Technical Information Paper 4

Valuation Uncertainty

International Valuation Standards Council

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Technical Information Papers

Technical Information Papers (TIPs) support the application of the requirements in other standards. A TIP will do one or more of the following:

- provide information on the characteristics of different types of asset that are relevant to value,
- provide information on appropriate valuation methods and their application,
- provide additional detail on matters identified in another standard,
- provide information to support the judgement required in reaching a valuation conclusion in different situations.

A TIP may provide guidance on approaches that may be suitable, but will not prescribe or mandate the use of a particular approach in any specific situation. The intent is to provide information to assist an experienced valuer in deciding which is the most appropriate course of action to take.

A TIP is not intended to provide training or instruction for readers unfamiliar with the subject and will be primarily focused on practical applications. A TIP is not a textbook or an academic discussion on its subject, and neither will it endorse or reference such texts.

The guidance in this paper presumes that the reader is familiar with the International Valuation Standards (IVSs). This TIP is of particular relevance to the application of the IVS *Framework* and IVS 103 *Reporting*.

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Introduction and Scope

1. IVS 103 *Reporting* requires the valuation report to disclose a number of matters, including any material uncertainty. This TIP provides guidance on the nature and identification of material *valuation uncertainty* in the context of this requirement and appropriate ways in which it can be disclosed. The discussion on how materiality may be determined is confined to matters within the scope of this TIP and has no relevance to establishing materiality in other contexts.

2. The discussion in this TIP is confined to *valuation uncertainty* arising in valuations on the basis of *market value* as defined in the IVS *Framework*, or similar market-based bases of value such as *Fair Value* as defined in IFRS 13. The objective of this TIP is to provide guidance on factors that may have given rise to material *valuation uncertainty* in the reported valuation figure in a way that is useful to those who will be relying on the valuation.

3. The guidance in this TIP is intended to assist in the preparation and reporting of all valuations where uncertainty needs to be disclosed to comply with the principle that the report should not be misleading and should provide the intended reader with a clear understanding of the valuation provided.

4. Uncertainty caused by limitations imposed under the terms of engagement on the extent of investigations or information on which the valuation is based is not addressed in this TIP. The focus of this paper is *valuation uncertainty* that is unavoidable, regardless of the terms under which the assignment is undertaken. Though the effects of limiting conditions or restrictions that affect the investigations undertaken in preparing a valuation estimate are outside the definition of *valuation uncertainty* in this TIP, they should be separately disclosed under IVS 103 *Reporting*.

5. While valuations prepared for financial reporting are included within the scope of this TIP, financial reporting standards

frequently have disclosure requirements relating to *valuation uncertainty* which will take precedence over the guidance on disclosures given in this TIP. Reference is made to some of the current disclosure requirements that relate to *valuation uncertainty* in the International Financial Reporting Standards, but other financial reporting standards may have different requirements.

6. Adjustments to reflect "valuation uncertainty" that are required to a financial institution's balance sheet values by financial regulators under capital adequacy regulations are outside the scope of this paper. Different definitions and disclosure requirements may apply for this purpose.

Definitions

7. The definitions that apply in the context of this TIP are listed below. Similar words and terms may have alternative meanings in a different context. The IVSC's *International Glossary of Valuation Terms* provides a comprehensive list of defined words and terms commonly used in valuation, together with any alternative meanings.

Definitions

IFRS fair value[1]	The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.
Market value	The estimated amount for which an asset or liability should exchange on the date of valuation between a willing buyer and a willing seller in an arm's length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion.
Valuation date	The date on which the opinion of value applies. The *valuation date* shall also include the time at which it applies if the value of the type of asset can change materially in the course of a single day.
Valuation uncertainty	The possibility that the estimated value may differ from the price that could be obtained in a transfer of the subject asset or liability taking place on the *valuation date* on the same terms and in the same market.

[1] © IFRS Foundation – IFRS 13

The Nature of *Valuation Uncertainty*

8. A valuation is not a fact; it is an estimate of the most probable of a range of possible outcomes based on the assumptions made in the valuation process. Market valuations are estimates of the most probable price that would be paid in a transaction on the *valuation date*. However, even where assets are identical and exchanged in contemporaneous transactions, fluctuations in the prices agreed between different transactions can often be observed. These fluctuations can be caused by factors such as differences in the objectives, knowledge or motivation of the parties. Consequently, an element of uncertainty is inherent in most market valuations as there is rarely a single price with which the valuation can be compared.

9. In some cases, the degree of uncertainty is clearly negligible, for example where the valuation is made by reference to concurrent prices for identical assets in the same market, as in the case of publicly listed and frequently traded securities. In others, uncertainty may be immaterial in the context of the market for a particular asset or the valuation assignment because it falls within the range, or margin of error, that would be expected, and accepted, by most market participants. Such uncertainty as exists should not be a source of concern to users and does not require specific disclosure under IVS 103.

10. This paper examines the nature of *valuation uncertainty* and discusses its common causes, when it may be considered material, and the types of disclosure that may be appropriate.

Uncertainty versus Risk

11. *Valuation uncertainty* should not be confused with risk. Risk is the exposure that the owner of an asset has to potential future losses. Risk can be caused by various factors affecting either the asset itself or the market in which it trades. Examples include:

- a reduction in market prices after the date of acquisition or valuation,
- a deterioration in the security of projected future income,
- a loss of liquidity compared with other assets,
- costs for maintaining or developing an asset being higher than currently anticipated,
- the rate of an asset's technical or physical obsolescence being higher than currently anticipated.

12. Such risks are taken into account by informed buyers when

considering a bid for an asset and are balanced against the perceived advantages of ownership. Risk is therefore normally reflected in market prices.

13. Risk can often be quantified. For example, market risk can be measured by applying statistical techniques to previous patterns of price fluctuation, or by assuming different market scenarios to model different outcomes. Techniques for identifying risks and quantifying them are central to the various methods used to determine discount rates used in valuation. Further discussion on risk and the methods of calculating it is outside the scope of this TIP.

14. While risk may be thought of as a measure of future uncertainties that may result in a fall in the price or value of an asset, *valuation uncertainty* is concerned only with uncertainties that arise as part of the process of estimating value on a specific date.

15. Valuation certainty and market risk are independent of each other. For example, a valuation of a highly liquid quoted stock has little uncertainty, but that stock may still be seen as carrying a high market risk. In contrast, the valuation of an illiquid fixed income bond may be uncertain because of a lack of recent price data but may carry a low market risk.

16. *Valuation uncertainty* should not be confused with stress testing, ie measuring the impact on a current price or value of a specified event or series of events.

Causes of *Valuation Uncertainty*

17. *Valuation uncertainty* can be caused by various factors. These can be broadly divided into the following categories:

- market disruption,
- input availability,
- choice of method of model.

18. These causes of *valuation uncertainty* are not mutually exclusive. For example, market disruption may affect the availability of relevant data which, in turn, may create uncertainty as to the most appropriate method or model to use. Interdependence and correlation between the causes of uncertainty are therefore likely to exist and account should be taken of this during the valuation process.

Market Disruption

19. *Valuation uncertainty* can arise when a market is disrupted at the *valuation date* by current or very recent events, such as sudden economic or political crises. The disruption can manifest itself in a number of ways, for example through panic buying or selling, or a loss of liquidity due to a disinclination of market participants to trade. An outbreak of sudden trading activity in response to an unforeseen event may cause rapid price changes that are not necessarily representative of those that would be agreed between parties acting "knowledgeably and prudently". Conversely, a loss of liquidity will mean fewer contemporaneous or relevant recent transactions, which may impact on the reliability of the valuation.

20. The events causing market disruption may be macroeconomic (eg the terrorist attacks of September 11th 2001 or the Lehman Brothers insolvency in 2008) or microeconomic (eg an unexpected change in the law or a natural disaster disrupting a sector of the market or causing disruption to the supply chain of an industry).

21. If the *valuation date* coincides with or immediately follows such an event, *valuation uncertainty* arises because the only inputs and metrics available for the valuation are likely to relate to the market before the event occurred and therefore have limited relevance to the situation on the *valuation date*. The impact of the event on the attitude of market participants, and therefore prices, will not be known during its immediate aftermath. Because of this, uncertainty caused by market disruption is rarely quantifiable.

Input Availability

22. A lack of relevant input data will cause *valuation uncertainty*. This may be due to market disruption as described above, but may also be due to the asset being unique or because the market for the asset is normally illiquid. Where there is a lack of relevant market data, there may be a need to extrapolate inputs from directly observable prices for similar assets or to rely on unobservable inputs. These are inputs for which market data are not available but that can be developed using the best information available about the assumptions that market participants would use when pricing the asset.

23. The use of extrapolation or unobservable inputs is a common source of uncertainty because of the difficulty of finding objective evidence to support either the adjustments or the assumptions made.

24. Where market data is available, uncertainty can still arise if there is a large range of prices or other conflicts in the data. While statistical analysis can be used in some cases to narrow the range

of data to that falling within a given confidence interval or above a specified confidence level, either the amount of data available or its distribution may frustrate such analysis or make it unreliable.

25. The valuation method used may adjust for input uncertainty. For example, in a discounted cash flow model the cash flow inputs are based on current expectations of future performance and are therefore uncertain. However, market participants' views of the potential risk or reward implied by the expected cash flows differing from those that actually occur in the future can often be reflected in the discount rate applied.[2] Consequently, inputs based on current expectations of future performance are not automatically a source of material *valuation uncertainty*.

26. In some cases, the *valuation uncertainty* resulting from inconsistent or conflicting data can be estimated by the effect on the valuation of using reasonably possible alternative inputs. A key consideration is the distribution pattern and spread of potential alternative inputs. If the data follows a normal pattern of distribution, or bell curve, data in the tails could be usually be safely disregarded as falling outside the range of being reasonably possible. However, other distribution patterns may mean that greater weight needs to be given to certain outliers.

Choice of Method or Model

27. For many asset types, more than one method or model may be commonly used to estimate value. However, those methods or models may not always produce the same outcome and therefore the selection of the most appropriate method may itself be a source of *valuation uncertainty*.

28. IVS 102 *Implementation*, para 7 provides that more than one valuation approach or method may be used to arrive at an indication of value, and encourages this where there are insufficient factual or observable inputs for a single method to produce a reliable conclusion. Where more than one valuation approach or method is used, the resulting indications of value should be analysed and reconciled. This is a heuristic process to improve understanding of why the methods or models produce different results. Although it may not lead to a mathematical reconciliation of the results, it should help indicate which method provides the result that is most relevant and representative of the value under current market conditions. However, if there is no clear reason to prefer one method over another but each produces a different result, the choice of which to use may be a source of *valuation uncertainty*.

[2] See also para 13.

29. Uncertainty caused by the choice of one method or model over another can normally be quantified by comparing the outcomes.

Materiality

30. As indicated in para 8, most valuations contain an element of uncertainty but IVS 103 only requires this to be disclosed when it is "material". A requirement to disclose uncertainty when it is of no or limited consequence would be an unnecessary complication in the reporting of many valuations and could breach the principle that reports should provide the intended reader with a clear understanding of the valuation. It could also potentially increase costs and raise unwarranted concern as to the reliability of many valuation opinions, which would not be helpful to users.

31. It is therefore necessary to consider when *valuation uncertainty* is material. Materiality should be considered from two interrelated aspects: first, whether the potential impact on the valuation figure is significant; and second, whether it is of relevance to an intended user of the valuation. Whereas insignificant uncertainty is very unlikely to be relevant, significant uncertainty may or may not be relevant.

32. Consideration of whether the impact of identified uncertainty on the valuation figure is significant involves the potential magnitude of any "margin of error". However, this cannot be defined in absolute terms, eg whether the valuation could fall outside of a stated range or be more than a stated percentage away from the reported valuation. As discussed earlier, in many cases the very conditions that give rise to *valuation uncertainty* will impede quantification of that uncertainty.

33. Even if the uncertainty can be quantified and appears to be significant, either as an absolute amount or as a percentage, whether it is also material depends on its relevance, which has to be judged in the context of the purpose for which the valuation is required and the potential impact on all intended users of the valuation subsequently being shown to have been incorrect on the date it was provided. For example, if a single asset owned by a business is being valued as security for a loan, the possibility that the "true" value might be, say, 15% higher or lower than the reported value is going to be of greater significance to a lender than if this was the only asset affected by the uncertainty in a valuation of the total assets of the business.

34. Factors that it may be helpful to consider in order to determine whether *valuation uncertainty* is material include:

- whether the valuation is required for internal purposes by the commissioning party or whether it will be disclosed to and relied

upon by third parties (the threshold of materiality is likely to be lower if the valuation is to be relied on by third parties);

- the extent to which the value of a total portfolio is affected if the *valuation uncertainty* affects only certain assets within the portfolio (this may also involve considering correlation and interdependence between the individual assets);
- whether the cause of the uncertainty was known to the commissioning party or to a third party relying on it when the valuation was commissioned;
- whether the effect of the uncertainty could expose the commissioning party or a third party relying on the valuation to significant risk of loss.

35. A useful test for considering whether *valuation uncertainty* is material is to consider whether failure to disclose the uncertainty in the report would lead a reasonable person to take action that relies on the reported valuation that they may not have taken if the uncertainty had been disclosed.

Nature of Disclosure

36. If *valuation uncertainty* can be identified and is considered to be material, the next question to be addressed is whether the disclosure in the valuation report should be only qualitative (ie descriptive), or whether a quantitative (ie numeric) estimate of the uncertainty should also be provided.

37. The general principle in IVS 103 is that the valuation report should communicate the information necessary for proper understanding of the valuation. A qualitative description of *valuation uncertainty* should therefore always be provided where the identified uncertainty meets the materiality criteria.

38. A qualitative description of *valuation uncertainty* should explain the source of the uncertainty and the effect it has on the market, the valuation process, or both. In the case of market disruption, it may be possible to comment on any consensus view on how long it may be until the effect of the event can be assimilated and stability returns to the market. In the case of model or input uncertainty, a description of the reason why the selected models or inputs were preferred can be provided

39. The question of whether a numeric estimate of the effect of the uncertainty should be also provided is more problematic. In the discussion of the different causes of uncertainty (paras 17-29) an indication is provided as to whether and how uncertainty may be quantified. However, where there is sufficient numerical

data to quantify uncertainty, in many cases that data could have been used in the valuation process to keep any uncertainty to an insignificant level, thus not triggering the need for disclosure.

40. If a quantitative measure of uncertainty is provided in addition to the required qualitative disclosure, caution is required to avoid implying a false precision. If uncertainty exists in the reported valuation because of limitations on the available data, this also affects any quantification of the uncertainty.

41. The reported value should be the best estimate that can be made based on the data available and users should be discouraged from using any quantification of the uncertainty to adjust the reported valuation as this could lead to inappropriate reliance on a figure that is significantly over- or understated.

42. It is customary for some valuation purposes to provide a range of values, eg where advice is provided on what would be a reasonable outcome of current or anticipated negotiations. However, quoting a range is not generally recommended as a satisfactory way of disclosing or quantifying material *valuation uncertainty* when it has been identified, for the following reasons:

- For many valuation purposes, a single valuation figure is required and a range would not be acceptable.
- Determining the limits of the range may also be unrealistic because the very factor that created the uncertainty in the first place is likely to mean that previously observed price fluctuations will no longer be relevant.
- Users may assume that an equal probability attaches to any outcome within the range, when this might not be the case.
- Users may assume that there is no possibility of a valuation falling outside of the indicated range.

43. Caution is also required to avoid giving a quantitative estimate of *valuation uncertainty* which is in fact an indication of risk, eg the effect on the value of an asset based on different prospective future inputs or outcomes, see para 14.

Measuring *Valuation Uncertainty*

44. Notwithstanding the general caution required in presenting any quantitative estimate of uncertainty, there may be valuation purposes where it is required. As discussed in paras 26 and 29, uncertainty stemming either from the choice of model or method or from a lack or inconsistency of input data may be estimated by observing the effect on the valuation of using an alternative model or input.

45. Quantification of *valuation uncertainty* can be more relevant for some classes of asset than others. The value of financial instruments is dependent upon the amount, timing and security of future cash flows between the counterparties. The probability of fluctuations in these numeric inputs over a fixed time horizon is normally measureable using statistical techniques. If the value of a financial instrument is uncertain because there is a lack of market data available for an identical or similar instrument, an estimate can often be made of the numeric inputs into the valuation based on the assumptions that a market participant might make.

46. Where two or more alternative figures could reasonably be chosen for a key input into the valuation, it is recommended that the reported valuation is based on the most likely of these outcomes, but a sensitivity analysis can be provided showing the effect of the range of possible outcomes on the reported value.

47. The principle of quantifying uncertainty by the use of a sensitivity analysis can also be applied to assets other than financial instruments where there are a sufficient number of reasonably possible alternative numeric inputs that could have been selected on the *valuation date*. However, such analysis is usually harder to apply to non-financial assets because the volume of transactions and related data is normally much lower. Where non-financial assets are subject to material *valuation uncertainty*, it is more likely that there will have been reliance on unobservable inputs that cannot be easily or accurately quantified and to which statistical analysis cannot be reliably applied. Providing a quantitative estimate of *valuation uncertainty* in such circumstances runs the risk of implying a false precision that could be misleading to those relying on the valuation.

48. If a quantitative measure of *valuation uncertainty* is to be provided, the following principles should be considered and applied as appropriate:

- A quantitative measure should always be accompanied with a narrative describing the cause and nature of the uncertainty. A purely numeric illustration will only confirm uncertainty, not explain it. There is no useful purpose served by providing such a quantitative expression of uncertainty if this will not result in a better understanding of the valuation conclusion by the user.

- Quantifying *valuation uncertainty* does not involve forecasting a worst case scenario. The objective is not to stress test a valuation to an extreme case. Any test of *valuation uncertainty* should address the impact on the reported value of reasonable and likely alternative assumptions. When choosing alternative assumptions to measure uncertainty, a selection needs to be made among possibilities that are not located in the tail of the

distributions (where events are very unlikely to happen) but rather in their central areas (where events are likely to occur).

- The objective of any uncertainty analysis is not to provide a forecast of possible fluctuations in the reported value at future dates, but to provide information about the variability of the value at the specific *valuation date*.
- When quantifying the impact of uncertainty, the interdependence or correlation between significant inputs needs to be considered when it is practical to do so. Incorporating correlation analysis is technically and operationally challenging and potentially costly, but an analysis that does not consider interdependence provides less relevant information to users. When uncertainty is measured without proper correlation of interdependent inputs, the degree of uncertainty may be overestimated.

49. Illustrative examples of qualitative and quantitative disclosures are included in the Appendix to this TIP.

Valuations for Financial Reporting

50. Some accounting standards have stipulations on the disclosure of *valuation uncertainty*. In this TIP reference is made to requirements in IFRS, but other financial reporting standards may apply and have differing requirements. IVS 300 *Valuations for Financial Reporting* requires valuations prepared for inclusion in a financial statement to be provided in accordance with the requirements of the financial reporting standards that are applicable, including any required disclosures about the valuation.

51. IFRS 13 *Fair Value Measurements* has extensive disclosure requirements. The most relevant to *valuation uncertainty*, although the term is not actually used, are in section 93:

> IFRS 13 93 (h)
>
> for recurring *fair value* measurements categorised within Level 3 of the *fair value* hierarchy:
>
> (i) for all such measurements, a narrative description of the sensitivity of the *fair value* measurement to changes in unobservable inputs if a change in those inputs to a different amount might result in a significantly higher or lower *fair value* measurement. If there are interrelationships between those inputs and other unobservable inputs used in the *fair value* measurement, an entity shall also provide a description of those

interrelationships and of how they might magnify or mitigate the effect of changes in the unobservable inputs on the *fair value* measurement. To comply with that disclosure requirement, the narrative description of the sensitivity to changes in unobservable inputs shall include, at a minimum, the unobservable inputs disclosed when complying with (d).

(ii) for financial assets and financial liabilities, if changing one or more of the unobservable inputs to reflect reasonably possible alternative assumptions would change *fair value* significantly, an entity shall state that fact and disclose the effect of those changes. The entity shall disclose how the effect of a change to reflect a reasonably possible alternative assumption was calculated. For that purpose, significance shall be judged with respect to profit or loss, and total assets or total liabilities, or, when changes in *fair value* are recognised in other comprehensive income, total equity.

52. IFRS 13 sets out a “fair value hierarchy” of Levels 1, 2 and 3 (see G4 and G5 of the Application Guidance to IVS 300). It will be noted that the disclosures required by IFRS 13 section 93 only apply where Level 3 inputs are used. These are “unobservable inputs” which are defined in the IFRS as inputs for which market data is not available and that are developed using the best information available about the assumptions that market participants would use when pricing the asset or liability.

53. Where Level 3 inputs have been used, the IFRS only requires a narrative description of the sensitivity of the valuation to changes in these inputs if this would result in a significantly higher or lower figure.

54. For financial instruments, slightly different criteria need to be considered. First, the alternative inputs considered must be “reasonably possible”. If it is decided that these alternatives are reasonably possible and that that they would result in a significant change to the value, then it is necessary to calculate and disclose the effect of that alternative input. Significance is judged by reference to total assets and liabilities or to total equity.

Annex
Uncertainty Examples

The following are examples of situations where material *valuation uncertainty* has been experienced in practice and where additional disclosures were made to comply with the requirement in IVS 103 to disclose material *valuation uncertainty*. In practice there will be many other scenarios which can give rise to material *valuation uncertainty*, which by their very nature are unpredictable and may give rise to difficulty during the valuation process.

Scenario 1

Type of asset:	Real property held in an investment fund.
Purpose of valuation:	An external valuation for inclusion in the fund's regular valuation statements.
Reason for *valuation uncertainty*:	The *valuation date* is a few days after the collapse of a global financial firm that has resulted in rapid falls in stock and bond prices, which threatens general economic stability. All available transaction data relates to the period before the collapse. The valuer is aware that since the event, some agreed transactions for similar investment property have been cancelled because buyers have withdrawn It would be reasonable for a valuer to expect the event to have a negative impact on buyers' sentiment at the *valuation date*, and therefore on the values that had been prevailing prior to the event. Although the valuer should take this negative impact into account, there is no reliable information available to measure the extent of any fall in prices.

Scenario 2

Type of asset:	A patent for a drug.
Purpose of valuation:	An external valuation for inclusion in a reporting entity's financial statements following its acquisition of another business that owned the patent.
Reason for *valuation uncertainty*:	Between the date of the business combination and the balance sheet date, some safety concerns have arisen about the drug and a number of government agencies have announced investigations that may lead to its licence being withdrawn or its use curtailed in certain countries. Consequently the assumptions as to future cash flows from sales of the drug that were reflected in the price paid for the acquired business are no longer valid. However, until the result of the investigations is known, the long-term impact on the earnings from this patent is highly uncertain.

Scenario 3

Type of asset:	Illiquid preferred stocks and subordinated debt.
Purpose of valuation:	Periodical external valuation to compute the NAV of the fund.
Reason for *valuation uncertainty*:	The assets are normally valued using a model that has credit spreads observed in the market as a key input. The 2008 financial crisis resulted in a collapse of the debt market and credit indicators. Such information as was available showed credit spreads increasing dramatically, but these were based on relatively few transactions where sellers were seeking to exit a position because of a genuine fear of the issuer becoming insolvent. They were not considered representative of the spreads that would be applicable for instruments issued by solvent companies. Accordingly, spreads had to be estimated by assessing the risk of default by analysing the financial statements of individual issuers. The lack of relevant market data meant that the *valuation uncertainty* was significantly increased.

Scenario 4

Type of asset:	Non-quoted equity in a bank.
Purpose of valuation:	External valuation to support exchange of preferred stocks for normal stocks.
Reason for *valuation uncertainty*:	There was considerable negative sentiment about the banking sector in the country in question. The bank in question had itself been the subject of government intervention to prevent insolvency. A valuation was prepared using a discounted cash flow (DCF) model based on a business plan approved by the banking regulator. The discount rate used in the DCF calculation was in line with evidence in the market for other unquoted businesses. However, because the market sentiment was poor, a valuation using price earnings ratios typical in the market indicated a much lower value. Because the valuation conclusion differed significantly depending on the method of valuation used, and that difference could not be reconciled, there was material uncertainty in the reported valuation.

Scenario 5

Type of asset:	Real property.
Purpose of valuation:	Financial reporting.
Reason for *valuation uncertainty*:	A few weeks before the balance sheet date, there had been a severe earthquake that destroyed large parts of the commercial centre of a city where an investment property belonging to the reporting entity is situated. Significant damage was caused not only to many buildings, but also to public infrastructure. For about six months following the earthquake there there was effectively no market as funding and insurance was unavailable. Price information from before the earthquake was irrelevant as although seismic risk was known and reflected in the price of some major buildings, the scale of the damage and the time required to establish its true extent meant that the economic environment in the city on the *valuation date* was completely changed. Where valuations were provided, there was full disclosure of the uncertainty and in many cases alternative valuations provided on the basis of alternative outcomes of engineering reviews, insurance availability and funding.

In each of the above cases, the valuation reports included specific disclosures as to the nature of the uncertainty surrounding the reported valuation. The precise form of disclosure that is appropriate will vary from case to case. The valuation provider should ensure that the disclosure is both adequate and appropriate having regard to the principles discussed in this TIP, in particular the guidance in paras 36-43, and to the facts of the particular assignment.