terms of some sort (e.g., the fees charged plus expenses and the cost of any work that needs to be done by the responsible party so that the practitioner can perform the engagement). Consequently, the costs of the provision of information through an assurance engagement are somewhat determinable and the incremental costs for additional information are usually reasonably estimable and provide a useful surrogate for an estimate of marginal costs.
- (68) On the other hand, the *benefits of the information* provided by the assurance engagement are much more difficult to gauge. As was pointed out, such marginal benefits depend upon the situation of the user and on the characteristics of the information. This means that a conceptual framework for assurance engagements ought to include characteristics of information required for that information to benefit the user once received. Information theory deals with this requirement through the concepts of “appropriateness” (the relevance of the information to the users’ needs) and “clarity” (the degree to which



information is free from ambiguity), whereas accounting theory speaks of “understandability” and “decision usefulness,” or “usefulness to users”.

- (69) In other words, for information to be valuable, its marginal benefits must exceed its marginal costs, and the benefits of the information appear to depend on two factors, which this Paper will term *usefulness* and *understandability*. *Usefulness* can be defined as the potential capacity of the contents of the information to bear on the purposes of the user. *Understandability* can be defined as the degree to which a user can perceive the significance of the information for his or her purposes. Under these definitions, information would have no benefits to a user unless it is both sufficiently *useful* and *understandable* (it is presumed that the user can act on the information so that he or she can actually obtain the potential benefits).
- (70) It should be pointed out that both the concepts *usefulness* and *understandability* reflect a combination of characteristics of the user and inherent to the information (see Diagram IV). One of the determinants of *understandability* is the *user profile* – that is, the level and nature of user understanding or prior knowledge. Furthermore, there is an assumption that users are prepared to study the information with reasonable *diligence* and have a reasonable level of *knowledge* of the subject matter, criteria and the nature of the engagement.
- (71) On the other hand, the *user profile* may also present problems to those engaged in measuring, presenting and reporting information. In particular, individuals may prefer limited rather than comprehensive information due to their threshold for *information overload*, which, if exceeded, may cause them to not perceive information as being significant even when it is so. In addition, individuals have different *thresholds for ambiguity* – sometimes information appropriately conveys ambiguity, but individuals may not feel comfortable with that level of ambiguity and hence attribute greater certainty to the information than is warranted. Studies have also shown that individuals are poor natural statisticians – that is, they tend to base estimates and predictions on recent or available observations even though these may neither be representative of long-run conditions nor reflect objective probabilities (the *subjective probabilities* problem).
- (72) Individuals may apply a number of strategies to deal with such complexities in information, including *functional fixation* and *anchoring*. *Functional fixation* suggests that individuals apply symbols, aggregations or surrogates in making judgements such that these are assumed to maintain the same meaning over time, irrespective of changes in what they represent or in the way they are computed. *Anchoring* suggests that individuals tend to use new information to adjust old information and thereby fail to fully adjust for significance of the new information.
- (73) A number of findings resulting from the effect of information on decision making include:
- irrelevant information added to an information set tends to decrease the performance of decision makers (*information overload*)
  - decisions makers tend to overemphasise highly correlated information (*correlation emphasis distortion*)
  - increased amounts of information tend to inhibit learning (*information overload*)
  - decision makers tend to overestimate the emphasis they place on minor cues (*cue emphasis distortion*)

- decision makers rely more heavily on a few major variables than they believe they do (*oversimplification*).
- (74) There are also other approaches to dealing with the way in which individuals process information, such as models that deal with human information processing (e.g., the lens model, Bayesian probabilistic judgment and the cognitive complexity/cognitive style models). However, a complete treatment of the behavioural aspects of information is beyond the scope of this Paper. Rather, it is important to recognise the limitations of users in their use of information.
- (75) The other determinant of *understandability* relates to the *profile of the information* in terms of its *inherent comprehensibility*, which depends upon whether the information is:
- *identifiable* (the degree to which users are able to identify the existence of the information),
  - *delineatable* (the degree to which users are able to determine the boundaries of the information for a particular matter versus information about other matters)
  - *intelligible* (the degree to which the information is formally presented by means of *channels, media* and in *language or symbols* that potentially relevant users generally can be expected to understand),
  - *clear* (the degree to which information is *unambiguous*, i.e., not subject to significantly different interpretation by potential users),
  - *concise*: the degree to which the information as a whole is not so burdened with less important information or this less important information is not so emphasised that potential users may more easily perceive the significance of other more important information; conciseness can generally be achieved by means of
    - *discrimination*: being discriminating in the inclusion of information – that is, by not reporting clearly immaterial information,
    - *brevity* or *compactness*: ensuring that a given volume of information is in as brief and compact a form as possible without redundancy so that it does not overtax the attention span of the user
    - *level of detail*: by means of *aggregation* and *summarisation* of information, ensuring that only that level of detail of information that aids user understanding is included
    - *presentation*: ensuring that the information is appropriately *classified*, in the appropriate *order* by nature and chronologically, appropriately *organised*, and that more material information is reported or presented in a more prominent fashion than less material information – that is, *emphasis by importance*),
  - *comprehensive* (the degree to which all of the information necessary for its being understood by potential users is included), and
  - *interpretable* (the degree to which the potential meaning contained in the information can inherently be perceived).

Nevertheless, it should be recognised that the required *profile for information* cannot be completely segregated from the *user profile*, since the two are closely related.

- (76) Like *understandability*, the *usefulness* of information depends upon both the user and the nature of the information (See Diagram V). On the one hand, a *user* must have particular *information needs* relating to the subject matter and, to the extent that there are multiple users, these may have different information needs. This suggests that the concept of *flexibility* of information in information theory (the usability of the information for more than one user) could be an important component of the determination of *user needs*.

- (77) There are those, such as Sterling, who would suggest that the *usefulness* of information depends upon whether the given attributes measured and hence contained in that information are specified by the decision model employed. This implies that those providing the information would need to know the variables and relationships employed by the models used by decision makers. In certain kinds of assurance engagements, this may be true. However, for many kinds of assurance engagements, such as for audits of financial statements, the information to be specified in the financial statements may need to meet the needs of many different kinds of users that employ varying decisions models based upon the decisions for which the financial statements are being used. Consequently, for some kinds of assurance engagements, *flexibility* remains an important concept for determining *user needs*.
- (78) To be useful, the information must be capable of meeting at least some of *users' needs* to some degree: that is, the information must matter in terms of user needs. Information matters to user needs if it is *material* to these needs by being capable of influencing user judgement. Hence, *materiality* can be defined as the principle that information should be reported to users if it is at least probable that, in light of the surrounding circumstances, the judgement of a reasonable person using this information would be influenced by its being reported. In addition, *materiality* also encompasses the principle that information reported to users should be free of misstatement if, in light of the surrounding circumstances, it is at least probable that the judgement of a reasonable person using this misstated information would be influenced by the magnitude of such misstatement. Negatively and more precisely stated, an omission of reported information or the magnitude of a misstatement of reported information is *material* if, in light of the surrounding circumstances, it is at least probable that the judgement of a reasonable person using the information would have been influenced by that omission or misstatement.
- (79) Used in this sense *materiality* reflects both a qualitative characteristic (what needs and does not need to be reported: i.e., required inclusions vs. omissions allowed) and a quantitative characteristic (how precise and accurately information needs to be reported: i.e., the permissible magnitude of misstatements for included information). The *materiality* principle also implies that all potentially material information needs to be measured and reported. In other words, the *materiality* principle represents an implicit requirement based upon the threshold set for *materiality*. Furthermore, under the principle of materiality, clearly immaterial information *need not* be reported. That clearly immaterial information *should not* be reported is a function of the *understandability* requirement in relation to the *user profile (information overload)* and the information profile (*conciseness*).
- (80) Whether particular information is *material* or not, then, depends upon the capacity of that information to influence users given their information needs and all such information that has the capacity to influence users must be reported. In addition, material information reported to users needs to be free of material misstatement.
- (81) *Materiality* considerations play a role in what needs to be reported and hence in what needs to be measured that is then reported (the qualitative aspect). Likewise, *materiality* considerations play a role in how accurate and precise reported information and hence its measurement need to be (the quantitative aspect) Therefore, *materiality* is also a concept that relates not only to what is reported to users and how, but also relates to the measurement *process* applied by the responsible party and hence the practitioner.

- (82) Since *materiality* relates to both measurement and the reporting of measurement, and is defined in terms of the capacity to influence users, there is a question as to whether *materiality* in an assurance engagement is different from *materiality* in other contexts (e.g., is auditing *materiality* the same as or different from accounting *materiality*). There does appear to be a widely accepted notion that there is no difference between accounting and auditing *materiality*. Since both accounting and auditing *materiality* are generally defined in terms of user requirements, this position appears logically supportable.
- (83) However, it also implies that then there is in fact no such thing as auditing *materiality*, for accounting (the financial statements) can exist independently of whether or not it is audited, whereas an audit can only exist when the subject matter being audited (the accounting as reflected in the financial statements) also exists. Consequently, while *materiality* is a concept that is central to the measurement and reporting involved in an assurance engagement, *materiality* relates to user needs in connection with particular subject matter independently of whether or not an assurance engagement will be carried out. This position is consistent with recent research literature on assurance and audits. However, it should be recognised that by including *materiality* within their accounting frameworks, accounting standards setters have also made *materiality* a part of the criteria by which financial statements (the subject matter) are evaluated in a financial statement audit.
- (84) However, it should be recognised that information that is not *available* regardless of 1. the *effort* made to measure and report it, 2. its potential *materiality* and 3. the needs of users, cannot be *useful*. The concept of *availability* should be distinguished from the concept of *accessibility*, which ties into the concept of *effectiveness* of practitioner *effort* in an assurance engagement (see the discussion on the *cost of information* above). . *Accessibility* represents a continuum, depending upon the *traceability*, *measurability* and *assessability* of the evidence representing the information, that ultimately may be reflected in the *cost* of the engagement or in obtaining the information. Even though in part the same factors apply (*traceability*, *measurability* and *assessability*), *availability*, on the other hand, represents a dichotomy rather than a continuum where regardless of the effort applied by the practitioner or user, the information necessary cannot be obtained. Furthermore, *availability* also depends upon the *existence* of the information or evidence and the *practicability* of available procedures (i.e., are they possible) to acquire that evidence or information. Nevertheless, in some circumstances other supporting information may be available, which may act as a substitute for the information desired. Therefore, on the whole, *availability* refers whether the information necessary is can be acquired per se.
- (85) Hence, the *usefulness* of information depends upon *user information needs*, the *materiality* of the information and its *availability*. It was noted that *material* information has the capacity to influence users. This capacity depends upon the following factors: *timeliness*, *comparability* and *validity*. *Timeliness* refers to the measurement and reporting of information to users at a time or over time such that the information does not lose its capacity to influence those users. In other words, if otherwise *material* information reaches users after it has lost its capacity to influence them, then such information cannot be considered *material*. *Timeliness* means ensuring that the information is conveyed to users at the *time required* (i.e., not too soon or too late). This in part depends upon *time elapse* – that is, the time required to identify, measure, evaluate and report that information to the user after the event giving rise to the information has occurred.

- (86) Another aspect of materiality is *comparability*, which refers to the degree to which particular information is *comparable* with *competing* or *corroborating* information. While, strictly speaking, *comparability* is an attribute of information that makes it useful to users, *comparability* is also subject to *materiality* requirements, for these requirements determine the degree to which such *comparability* is required, and in many cases information that is not *comparable* with *competing* or *corroborating* information may not be *material* (i.e., will not be capable of influencing users). Consequently, *comparability* is an aspect of materiality. One component of *comparability* is *consistency*, which refers to the *comparability* of information with *competing* or *corroborating* information over time. In those cases where information is not perfectly *comparable* and this is not directly obvious from the information as presented, it is important that those differences leading to the *material* impairment of comparability be *disclosed*.
- (87) The third factor affecting *materiality* is the *validity* of the information (see Diagram VI). As adapted to measurement and reporting in an assurance engagement environment, *validity* can be defined as the extent to which information measures and communicates what one actually desires to measure and communicate. *Validity* relates to the *validity* of the content of the information reported (*information validity*), which in turn depends upon the *validity of the measurement or engagement process*. *Information validity* comprises three types of *validity* that are predicated upon *information reliability*:
- *content validity*: the degree to which the content of the information adequately represents the universe of all items associated with the subject matter; content validity requires
    - *representativeness* of the information, when applying *inductive* approaches, and
    - *representational faithfulness* of the information (i.e., the represents what it purports to represent, including any representations with respect to the information's supposed reliability)
    - *completeness* of the information (i.e., no material components or aspects of the information are omitted)
    - *quantifiability* of information (i.e., the degree to which information can be formally presented in terms of its logical – not numerical – quantifiability)
  - *criterion-related validity*: the degree to which information is useful in predicting or confirming a criterion (events or conditions); there are three kinds of *criterion-related validity*:
    - *concurrent criterion-related validity*: the degree to which information is useful for predicting concurrent criteria (events and conditions that can be measured concurrently)
    - *future criterion-related validity*: the degree to which information is useful for predicting criteria measured in the future (future events or conditions)
    - *confirmatory criterion-related validity*: the degree to which information is useful in confirming past criteria (events or conditions that occurred in the past)
    - *duration*: refers to the time factor in determining *criterion-related validity of information*; factors to consider in relation to duration include:
      - *currency*, which refers to the information being sufficiently up-to-date to allow the criterion to be predicted or confirmed
      - *expiry disclosure*: in many cases, it is known in advance that information may no longer be current if certain subsequent events occur or due to the passage of time; hence in these cases without explicit disclosure within the information of its limitations the information may not be *valid*
  - *construct validity*: the degree to which the information is supported by certain observable events or conditions implied by the construct applied

- *reliability*: the *accuracy* and *precision* of information, each of which can be defined as follows:
    - *accuracy*: the degree to which bias is absent from the information (i.e., the lack of systematic variance, or error, which is defined as the variation in information due to some known or unknown influences that cause results to tend in one direction more than another)
    - *precision*: the degree to which the random errors remain in the information after having adjusted for systematic variance; for numerically described quantitative information, precision comprises:
      - *significance*: the number of significant digits in a number (with the last digit representing that part of the number still subject to a degree of unsystematic error or tolerance)
      - *tolerance*: the degree to which the last significant digit is subject to unsystematic error.
- (88) While the previous description of *validity of information* in part addresses *validity* issues associated with the reporting of information, it does not, however, address the *validity* issues associated with measurement of information, which is a prerequisite for the *valid* reporting of and hence valid content of information. *Validity* with respect to *the measurement and reporting of information* (i.e., *the engagement process*) encompasses:
- *content validity*: pertains to inferences about *measurement or reporting construction* rather than inferences about measurement or reporting results – that is, the *appropriateness of the measurement or reporting constructions or instruments* (set of *measurement or reporting operations*) to meet the purposes for which they are being used; it in part depends upon the degree to which information can be measured and reported in terms of its *logical quantifiability*
  - *criterion-related validity*: the degree to which a *predictor* measured or reported is useful in predicting or confirming a *criterion* (*events or conditions*); in this case the *validity criterion* must be *valid* itself, i.e. the *criterion* should be defined and described in terms judged to be proper measures of the attribute or property in question and must be *reliable*
  - *construct validity*: identification of the underlying constructs being measured or reported and a determination of how well the measurement or communication represents them – i.e., do the *observable relations* being measured or reported (*the set of operations*) adequately represent the *construct* (*an abstract variable constructed to represent important attributes or properties*) that embodies certain *theorems* about these observable relations that can be tested empirically; in other words the construct validity of a measurement or reporting operation relates to the *empirical evidence* in support of the measure or communication in relation to certain observable events or conditions implied by the construct
  - *reliability* (see Diagram VII): the *accuracy* and *precision* of measurement or reporting procedures; *measurement and reporting reliability* encompasses the following concepts:
    - *stability*: the degree to which consistent results are achieved with repeated measurements or communications of the same subject matter with (a) *the same instrument over time* or (b) *under different conditions*, or *the consistency of the measurement or reporting operation*
    - *equivalence*: the degree to which alternative forms of the same measure or communication (due to *different measurers or reporting parties*, or to *variations in the sample of items* chosen for the measurement or reporting) produce the same or similar results

- *internal consistency*: degree to which instrument items are homogeneous and reflect the same underlying constructs
- *accuracy*: the degree to which *bias is absent* from the measurement or reporting process (i.e., *the lack of systematic variance, or error*, which is defined as the variation in the measurement or communication due to some known or unknown influences that cause results to *tend in one direction* more than another or *towards predetermined results*)
- *precision*: the degree to which the *random fluctuations* in the measurement or reporting process (*error*) remain after having adjusted for systematic variance; these may be caused by the *imprecision of the operation, lack of information, misinformation, miscalculation, etc.*; for the measurement or communication of numerically described quantitative information, precision comprises:
  - *significance*: the number of significant digits in a number (with the last digit representing that part of the number still subject to a degree of unsystematic error or tolerance) allowed by the measurement or reporting process;
  - *tolerance*: the degree to which the last significant digit is subject to unsystematic error under the measurement or reporting process
- *refinement*: the degree to which a measurement or reporting operation has been made precise and accurate through model development tested against empirical observation
- *security*: a prerequisite for the measurement and reporting of accurate and precise information is adequate security over that information; adequate security covers:
  - *integrity* (data and information are protected against inadvertent corruption or unauthorised modification or manipulation, either through inalterability, whereby no information can be changed such that its original content can no longer be identified, or through logs, whereby the changes to the original information or data are recorded)
  - *confidentiality* (data and information is protected against inadvertent or intentional disclosure to parties not authorised to receive that information or data – this is of particular importance where the disclosure of the data or information could have an impact upon its currency through the reaction of the recipients)
  - *authenticity* (there are means by which authentic data and information can be distinguished from non-authentic data and information)
  - *authorisation* (only those persons so authorised have access to particular information or data, whether in terms of reading, modification or reporting)
  - *non-repudiation* (the measurement and reporting of information or data bring about the desired legal consequences with binding effect)
- *sources of error*: the following sources of error may lead to *inaccuracy* or *imprecision*:
  - *vagueness* (attribute or property being measured or communicated not clearly defined)
  - *measurer errors* (*intentional bias, unintentional errors, misinterpretation of measurement or reporting operation, use of improper channels, media, or languages or symbols*)
  - *instrument errors* (defective or flawed instrument for measurement or reporting)
  - *imprecise measurement operation* (*vague or ambiguous rules of measurement or reporting* subject to varying interpretation, *environmental factors* affecting the measurement or reporting operation, *or time elapse*)

- *respondent error* (errors resulting from the behaviour or respondents when behaviour of individuals or groups of individuals is being measured).
- (89) The *validity* of the scale applied (nominal, ordinal, interval or ratio) also determines the *validity* of information and the *engagement process* used to produce and report that information. With the exception of *security* and *sources of error*, for both *information* and *process validity*, the *reliability* factors represent the requirements for measurability. The *security* concept represents a prerequisite for appropriate *measurement* and *reporting*. The *sources of error* represent limitations on *measurability*.
- (90) The characteristics of *valuable information* described in the previous paragraphs are depicted in the following diagrams.

Diagram III

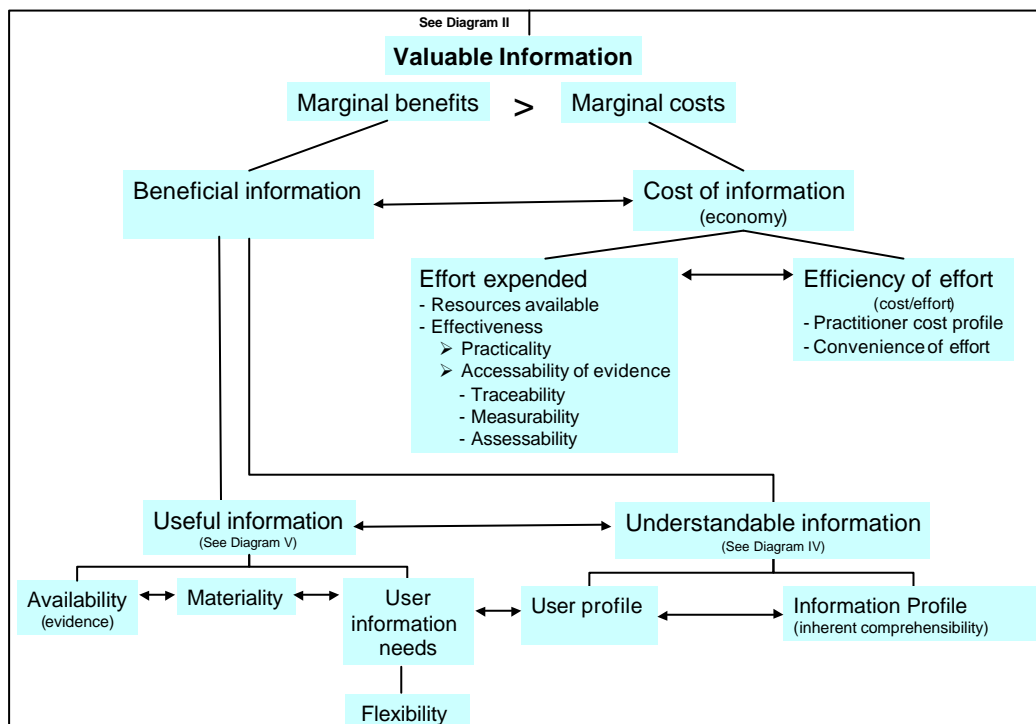




Diagram IV

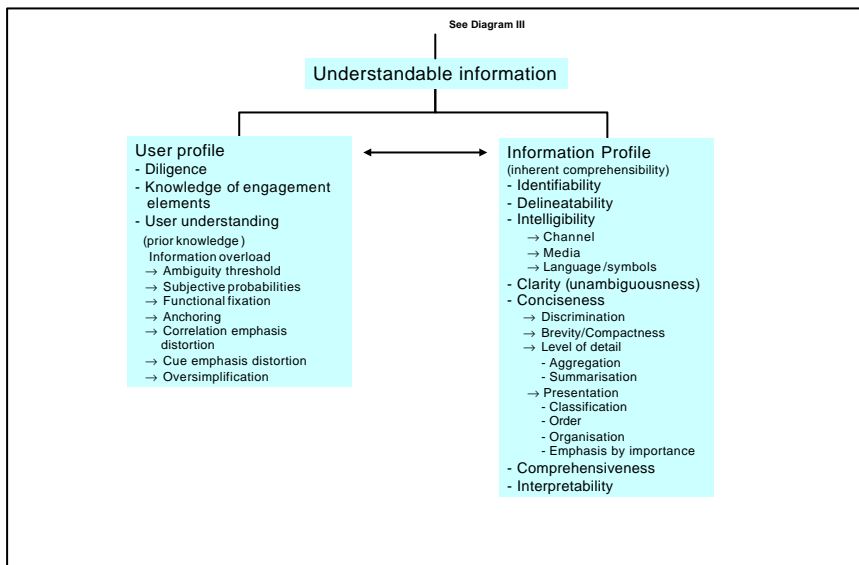


Diagram V

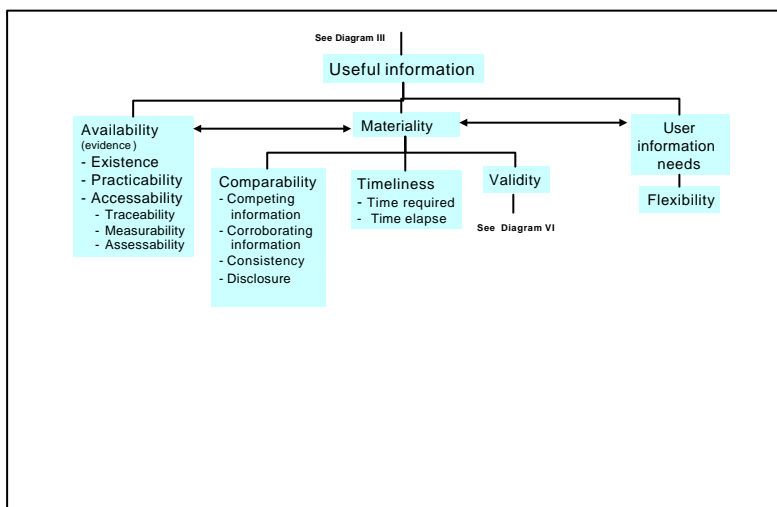
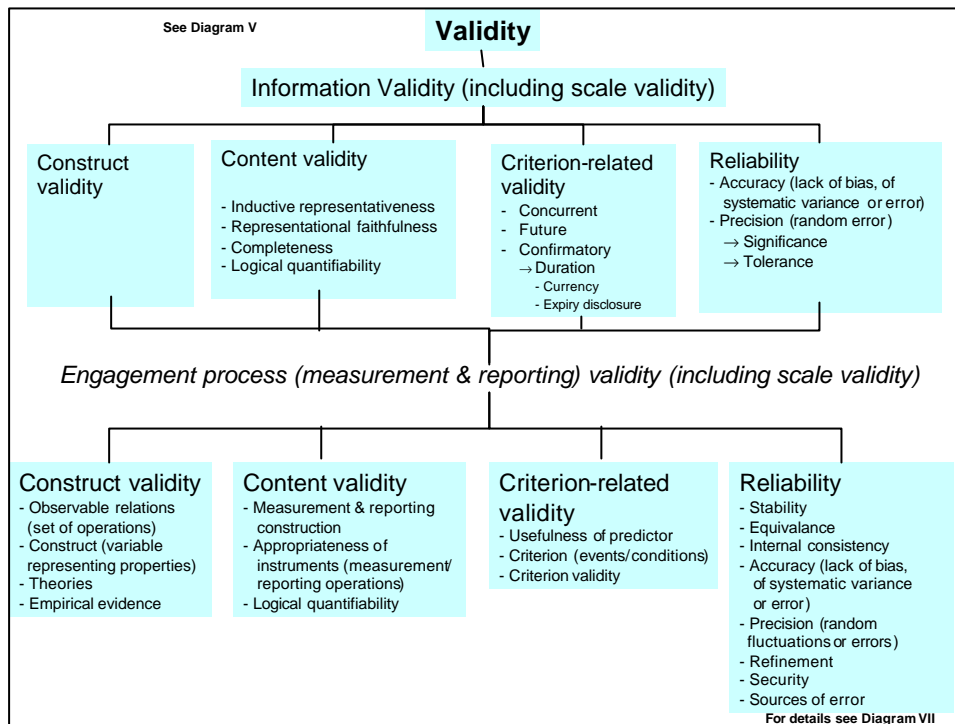
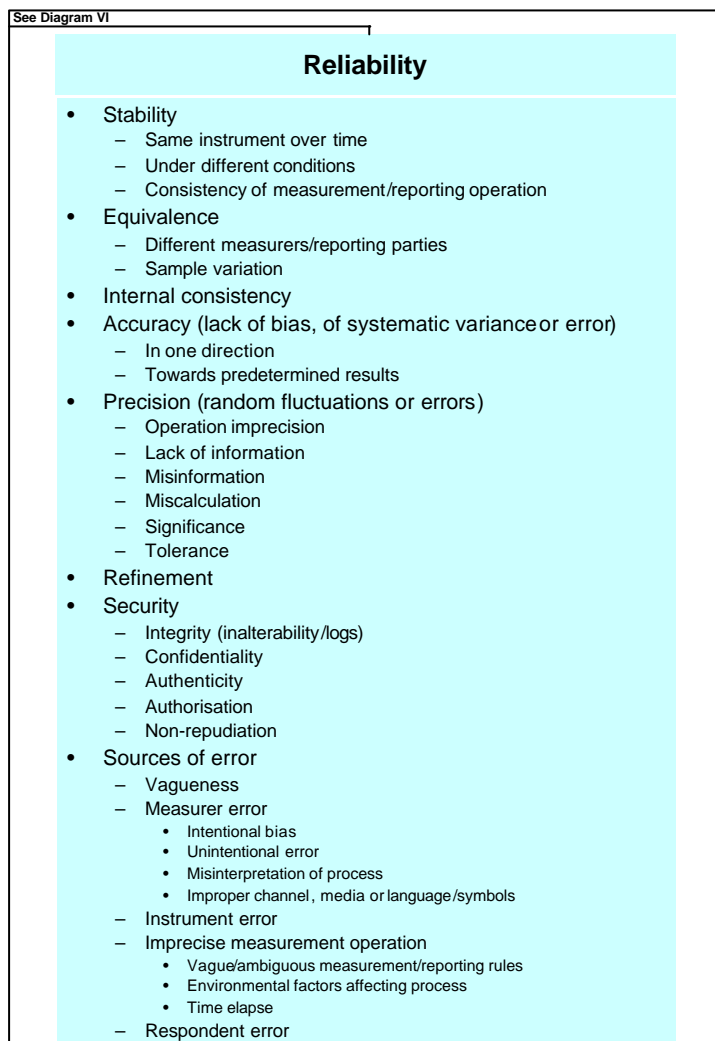


Diagram VI



## Diagram VII



- (91) The double-sided arrows in the previous diagrams signify an interaction between the concepts that implies that the concepts cannot be considered in isolation from one another. Purists might argue that *information validity* is just an expression of *measurement and reporting validity*, since, strictly speaking, one validates not a measuring instrument but rather some use to which the instrument is put. In other words, the *validity* of the process is of primary concern rather than the *validity* of the results. This is true, but professional accountants are ultimately concerned about the results – that is, the *usefulness* of the information in itself to users. Consequently, for practical purposes practitioners may also look to the *validity* of the results due to the validity of the process.
- (92) The concept of *reliability* is often confused with the concept of *credibility*. This Paper defines *credibility* in terms of the assurance attributed by the user of a practitioner's opinion or conclusion on the subject matter. In this sense, the *reliability* of information relates to its *accuracy* and *precision*, whereas the *credibility* of information relates to the degree to which the user perceives it likely that the information is as *reliable* as needed or as *reliable* as it purports to be.

- (93) In conclusion, the *suitability* of information (and the processes used to *measure and report* that information) depends upon whether or not that information is *valuable* and meets *ethical* constraints. The judgement about the suitability of the elements of an assurance engagement (subject matter, criteria, evidence and engagement process) is based upon the information about these. Hence, the suitability of the elements of an assurance engagement depends upon these elements yielding valuable information to users.

### **6.B. Subject Matter**

- (94) Subject matter in an assurance engagement is defined as any specific matter (entity) subjected to measurement and evaluation based on the criteria applied in the assurance engagement process and upon which the practitioner expresses to the user a conclusion or opinion with a certain level of assurance obtained to support that conclusion or opinion. To analyse the nature of subject matter in a general sense, this Paper applies measurement theory as well as metaphysical and logical argument. Measurement theory and metaphysical argument are useful tools for describing the nature of actual assurance engagements, but the circumstances of the engagement have a significant impact on the way in which measurement theory is applied.
- (95) In an assurance engagement, the practitioner measures and evaluates the indicants (operationally defined constructs used as an index to describe the properties being measured) of properties (observable aspects or characteristics measured) possessed by subject matter and uses the manifested outcomes (manifestations) of these measurements to determine whether the subject matter possesses those properties and manifestations thereof predicated by those properties essential to being a member of a particular class of subject matter.
- (96) The basis for this conclusion is as follows. The properties and manifestations thereof that are deemed essential to membership in a particular class of subject matter in effect represent the *criteria* that determine membership in that particular class of subject matter. Hence, property ascription to classes of subject matter defines the membership criteria for those classes. As a result, property ascription to classes of subject matter represents the link between criteria and classes of subject matter. In this sense, the application of the criteria to measure or evaluate the subject matter in an assurance engagement represents a *classification exercise*, in which the practitioner determines whether the subject matter possesses the essential properties (the criteria) for membership in the class in question. Accidental properties of specific subject matter within a class allow the differentiation among specific subject matter within that class.
- (97) Whether value-for-money engagements qualify as assurance engagements in this sense is an issue that requires further deliberation and research.
- (98) In exploring the nature of the relationship between subject matter and criteria, it appears that the existence of subject matter may be either dependent upon or independent of the criteria. One may suspect that for cases in which the subject matter exists independently of the criteria, the deviations of the subject matter from the criteria would generally be greater than for those cases in which the subject matter exists only because of the criteria. Furthermore, in certain cases, independent subject matter and criteria may be interchangeable based upon the perspective of the assurance engagement. These issues may require further academic research.

- (99) One difficulty in an assurance engagement is to identify the appropriate subject matter. The identification of subject matter should be guided by the following principles:
1. the identification of the subject matter should not lead to the definition of any properties, criteria, manifestations or indicants that require a reference to an entity of which the subject matter is subsidiary (i.e., a property, criterion, manifestation or indicant of that entity), since this would lead to circular reasoning;
  2. separate conclusions or opinions should not be expressed for those cases in which some of those conclusions or opinions do not yield valuable information without being expressed in conjunction with other independent conclusions or opinions;
  3. separate conclusions or opinions should not be expressed for conclusions or opinions that are dependent upon one another. However, there may be different degrees of interdependence of conclusions. This difficult area may require further academic research.
- (100) By applying the definition of suitable information developed previously, one can conclude that subject matter (and its properties being measured) is suitable for the engagement when the application of the criteria to the subject matter generates suitable assertions. Assertions are suitable when they are sufficiently valuable for the users of that information, by satisfying the characteristics of valuable information, and meet ethical requirements.
- (101) While suitability of subject matter (and its properties and indicants thereof) for given criteria represents a continuum across engagements types and specific engagements within such types, for a particular engagement the suitability of the subject matter depends upon the circumstances of that specific engagement and would represent a threshold to be satisfied to enable the performance of the assurance engagement.
- (102) In light of the analysis of subject matter, the issue of the definition of subject matter in relation to the information-data vs. other subject matter dichotomy discussed previously can be revisited. As was noted previously, there is little advantage to distinguishing between direct and indirect engagements, but there are important differences arising between measurement versus remeasurement engagements. In an assurance engagement, the assertions measured by the practitioner are generated by the application of the criteria on the subject matter. Although the assertions represent information or data, it is not clear that this conclusion has a critical impact on the nature of assurance engagements. Certainly, one can only lend credibility to information. The fact that the performance of an assurance engagement may lead to improvements in the quality of the subject matter is an ancillary effect that is not essential to an assurance engagement.

### **6.C. Criteria**

- (103) Criteria represent standards by which a practitioner judges whether a specific subject matter belongs to a particular class of subject matter whose essential properties and manifestations thereof are defined by those criteria. Some criteria are not as well developed as others and therefore supplementary criteria may need to be developed and applied. Assertions, whether explicit or implicit, about subject matter are generated by the application of the criteria to that subject matter.

- (104) Standard setters have developed criteria for determining whether criteria are suitable for an assurance engagement, but the nature and scope of these criteria vary. The application of the characteristics of suitable information as defined in this Paper appear to offer better means of evaluating the suitability of criteria. Based on the examination the nature of subject matter undertaken previously, the nature of criteria is very similar to that of subject matter. This includes the view that the suitability of criteria depends on both their application leading to valuable information for given subject matter and meeting ethical requirements. Furthermore, the suitability of criteria represents a continuum, but for a specific engagement, the criteria must be sufficiently suitable for that engagement. Like subject matter, criteria must be susceptible to evidence gathering procedures. It appears to make intuitive sense that users should have access to the criteria in some way, but this is an issue that may require further research.
- (105) The question arises whether there ought to be differences in approach for established versus specifically developed criteria. However, specifically developed criteria need not necessarily be less suitable than established criteria. Nevertheless, when established criteria are available and meet the objective of the engagement (i.e., yield suitable assertions or information), these should be used, since presumably their suitability for that kind of engagement has been established by certain bodies operating in the public interest.
- (106) The practitioner would need to perform more work to assess the suitability of specifically developed criteria compared to that which would need to be performed to assess the suitability of established criteria. The suitability of established criteria for certain kinds of engagements would have authoritative support, whereas such authoritative support would be lacking for specifically developed criteria. If specifically developed criteria are applied, their application should be agreed with the responsible party and the users and the report restricted to those parties. In any case, the application of the criteria should not lead to unsuitable assertions (misleading information) in the assurance report.

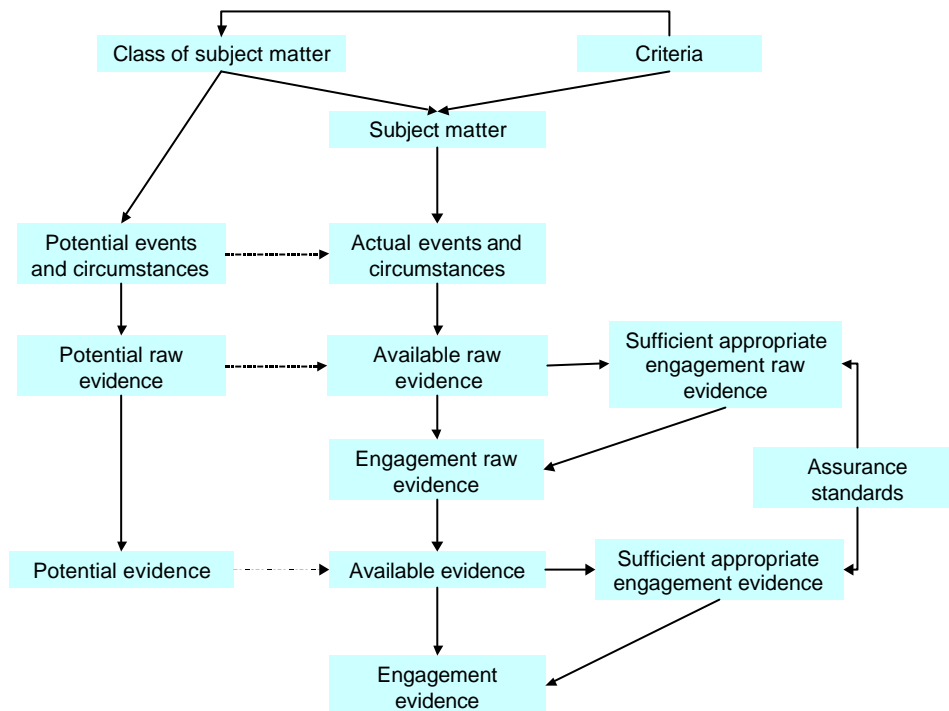
#### **6.D. Evidence**

- (107) There are different definitions of evidence in commonly used English, legal terminology, audit and assurance literature, and audit and assurance standards. An operational definition of evidence depends upon an analysis of its nature.
- (108) Evidence is information, which cannot be segregated from the state of mind of the recipient or user. Evidence should therefore be distinguished from raw evidence (data about events and circumstances) arising from events and circumstances and the events and circumstances themselves. Since evidence represents information, evidence is subject to the characteristics of suitable and hence valuable information. Furthermore, evidence is information that supports the beneficial nature of other information.
- (109) In the context of an assurance engagement, a practitioner should obtain sufficient appropriate engagement evidence, which represents any information that the practitioner may reasonably be expected to obtain to draw conclusions on which to base the overall opinion. Engagement evidence, on the other hand, represents the evidence actually obtained in a particular engagement.

(110) In summary, one can therefore identify the following evidence concepts:

- events or circumstances: any subject matter, or its properties, or indicants or manifestations thereof
- potential events or circumstances: the subject matter or its properties, or indicants or manifestations thereof, that could possibly exist for a given class of subject matter
- actual events or circumstances: the matter subject to the assurance engagement or its properties, or indicants thereof, the measurement of which, or the manifestations of these representing measurement outcomes, that lead to the creation of raw evidence
- raw evidence: the data that is gathered to represent certain aspects (properties, manifestations and indicants) of events or circumstances by measuring these using the criteria
- potential raw evidence: the data that could potentially be gathered to represent certain aspects (properties, manifestations and indicants) of potential events or circumstances by measuring these using the criteria
- available raw evidence: the data that can be gathered to represent certain aspects (properties, manifestations and indicants) of events or circumstances by measuring these using the criteria
- sufficient appropriate engagement raw evidence: given the available raw evidence, the data of sufficient amount and appropriate kind that a practitioner can reasonably be expected to obtain, in a particular assurance engagement as a basis for sufficient appropriate engagement evidence (see below), to represent certain aspects (properties, manifestations and indicants) of events or circumstances by measuring properties or indicants
- engagement raw evidence: the data that has actually been gathered in an assurance engagement to represent certain aspects (properties, indicants or manifestations) of events or circumstances by measuring properties or indicants using the criteria
- evidence: any information derived from raw evidence that contributes to the confirmation or refutation of assertions about certain aspects of events or circumstances
- potential evidence: the evidence that could potentially be derived from potential raw evidence to contribute to the confirmation or refutation of assertions about certain aspects of potential events or circumstances
- available evidence: the evidence that can be obtained about events or circumstances by gathering raw evidence about these
- sufficient appropriate engagement evidence: the evidence that a practitioner can reasonably be expected to obtain to draw conclusions on which to base the overall conclusion
- engagement evidence: the evidence that a practitioner has obtained in a particular engagement to draw conclusions that support the overall conclusion expressed.

(111) The following diagram attempts to provide an indication of the relationships between the concepts noted above:



(112) In conclusion, evidence is a form of information generated by the application of the criteria on the subject matter that contributes to the confirmation or refutation of assertions about events and circumstances in connection with subject matter. There are different concepts of evidence resulting from the interrelationship between classes of subject matter, specific subject matter, and the outcomes of measurement operations. Conclusions are assertions by the practitioner derived from engagement evidence based on logical arguments that apply professional judgement.

(113) With respect to the suitability of evidence, the validity of the processes for obtaining evidence and hence the validity of the evidence concepts are of particular importance in assessing the suitability of evidence for given subject matter and criteria under the objective of suitable information for users. Furthermore, the suitability of evidence represents a continuum across engagement types and engagements within types, but would act as a threshold within a particular engagement.

(114) Corroborating evidence is any evidence that contributes to the confirmation of assertions embodied in other evidence. For evidence to be corroborating, it must at least by implication “contain” the same assertions as the evidence being corroborated, but the process to obtain the corroborating evidence must be independent of the process to obtain the evidence being corroborated. If the process used to obtain the evidence being corroborated and the corroborating evidence lead to different results, the measurer is alerted to the fact that one or the other or both processes are not sufficiently valid.

(115) The discussion on the concepts of persuasive and conclusive evidence in light of the analysis of the nature of evidence can also be revisited. Conclusive evidence is that which is clear and convincing, whereas persuasive evidence represents only the preponderance of the evidence. This would mean that evidence that is less than persuasive does not



support an assertion with at least the preponderance of the evidence. Persuasiveness and reasonableness relate to the degree to which evidence supports certain information or a particular assertion by adding credibility thereto: the more suitable and credible the evidence, the more that evidence will add credibility to that information or assertion.

- (116) Most auditing, attestation and assurance standards contain guidance as to the types of evidence, and classify these by nature (qualitative or quantitative), source (internal or external) and medium (visual, oral or documentary). This guidance usually also describes their relative reliability. An examination of these types of generalisations leads to the conclusion that their relative reliability depends heavily upon the individual circumstances of the engagement. Consequently, generalisations in these matters ought to be avoided.
- (117) The auditability of subject matter for given criteria depends upon whether sufficiently suitable evidence can be obtained. Measurability is a concept that describes whether sufficiently reliable evidence or information can be obtained through the measurement process. Availability and accessibility are concepts relating to information and hence evidence as described in the characteristics of suitable information (see the diagrams on the characteristics of suitable information above).
- (118) A central issue in assurance engagements is the effect of the quality and quantity of evidence obtained on the level of assurance obtained.
- (119) There appears to be a common presumption among standard setters that the quality of evidence must be appropriate and quantity of evidence sufficient to be able to reach a conclusion or form an opinion. Furthermore, most standard setters recognise that either the nature of evidence can be of lesser quality for an engagement of lesser assurance compared to that required for an audit or high assurance engagement. More controversial is whether a reduced quantity of evidence is required for an engagement of lesser assurance compared to that for an audit or high assurance engagement.
- (120) In the application of the concept of “confirming evidence”, which provides an explanatory connection between the conclusion and the evidence supporting it with a high epistemic probability, the confirming evidence increases the assurance obtained by the practitioner by means of uncertainty reduction, which would be measured by comparing the credibility of the assertion being examined after the evidence is obtained with the credibility of the assertion before such evidence was obtained. In other words, evidence increases the credibility of assertions. However, this is not a new insight – nor does it explain how more evidence of given quality or improved quality of evidence for a given quantity increases credibility. This quandary is not necessarily solvable. There is no generally accepted view as to what is necessary for sufficient epistemic support.
- (121) Consequently, at the present time practitioners may simply accept the assumption that, all other things being equal, more evidence of given quality or better quality evidence of given quantity may lead to increased assurance. However, it must also be recognised that there are situations where an increase in the quantity of evidence will not offset insufficient quality due to a lack of validity other than inductive representativeness; likewise, an improvement in the quality of evidence may not offset insufficient quantity due to a lack of validity because of insufficient inductive representativeness.
- (122) This does not mean that practitioners are not in a position to “justify” the nature and extent of evidence that they have obtained to support their conclusions for a particular engagement. Rather, practitioners would apply reasoning to develop an argument by

induction, deduction or abduction (inference to the best explanation) to support the conclusion. Important in this respect is the acceptance by the responsible party, users, the courts and others in the profession of the means of argument. The conclusions drawn by practitioners must be based on arguments that are acceptable to foreseeable users (notably, the courts) of the conclusions. In other words, the arguments applied must have sufficient equivalence.

- (123) Another issue in relation to the effect of the quantity and quality of evidence on the level of assurance obtained is the nature of the assumptions that practitioners are allowed to make in their arguments supporting their conclusions. There is a difference between an assessment and an argument supporting that assessment. In an assurance engagement, a practitioner is required to obtain evidence to support his or her assessment. This begs the question as to why such evidence (and how much – both in terms of quality and quantity) is required.
- (124) Strictly speaking, the need for evidence to support the assessment arises from the question as to with what strength the practitioner needs to make the assessment – i.e., what is the acceptable level of risk that the practitioner’s assessment of engagement risk is not correct? Ultimately, even the assessment of the strength of that assessment, and so forth, may also be questioned, ad infinitum. This quandary leads to two conclusions: 1. the practitioner requires evidence to support his or her assessments and 2. the nature and extent of the required evidential support depends upon the presumptions that the practitioner is allowed to entertain – that is, the presumptions that users (and the courts) are willing to regard as reasonable presumptions. The question with respect to the presumptions that practitioners may generally entertain is closely connected to the meaning of “professional scepticism” as described in the section of this abridged version dealing with “reasonable vs. high assurance” and presumptions of management’s good faith.
- (125) This has major implications for the nature and extent of assurance engagements. For example, in a forensic audit, it is likely that the collective strength of the presumptions that a practitioner may reasonably entertain may be significantly less than in a normal audit of financial statements (e.g., that the documents and records are genuine in the absence of indications to the contrary). In fact, since in a forensic audit the auditor may obtain access to records and other evidence through prosecutors’ subpoenas that would not normally be available to an auditor in a financial statement audit, a practitioner performing a financial statement audit may be forced to entertain presumptions of greater strength than would be acceptable in a forensic audit.
- (126) The less effective the acceptable presumptions are, the more evidential support for the practitioner’s assessment would be required. Furthermore, the more evidential support required, the greater the cost of the engagement. This analysis uncovers the fundamental nature of the discussion of financial statement auditors’ responsibility for fraud: in the end, the public may wish auditors to accept responsibility for detecting material fraud in financial statements (including management fraud in connection with the falsification of documents and collusion with third parties), but auditors may be unable to accept this responsibility without a significant increase in the resources available – both legal and financial. Ultimately, society needs to decide how to allocate its resources in this respect by determining whether the benefits of obtaining additional or higher quality evidence exceed the costs involved.
- (127) The danger for standard setters in this respect is the temptation to add to the procedures required and thereby leave the impression that the likelihood of certain kinds of material

fraud not being detected in a financial statement audit is significantly reduced, when in fact a significant reduction would require a financial and legal resources of an order of magnitude greater than that currently available for financial statement audits. This situation can only lead to a widening of the expectations gap.

- (128) The issue as to how much evidence is required to support an assessment also forms the basis for the differentiation between an engagement in which reasonable assurance is obtained as opposed to an engagement in which less assurance than could reasonable be obtained is acquired (limited assurance). Here as well, the nature and extent of procedures to obtain evidence depend upon the presumptions that the practitioner is allowed to entertain.
- (129) For example, unless there are indications of a material misstatement that arise from inquiry and analytical procedures, in a review of financial statements a practitioner must essentially assume that no material fraud has occurred, since neither of these two procedures are likely to be effective in detecting material fraud – especially fraud involving management manipulating the financial statements and underlying records so that the results of analytical procedures look plausible in the circumstances. If a practitioner were not in a position to presume that no such fraud has occurred, then the performance of a review engagement does not appear to be an acceptable proposition. This line of argument suggests that the nature and extent of procedures required for the performance to obtain limited assurance – as opposed to reasonable assurance – will ultimately depend upon how such an engagement is designed in the context of user expectations and practitioner capabilities.
- (130) However, where there are indications of a material misstatement that arise from inquiry and analytical procedures in a review of financial statements, the practitioner is not longer in a position to entertain certain presumptions underlying the limitation of the engagement procedures to analysis and inquiry. In these circumstances, the acceptable presumptions are reduced to those of lesser strength, and consequently procedures of a different nature and of greater extent may be required. This conclusion can be extrapolated to all engagements where less assurance than that reasonably obtainable is acquired: if in an engagement leading to limited assurance a practitioner becomes aware that the presumptions supporting the performance of procedures leading to less than reasonable assurance are no longer acceptable, then procedures that would normally only be performed in an engagement leading to reasonable assurance may be required.
- (131) This line of argument may also apply to audits of financial statements and other assurance engagements leading to reasonable assurance. For example, if, during the course of the audit engagement, the presumptions underlying the performance of only procedures normally associated with audits of financial statements can no longer be supported, additional procedures, such as those that might be required in a forensic audit, might be required.
- (132) The nature of the presumptions that a practitioner is allowed to entertain also has an impact on the ability of a practitioner to accept engagements. For example, if the practitioner believes that certain presumptions are not applicable, then the practitioner would not be in a position to accept that engagement (e.g., if the practitioner believes that management is not of integrity, then the practitioner is unlikely to be able to rely on the presumption that the documents are genuine, which may cause the practitioner to conclude that the engagement should not be accepted). Furthermore, the nature of the presumptions that the practitioner may entertain may also affect the ability of the practitioner to change the nature of the engagement once accepted. For example, if in the

course of an audit, the practitioner determines that there is a reasonable likelihood of a material misstatement in the financial statements, the practitioner would not be justified in accepting management's request to perform a review rather than audit, since the practitioner would no longer be in a position to defend the presumptions upon which the acceptance of the review engagement is based.

- (133) In conclusion, it is difficult to provide an epistemologically sound basis for the notion that more evidence of given quality or evidence of better quality for given quantity may increase the level of assurance. However, subject to the circumstances in which an increase in the quantity of evidence will not offset insufficient quality or an improvement in the quality of evidence may not offset insufficient quantity, practitioners must develop arguments that would be sufficiently accepted by the responsible party, users, the courts and others in the profession (i.e., sufficient equivalence) that an increase in the quantity of evidence or its quality leads to an increase in assurance desired or required. In any case, the nature of evidential support in assurance engagements and its epistemological basis may form an area for fruitful future academic research.
- (134) The quality and quantity of evidence required, however, ultimately depends upon the presumptions that the practitioner is allowed to entertain in performing the engagement. Consequently, the nature and extent of procedures required to obtain evidence for engagements leading to reasonable assurance or limited assurance depends upon decisions that society make on a cost-benefit basis on the allocation of resources.

### ***6.E. Engagement Process***

- (135) An engagement process for a professional engagement as a more or less continuous course or method of operation or series of related actions undertaken by a professional entity to fulfil the legal, regulatory or ethical obligations arising from a contract, agreement, commission or appointment to provide professional services to another entity.
- (136) Since audits, reviews and other assurance services are essentially about lending credibility to assertions (which are information) about subject matter (which may itself be information) and these professional services entail gathering evidence (which is information) about these assertions, one may argue that assurance engagements represent a kind of system for conveying information – that is, an information system of some sort. While the kind of information system represented by assurance engagements is very different from a management or business information system, some of the concepts used to define management or business information systems may be applicable to assurance engagements. In any case, the insight that an assurance engagement represents a “system” does suggest that such engagements can be analysed from a systems theory perspective.
- (137) An engagement process for an assurance engagement forms a part of an assurance engagement system, which is created to meet system objectives (the objectives of an assurance engagement). The engagement process represents the means by which the engagement inputs are transformed into engagement outputs (the report issued by the practitioner to the users). An assurance engagement system operates within the engagement environment, which includes suprasystems that encompass the engagement system as a subsystem and events, conditions and other systems with which an assurance engagement system interfaces through the system boundary. Furthermore, the engagement system may contain one or more subsystems. The engagement system may be subject to quality controls, which may be in a suprasystem of the engagement system,

in another system or within a subsystem as part of the engagement process. To the extent that controls are within the engagement system itself, it can adapt its processes to prevent or detect and correct system weaknesses. These types of controls usually include feedback mechanisms.

- (138) The proposed subject matter and criteria and the potential evidence are identified as initial inputs of the engagement system, but the subsequent inputs, such as the specific matter subject to and the criteria applied in the assurance engagement as well as the available raw evidence derived therefrom are defined by the engagement process. Furthermore, in the engagement process, the criteria are applied upon the subject matter to gather the engagement evidence (obtained).
- (139) It can be demonstrated that applying a systems approach to assurance engagements may provide a useful basis for determining the basic and generic requirements for a suitable engagement system and hence a suitable engagement process for an assurance engagement.
- (140) The traditional view of engagement management as being part of the audit process appears dated. Rather, it would seem more appropriate to regard engagement management as management of the risks associated with the engagement system and its environment, where the engagement process is a part of the engagement system. In this context, the efficiency and effectiveness of the engagement process can be analysed by applying principles and techniques used in operations management – in particular with respect to process analysis and design, and process re-engineering. In particular, the concepts and techniques applicable to project management may be useful for the management of particular engagements.
- (141) An effective engagement process is predicated upon suitable engagement management and a suitable engagement system and environment. Furthermore, suitable engagement management encompasses suitable risk management of engagement system risks, which would include the establishment of suitable quality control (in supra-systems, other systems or within the engagement system) over the engagement system and process. The constituent parts of the engagement process are interdependent: consequently, if one of these parts is not valid, the entire process is probably not valid. Since the determination of the engagement objective, the identification of the criteria and subject matter and the application of the criteria to the subject matter to gain evidence to be evaluated are all part of the engagement process, the validity of the engagement process and hence the suitability of the engagement system and its surrounding environment are the critical factors in the suitability of the assertions generated by that process and the suitability of the conclusions conveyed by the practitioner's report.
- (142) The basic parts of the engagement process identified by textbooks and standard setters include client and engagement acceptance procedures, agreement of engagement terms with the client, engagement planning, acquisition of evidence, evaluation of evidence, drawing conclusions from the evaluation, and expression of these conclusions in a report. Of course, there may be considerable overlap among these parts of the engagement.
- (143) It can be demonstrated that for a given piece of evidence, cumulative assurance declines as the engagement progresses. Hence, unless corroborating evidence is obtained, a very high level of assurance would need to be obtained with respect to the original piece of evidence at each stage in the engagement process to ensure that the desired level of assurance is obtained and then conveyed so that the engagement process can be

considered suitable. These issues have not been addressed either in current standards or in auditing literature. Consequently, further academic research in this area may be required.

- (144) It can also be demonstrated that a practitioner needs to consider not only the usefulness of the criteria and the subject matter individually, but also determine the impact of their combined unusefulness. If the subject matter and the criteria are both not perfectly useful, the measurement of the evidence by applying the criteria on the subject matter will be even less useful. It should be recognised that the progress of the engagement process itself has an effect on the usefulness of the evidence obtained or conveyed. The degree of usefulness for given evidence declines as the engagement process progresses, but this problem cannot be alleviated by corroborating evidence, because if neither of the two pieces of evidence are useful, combining their usefulness will not increase their usefulness. Hence, practitioners would need to obtain more useful evidence in the early stages of the engagement process so that the decline in usefulness from the application of the following stages in the engagement process does not cause the overall conclusion conveyed to be less useful than desired. This implies that an engagement process cannot be valid unless these factors are taken into account in the determination as to whether the conclusions conveyed are sufficiently useful. This area may require further academic research.

#### ***6.F. The Implications of the Conclusions Drawn in Relation to Engagements Systems, Criteria, Subject Matter and Evidence***

- (145) Information needs to meet ethical requirements and be valuable to be suitable and analysed the components of valuable information. The application of the criteria to measure, evaluate, or even identify subject matter in an assurance engagement is a property ascription and hence classification exercise. This implies that the relationship between the criteria and the subject matter is a very close one – in fact, in many cases the subject matter would not exist independently of the criteria.
- (146) Furthermore, suitability is a concept that actually relates not to the criteria and subject matter separately, but to the assertions generated by the application of the criteria to the subject matter. Consequently, one can only speak of the suitability of the criteria for given subject matter and vice-versa – not of the suitability of the subject matter or the criteria in any form of isolation. The Paper also draws the conclusion that evidence is information that supports the beneficial nature of other information (assertions), but that there are a number of interconnected evidence concepts that need to be considered. Given the nature of evidence as information, the definition of suitable information would also apply to evidence. The “auditability” of subject matter with given criteria depends upon whether sufficiently suitable evidence can be obtained.
- (147) However, the criteria, subject matter and evidence must be seen within the context of the assurance engagement system (an information system which includes the engagement input, process and output) and its environment – since these will determine whether suitable criteria, subject matter and sufficient appropriate engagement evidence can be obtained. Furthermore, the limitations of the engagement process in yielding the cumulative usefulness of the information desired to be conveyed at the desired level of cumulative assurance need to be recognised.
- (148) On this basis, the primary focus of those who set standards for assurance engagements ought to be the development of the required elements of a suitable engagement system for

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given environments and the development of standards and guidance for a valid engagement process, for if these standards are appropriate, then the appropriate application of these standards to assurance engagements will yield appropriate criteria, which in turn will yield suitable subject matter in relation to these criteria, sufficient appropriate engagement evidence and reasonable conclusions therefrom that can be appropriately conveyed to users.

- (149) Overall, however, the most important implication would be that the suitability of the assertions, generated by the application of the criteria to the subject matter leading to the acquisition of evidence in the engagement process to support those assertions with a certain level of assurance, is a continuum, where the required threshold level for a particular engagement is determined by circumstances of the engagement and in light of user needs.

## **7. THE DETERMINANTS OF ASSURANCE, TYPES OF ASSURANCE ENGAGEMENTS AND REPORTING IMPLICATIONS**

### ***7.A. Implications of the Assurance Concept and the Nature of the Elements of Assurance Engagements for High and Moderate Assurance Engagements***

- (150) This Paper concludes that the terms “high” and “moderate” assurance do not appear to represent useful concepts for assurance engagements that practitioners are normally asked to perform – particularly those requiring the exercise of considerable professional judgement.

### ***7.B. Reasonable and Limited Assurance Engagements***

- (151) The shortcomings of the high and moderate assurance concepts lead to the obvious alternative: the use of the terms “reasonable” and “limited” assurance. There are significant advantages to this approach. The most important is that the broad nature of reasonable assurance (greater than the balance of the probabilities, usually less than virtual certainty but always less than absolute assurance) obviates the need to scope out some assertions. In addition, the term limited assurance essentially signifies the fact that the assurance obtained was limited on purpose even though it could have been reasonable to obtain more assurance, if desired. Of course, an engagement to obtain and express limited assurance could only be accepted by a practitioner if the limited assurance obtained on the assertions embodied in the practitioner’s report provide valuable information to users and the practitioner is convinced that users are prepared to accept less assurance than could reasonably have been obtained with greater effort.
- (152) The primary shortcomings of the concepts “reasonable” and “limited” assurance are the flip side of their strengths: their nebulous meaning. What is reasonable in the circumstances depends upon what a society deems reasonable through the operation of its courts and through the standards set by the profession using a transparent due process that considers the public interest. Limited means no more than less than what could otherwise reasonably have been obtained. The question then arises whether the use of these words is meaningless without operationalising them by defining them in terms of actions or operations (procedures), i.e., perhaps one can differentiate between reasonable and limited assurance by the nature of extent of procedures (example: the difference between audits and reviews as noted in the previous Part).
- (153) However, such an operationalisation by means of defining detailed procedures is fraught with its own difficulties. If the definition of procedures is limited to essential procedures, which in this case, represent the criteria defining that class of engagement, and only these procedures are necessary to perform all of the engagements within that class, then while a certain class of engagements has been effectively operationalised, such an engagement cannot involve the application of professional judgement in the application of procedures. Yet, it is precisely the application of professional judgement in selecting and applying procedures that distinguishes an assurance engagement such as an audit from an agreed-upon procedures engagement or a simple mechanical exercise.



- (154) Likewise, if one were to define all of the conditions under which certain procedures would become necessary, an engagement would become a simple mechanical exercise involving tests of form (akin to legal subsumption) not requiring professional judgement rather than of substance that would require such judgement. This suggests that while certain basic principles and essential procedures can be set forth in standards for specific types of assurance engagements, this cannot be done at a generic level. Furthermore, while certain essential procedures define a particular kind of assurance engagement, no such list of procedures will ever be definitive for all circumstances encountered in practice. In this sense, the inability to conceive of a definitive list of procedures automatically leads to a “principles-based” approach to standard setting, if this term means the definition of the basic principles and essential procedures of a particular kind of assurance engagement and the context in which these are applied.
- (155) Hence, the weaknesses associated with lack of operationalisation cannot be alleviated without reducing assurance engagements to tests of form that do not require the exercise of professional judgement as opposed to tests of substance that do. The use of the concepts “reasonable” and “limited” in conjunction with assurance engagements is based on the presumption the society prefers professionals to exercise professional judgement so that they can opine on issues of substance rather than merely on issues of form.
- (156) On this basis, one can conclude that there are two kinds of assurance engagements: those in which the professional obtains reasonable assurance and those in which the professional obtains less than the assurance that could reasonably have been obtained (limited assurance) because it isn’t necessary for certain reasons, such as benefit-cost considerations. While audits and reviews of financial statements are an example of assurance engagements leading to reasonable or limited assurance, respectively, it is apparent that reviews of financial statements are very much constrained by their operationalisation into certain kinds of procedures (inquiry and analysis). Furthermore, in many jurisdictions, audits of financial statements are, in some circumstances, subject to legislative or regulatory requirements, which do not necessarily follow the general principles of assurance engagements.
- (157) For this reason, it appears sensible to segregate audits of financial statements (and in particular, statutory audits) in a conceptual way by applying different nomenclature to other assurance engagements that lead to the acquisition of reasonable assurance. This argument applies even more so to reviews of financial statements compared to assurance engagements leading to the acquisition of limited assurance, since reviews of financial statements are so constrained by their procedural perspective (inquiry and analysis).
- (158) The solution to the nomenclature for assurance engagements leading to the acquisition of reasonable assurance is simple, since in the U.S., the term “examination” is used for these kinds of engagements. There is no reason not to follow this example. However, the U.S. use of the term “review” for assurance engagements leading to the acquisition of limited assurance is not worthy of emulation, since, unlike the AICPA standards, this Paper does not propose to limit these kinds of engagements to inquiry or analytical procedures.
- (159) For lack of a better term, the term “survey” might be applied to all those engagements leading to the acquisition of limited assurance. While there will be those that will argue that in dictionaries the term “survey” is a synonym for “examination”, it should be pointed out that the word “review” suffers from the same defect. The use of the word “survey” is being suggested solely to distinguish that kind of limited assurance engagement from reviews of financial statements. Of course, other alternatives to the use of these two terms may be suggested.

- (160) Hence, given the shortcomings associated with the concepts associated with “high” and “moderate” assurance, this Paper recommends that assurance engagements ought to be divided into two kinds: those leading to the acquisition of reasonable assurance and those leading to the acquisition of limited assurance. The first could be called “examinations” to distinguish them from audits of financial statements, which are subject to considerable legislation and regulation in many jurisdictions; the second could be called “surveys” to distinguish them from reviews of financial statements, which are associated with certain kinds of procedures (i.e., analysis and inquiry).

### ***7.C. Reporting Implications***

- (161) It is apparent that a systematic analysis of reporting requirements needs to be performed – both at an academic level and by standard setters. Furthermore, it is incumbent upon standard setters to ensure that engagements leading to the acquisition of limited assurance are clearly distinguished in communication to users from those leading to reasonable assurance. Opinions or conclusions leading to the acquisition of reasonable assurance could be worded using a reference to the preponderance of the evidence (e.g. generically: “Based upon the preponderance of the evidence obtained in the performance of the engagement, in our opinion the subject matter meets the criteria for the class of subject matter defined by these criteria”).
- (162) For audits of financial statements the wording could be: “Based upon the preponderance of the evidence obtained in the performance of our audit, in our opinion the financial statements are fairly presented as defined by International Financial Reporting Standards”. Engagements leading to the acquisition of limited assurance could be distinguished from those leading to reasonable assurance by noting the kinds of procedures or specific procedures that were not performed that would otherwise have been performed for an engagement leading to reasonable assurance. In any case, the contextual meaning of the term “reasonable assurance” would need to be explained to users to help ameliorate the expectations gap. The communication of the meaning of reasonable assurance remains a major communications issue for practitioners and standard setters.
- (163) There is considerably more difficulty in defining how the opinion or conclusion itself should be worded for an engagement leading to limited assurance: it is, however, clear that the use of negatively expressed assurance (“negative assurance”) does not convey any additional information to users. This Paper does not suggest how the conclusion or opinion for a limited assurance engagement could be expressed, since this is an issue that requires further discussion and research.
- (164) To ensure some degree of comparability among reports, standard setters should set forth the basic requirements for generic assurance reports and set forth the wording expressing the opinion or conclusion as noted above, but should not attempt to provide wording to cover all kinds of assurance engagements. The definition of specific wording other than for the expression of the opinion could be addressed when standards are issued for specific kinds of assurance engagements.

## 8. OVERALL CONCLUSIONS AND RECOMMENDATIONS

- (165) The analyses in the Paper indicated that there is a wide divergence in standard setting for assurance engagements in key areas. Furthermore, there are a large number of important issues that have either not been addressed in the standards or have not been addressed in a consistent manner.
- (166) Some of the issues on which there does not appear to be consensus among standard setters (or even between or within standards issued by the same standard setters) and the conclusions of this Paper in these matters (included in parentheses after the identification of each contentious issue) include:
1. The fundamental distinction between assurance engagements and other types of professional engagements (the primary distinguishing characteristic of assurance engagements is the issuance of an overall conclusion or opinion by the practitioner with a certain level of assurance about particular assertions with respect to subject matter using identified criteria based upon evidence obtained in an engagement process)
  2. The role of direct engagements, where the practitioner expresses an opinion or conclusion directly upon subject matter based upon a direct evaluation of the subject matter against the identified criteria, vs. indirect engagements, where the practitioner expresses a conclusion or opinion on the reliability of or that enhances the credibility of a written assertion by the responsible party in relation to the subject matter (differentiating between direct and indirect engagements is not as useful as differentiating between engagements in which the practitioner measures the subject matter directly as opposed to engagements in which the practitioner examines measurements undertaken by the responsible party)
  3. The appropriate assurance perspective in relation to engagement risk (the appropriate assurance perspective in relation to engagement risk is that of the assurance obtained by the practitioner, whereby engagement risk becomes the mathematical complement of assurance)
  4. The meaning of the terms “high” and “moderate” assurance (these represent mutually exclusive terms across engagement types and reflect absolute rather than relative notions)
  5. The meaning of the term “reasonable assurance” (a relative term whose content depends upon the circumstances, which implies that reasonable assurance varies not only across different subject matter, criteria, evidence and engagement processes, but also across jurisdictional boundaries and within jurisdictions over time)
  6. The assurance obtained in engagements not achieving reasonable assurance (the term “limited assurance” appears to be associated with engagements in which the decision was taken to obtain less assurance than otherwise could have been reasonable to obtain)
  7. The characteristics of suitable elements of assurance engagements or assertions generated by such engagements (a synthesis of ethical considerations, information or communications theory and measurement theory appears to provide the appropriate tools with which to analyse the suitability of assertions generated by an engagement; this context leads to the application of the concept of “validity” and a redefinition and distinction of the concepts “reliability” and “credibility”;
  8. What practitioners “do” with subject matter from a logical point of view (subject matter cannot be measured directly; a practitioner measures the indicants of properties possessed by subject matter and uses the manifested outcomes of these measurements to determine whether the subject matter possesses those properties)

and manifestations thereof predicated by those properties essential to being a member of a particular class of subject matter; in essence, this implies that assurance engagements represent a property ascription and hence a classification exercise)

9. The suitability of subject matter (subject matter is deemed to be suitable when the application of given criteria to that subject matter generate suitable assertions; such assertions are suitable if they are both valuable to users and satisfy applicable ethical requirements)
  10. The suitability of criteria (criteria are deemed to be suitable when their application with respect to specific given subject matter generates suitable assertions; one cannot speak of the suitability of criteria or of subject matter in isolation)
  11. The nature of evidence (evidence is a form of information, generated by the application of the criteria on the subject matter, that contributes to the confirmation or refutation of assertions about events and circumstances in connection with that subject matter; there are different evidence concepts that can be applied in determining the nature of evidence)
  12. The nature and extent of evidence required in an assurance engagement (the evidence required in an engagement and hence the nature of an engagement depends upon the acceptable presumptions that a practitioner may entertain in performing the engagement; ultimately, the reasonableness of making these presumptions is determined by their acceptance by engagement stakeholders and by practitioner capabilities)
  13. The nature of the engagement process (an assurance engagement is an information system that conveys information from the practitioner to users; the engagement process is a part of this system; a suitable engagement process is predicated upon suitable engagement management and a suitable engagement system and environment)
  14. The role of standard setters (the primary focus of those who set standards for assurance engagements ought to be the development of the required elements for a suitable engagement system for given environments and the development of standards and guidance for suitable engagement processes in this context)
  15. The application of the concepts “high” and “moderate” assurance in assurance engagements (high and moderate assurance do not appear to represent useful concepts for assurance engagements in which practitioners are required to exercise considerable professional judgement)
  16. The appropriate categories of assurance engagements (assurance engagements ought to be categorised into those leading to the acquisition of reasonable assurance and those leading to the acquisition of limited assurance)
  17. Reporting requirements (a systematic analysis of reporting requirements for assurance engagements still needs to be performed by both academics and standard setters).
- (167) There are those who have advocated what is termed the “principles-based” approach to standard setting. The analyses in this Paper indicate that standard setting in the past has not been “principles-based” enough – possibly because the foundations underlying such an approach have not been established. On the one hand, it is apparent that there is considerable academic research that still needs to be done in the area of audit, assurance and attestation theory. On the other hand, given the problems associated with the expectations gap, which appears to be growing given recent corporate events that have impacted upon the auditing profession, standard setters ignore the theoretical foundations of their craft at their peril. This means that the cooperation between standard setters and the academic community needs to be expanded and improved.

(168) Furthermore, accounting standard setters have recognised the need for conceptual frameworks of accounting. In contrast, the auditing, attestation and assurance standard setters have not yet produced such a conceptual framework to guide and underpin their standard setting processes. Certainly, the general attestation and assurance standards issued by standards setters at an international level (IAASB) and in the U.S., Canada and Australia are a step in the right direction. Nevertheless, these do not represent conceptual frameworks as known in the accounting world. The FEE therefore recommends that the accounting profession in Europe and elsewhere undertake renewed efforts to develop and agree on an internally consistent conceptual framework for assurance engagements that will serve as a foundation for future standard setting and guidance in this area. Such a conceptual framework for principles-based standard setting ought to address:

- The levels of analysis underlying requirements in standards
- The tools required to analyze standards
- The economic basis for assurance and other related engagements
- Types of subject matter
- Types of professional engagements
- Distinguishing characteristics of assurance engagements
- Measurement vs. remeasurement issues
- The nature of assurance and its relationship to risk
- The meaning of reasonable assurance and limited assurance
- The qualitative characteristics of suitable assertions based upon information and measurement theory
- The nature of subject matter and its measurement
- The nature of criteria and their relationship to subject matter
- The nature of the assertions generated by the application of the criteria to the subject matter
- Evidence concepts underlying an assurance engagement
- The nature of corroborating evidence
- The role of presumptions underlying the performance of assurance engagements
- The engagement system, its environment and the engagement process within that system
- The requirements for a suitable engagement system
- Reporting principles.

## FEE ISSUES PAPER

### PRINCIPLES OF ASSURANCE:

FUNDAMENTAL THEORETICAL ISSUES WITH RESPECT TO ASSURANCE IN ASSURANCE ENGAGEMENTS

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