STATEMENT OF AUDITING STANDARDS
420
AUDIT OF ACCOUNTING ESTIMATES

*(Effective for audits of financial statements for periods beginning before 15 December 2004)**

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* HKSA 540 "Audit of Accounting Estimates" is effective for audits of financial statements for periods beginning on or after 15 December 2004.

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*Statements of Auditing Standards (SASs) are to be read in the light of SAS 010 "The scope and authority of auditing pronouncements". In particular, they contain basic principles and essential procedures (auditing standards), indicated by paragraphs in **bold italic type**, with which auditors are expected to comply in the conduct of any audit including those of companies applying section 141D of the Companies Ordinance. SASs also include explanatory and other material which is designed to assist auditors in interpreting and applying auditing standards.*

Introduction

1. The purpose of this Statement of Auditing Standards (SAS) is to establish standards and provide guidance on the audit of accounting estimates contained in financial statements. This SAS is not intended to be applicable to the examination of prospective financial information, though many of the procedures outlined herein may be suitable for that purpose.

2. Auditors should obtain sufficient appropriate audit evidence regarding accounting estimates. (SAS 420.1)

3. "Accounting estimate" means an approximation of the amount of an item in the absence of a precise means of measurement. Some examples are set out below.

   a. Allowances to reduce stocks and debtors to their estimated realisable value.

   b. Depreciation provisions.

   c. Accrued revenue.

   d. Provision for deferred taxation.

   e. Provision for a loss from a lawsuit.

   f. Profits or losses on construction contracts in progress.

   g. Provision to meet warranty claims.

4. Management is responsible for making accounting estimates included in financial statements. These estimates are often made in conditions of uncertainty regarding the outcome of events that have occurred or are likely to occur and involve the use of judgement. As a result, audit evidence obtained is generally less conclusive when accounting estimates are involved. Consequently, in assessing the sufficiency and appropriateness of audit evidence on which to base the audit opinion, auditors are more likely to need to exercise judgement in their consideration of accounting estimates than in other areas of the audit.

The nature of accounting estimates

5. The determination of an accounting estimate may be simple or complex depending upon the nature of the item. For example, accruing a charge for rent may be a simple calculation, whereas estimating a provision for slow-moving or surplus stock may involve considerable analyses of current data and a forecast of future sales. In making complex estimates, there may be a high degree of special knowledge and judgement required.

6. Accounting estimates may be determined as part of the routine accounting system operating on a continuing basis, or may be non routine, determined only at the period end. In many cases, accounting estimates are made by using a formula based on experience, such as the use of standard rates for depreciating each category of fixed assets or a standard percentage of sales revenue for computing a warranty provision. In such cases, the formula needs to be reviewed regularly by management, for example, by reassessing the remaining useful lives of assets or by comparing actual results with the estimate and adjusting the formula when necessary.

7. If the uncertainty associated with an item, or the lack of objective data makes it incapable of reasonable estimation, auditors would consider its impact on the auditors' report in accordance with SAS 600 "Auditors' reports on financial statements".

   a. Auditors would consider whether the circumstances surrounding the uncertainty are adequately disclosed in the notes to the financial statements and, if so, to include a paragraph of added emphasis in the basis of opinion section of their report.

   b. Alternatively, if the auditors conclude that disclosure is inadequate their report would be qualified for disagreement.

Audit procedures

8. Auditors should obtain sufficient appropriate audit evidence to conclude as to whether an accounting estimate is reasonable in the circumstances and, when required, is appropriately disclosed. (SAS 420.2)

9. The evidence available to support an accounting estimate will often be more difficult to obtain and less conclusive than evidence available to support other items in the financial statements. An understanding of the procedures and methods, including the accounting and internal control systems, used by management in making the accounting estimates is often important for auditors to plan the nature, timing and extent of the audit procedures.

10. Auditors should adopt one or a combination of the following approaches in the audit of an accounting estimate:

   a. review and test the process used by management to develop the estimate;

   b. use an independent estimate for comparison with that prepared by management; or

   c. review subsequent events. (SAS 420.3)

Review and testing the process used by management

11. The steps ordinarily involved in reviewing and testing the process used by management are:

   a. evaluation of the data and consideration of assumptions on which the estimate is based;

   b. testing of the calculations involved in the estimate;

   c. comparison, when possible, of estimates made for the purposes of the preparation of prior period financial statements with subsequent actual outcomes;

   d. consideration of management's approval procedures; and

   e. obtaining management representations.

Evaluation of data and consideration of assumptions

12. Auditors evaluate whether the data on which the estimate is based is accurate, complete, relevant and consistent with other information obtained in the course of the audit. For example, in substantiating a warranty provision, auditors may obtain audit evidence that the data relating to products still within the warranty period at period end agrees with the sales information within the accounting system.

13. Auditors may also seek evidence from sources outside the entity. For example, when examining a provision for stock obsolescence calculated by reference to anticipated future sales, auditors may, in addition to examining internal data such as past levels of sales, orders on hand and marketing trends, seek evidence from industry-produced sales projections and market analyses. Similarly, when examining management's estimates of the financial implications of litigation and claims, auditors may seek direct communication with the entity's lawyers in accordance with SAS 401 "Audit evidence - considerations for specific items".

14. Auditors evaluate whether the data collected is appropriately analysed and projected to form a reasonable basis for determining the accounting estimate. Examples are the analysis of the age of debtors and the projection of the number of months of supply on hand of an item of stock based on past and forecast usage.

15. Auditors evaluate whether the entity has an appropriate base for the principal assumptions used in the accounting estimate. In some cases, the assumptions will be based on industry or government statistics, such as future inflation rates, interest rates, employment rates and anticipated market growth. In other cases, the assumptions will be specific to the entity and will be based on internally generated data.

16. In evaluating the assumptions on which the estimate is based, auditors may consider, among other things, matters set out below.

    a. Whether they are reasonable in light of actual results in prior periods.

    b. Whether they are consistent with those used for other accounting estimates.

    c. Whether they are consistent with management's plans.

    Auditors would pay particular attention to assumptions which are sensitive to variation, subjective or susceptible to material misstatement and carry out sensitivity analyses to provide a quantitative understanding of any exposure to variation.

17. In the case of complex estimating processes involving specialised techniques, it may be necessary for auditors to use the work of an expert, for example, engineers for estimating quantities in stock piles of mineral ores in accordance with SAS 520 "Using the work of an expert".

18. Auditors review the continuing appropriateness of formulae used by management in the preparation of accounting estimates. Such a review would reflect the auditors' knowledge of the financial results of the entity in prior periods, practices used by other entities in the industry and the future plans of management as disclosed to the auditors.

Testing of calculations

19. Auditors test the calculation procedures used by management. The nature, timing and extent of the auditors' testing depend on such factors as the complexity involved in calculating the accounting estimate, the auditors' evaluation of the procedures and methods used by the entity in producing the estimate and the materiality of the estimate in the context of the financial statements.

Comparison of previous estimates with actual results

20. When possible, auditors compare accounting estimates made for the purposes of the preparation of prior period financial statements with subsequent actual outcomes to assist in:

    a. obtaining evidence about the general reliability of management's estimating procedures;

    b. considering whether adjustments to estimating formulae may be required; and

    c. evaluating whether differences between actual results and previous estimates have been quantified and that, where necessary, appropriate adjustments or disclosures have been made.

Consideration of management's approval procedures

21. Material accounting estimates are ordinarily reviewed and approved by management. Auditors would consider whether such review and approval is performed by the appropriate level of management and is evidenced in the documentation supporting the determination of the accounting estimate.

Management representations

22. Auditors would consider seeking specific written representations from management in respect of material accounting estimates and in respect of the assumptions which underly them.

Use of an independent estimate

23. Auditors may make or obtain an independent estimate and compare it with the accounting estimate prepared by management. When using an independent estimate auditors would ordinarily evaluate the data and consider the assumptions, and may test the calculation procedures used in its development. It may also be appropriate to compare accounting estimates made for prior periods with actual results of those periods.

Review of subsequent events

24. Transactions and events which occur after the period end, but prior to completion of the audit, may provide audit evidence regarding an accounting estimate made by management. Auditors' reviews of such transactions and events may reduce, or even remove, the need for the auditors to review and test the process used by management to develop the accounting estimate or to use an independent estimate in assessing the reasonableness of the accounting estimate.

Evaluation of results of audit procedures

25. Auditors should make a final assessment of the reasonableness of the estimate based on the auditors' knowledge of the business and whether the estimate is consistent with other audit evidence obtained during the audit. (SAS 420.4)

26. Because of the uncertainties inherent in accounting estimates, evaluating differences can be more difficult than in other areas of the audit. When there is a difference between the auditors' estimate of the amount best supported by the available audit evidence and the estimated amount included in the financial statements, auditors would determine whether such a difference requires adjustment. If the difference is reasonable, for example, because the amount in the financial statements falls within a range of acceptable results, it may not require adjustment. However, if the auditors believe the difference is unreasonable, management would be requested to revise the estimate.

27. Auditors also consider whether individual differences which initially were accepted as reasonable are biased in one direction, so that, taken in aggregate, they may have a material effect on the financial statements. In such circumstances, auditors evaluate the accounting estimates on an overall basis in determining whether the differences are reasonable and whether to request management to adjust the estimates.

28. If the auditors consider that the estimates need to be adjusted and management refuses to revise them, the differences would be considered misstatements and would be considered with all other misstatements identified in the course of the audit in assessing whether the effect on the financial statements is material. Where the auditors consider that the effect on the financial statements is material, they would consider whether the auditors' report would be qualified for disagreement, or whether they would express an adverse opinion, in accordance with SAS 600 "Auditors' reports on financial statements".

Compliance with International Standards on Auditing

29. Compliance with the auditing standards contained in this SAS ensures compliance in all material respects with the basic principles and essential procedures in International Standard on Auditing 540 "Audit of Accounting Estimates".

Effective date

30. This SAS is effective for audits of financial statements for periods beginning before 15 December 2004.