

SA 540 (AAS 18)

AUDIT OF ACCOUNTING ESTIMATES

(Effective for all audits commencing on or after 1st April, 2000)

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Standard on Auditing (SA) 540*, "Audit of Accounting Estimates", should be read in the context of the "Preface to the Standards on Quality Control, Auditing, Review, Other Assurance and Related Services"¹, which sets out the authority of SAs.

* Issued in April, 2000.

¹ Published in the July 2007 issue of the Journal.

Introduction

1. The purpose of this Standard on Auditing (SA) is to establish standards on the audit of accounting estimates contained in financial statements. This SA is not intended to be applicable to the examination of prospective financial information².
2. The auditor should obtain sufficient appropriate audit evidence regarding accounting estimates.
3. "Accounting estimate" means an approximation of the amount of an item in the absence of a precise means of measurement. Examples are:
 - ◆ Allowances to reduce inventory and accounts receivable to their estimated realisable value.
 - ◆ Provisions to allocate the cost of fixed assets over their estimated useful lives.
 - ◆ Accrued revenue.
 - ◆ Provision for taxation.
 - ◆ Provision for a loss from a lawsuit.
 - ◆ Insurer's liability for outstanding claims.
 - ◆ Losses on construction contracts in progress.
 - ◆ Amortisation of certain items like goodwill and deferred revenue expenditure.
 - ◆ Provision to meet warranty claims.
 - ◆ Provision for retirement benefits in the financial statements of employers.
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, the risk of material misstatement is greater when accounting estimates are involved.

² In this regard, it may be noted that the Institute of Chartered Accountants of India has issued a Standard on Assurance Engagements (SAE) 3400, "The Examination of Prospective Financial Information".

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 inventory may involve considerable analysis of current data and a forecast of future sales. In complex estimates, a high degree of special knowledge and judgment may be required.
6. Accounting estimates may be determined as part of the routine accounting system operating on a continuing basis, or may be non-routine, operating only at the end of the period. 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. The uncertainty associated with an item, or the lack of objective data may make it incapable of reasonable estimation, in which case, the auditor needs to consider the same while expressing his opinion on the financial statements.

Audit Procedures

8. The auditor should obtain sufficient appropriate audit evidence as to whether an accounting estimate is reasonable in the circumstances and, when required, is appropriately disclosed in the financial statements. 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.
9. 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 the auditor to plan the nature, timing and extent of the audit procedures.
10. The auditor 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;

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- (b) use an independent estimate for comparison with that prepared by management; or
- (c) review subsequent events which confirm the estimate made.

Reviewing and Testing the Process Used by Management

11. The steps ordinarily involved in reviewing and testing of 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 prior periods with actual results of those periods; and
- (d) consideration of management's approval procedures.

Evaluation of Data and Consideration of Assumptions

12. The auditor would evaluate whether the data on which the estimate is based is accurate, complete and relevant. When accounting data is used, it will need to be consistent with the data processed through the accounting system. For example, in substantiating a warranty provision, the auditor would obtain audit evidence that the data relating to products still within the warranty period, at period end, agree with the sales information within the accounting system.

13. External evidence is, usually, more reliable for the purpose of an audit than internal evidence. Accordingly, obtaining external evidence may be warranted in certain circumstances. For example, where there may be uncertainties with regard to the anticipated future sales of products requiring provision for obsolescence of inventories, the auditor, in addition to examining internal data such as past levels of sales, orders on hand etc., may seek external evidence to corroborate the requirement for inventory obsolescence provision. Similarly, in respect of claims against the entity arising out of litigation, internal evidence may be required to be corroborated by making a reference to entity's lawyers, if so required. Internal evidence relating to provision for gratuity, pension or other terminal benefits for the staff, where funded by external agencies, may sought to be corroborated by external evidence.

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14. The auditor would evaluate whether the data collected is appropriately analysed to form a reasonable basis for determining the accounting estimate. For example, the analysis of the age of accounts receivable to estimate the provision for doubtful debts and advances.

15. The assumptions used in the accounting estimate will be specific to the entity and would be based on internally generated data, while in other cases, the assumptions may be based on industry or government statistics. The auditor would evaluate whether the entity has an appropriate base for the principal assumptions used in the accounting estimate.

16. In evaluating the assumptions on which the estimate is based, the auditor would consider, among other things, whether they are:

- ◆ Reasonable in light of actual results in prior periods.
- ◆ Consistent with those used for other accounting estimates.
- ◆ Consistent with management's plans which appear appropriate.

The auditor would need to pay particular attention to assumptions which are sensitive to variation, subjective or susceptible to material misstatement.

17. In the case of complex estimating processes involving specialised techniques, it may be necessary for the auditor to use the work of an expert, for example, engineers for estimating quantities in stock piles of mineral ores. Requirements as to how to use the work of an expert are prescribed in SA 620, "Using the Work of an Expert."

18. The auditor would review the continuing appropriateness of formulae used by management in the preparation of accounting estimates. For this purpose, the auditor's 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 auditor would be useful.

Testing of Calculations

19. The auditor would test the calculation procedures used by management. The nature, timing and extent of the auditor's testing will depend on such factors as the complexity involved in calculating the accounting estimate, the auditor's 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.

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Comparison of Previous Estimates with Actual Results

20. When possible, the auditor would compare accounting estimates made for prior periods with actual results of those periods to assist in:

- (a) obtaining evidence about the general reliability of the entity'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. The auditor would consider whether such review and approval is performed by the appropriate level of management and that it is evidenced in the documentation supporting the determination of the accounting estimate.

Use of an Independent Estimate

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

Review of Subsequent Events

23. Transactions and events which occur after period end, but prior to completion of the audit, may provide audit evidence regarding an accounting estimate made by management. The auditor's review of such transactions and events may reduce, or even remove, the need for the auditor 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

24. The auditor should make a final assessment of the reasonableness of the estimate based on the auditor's knowledge of the business and whether the estimate is consistent with other audit evidence obtained during the audit.

25. The auditor would consider whether there are any significant subsequent transactions or events which affect the data and the assumptions used in determining the accounting estimate.

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 auditor's estimate of the amount best supported by the available audit evidence and the estimated amount included in the financial statements, the auditor 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 auditor believes the difference is unreasonable, management would be requested to revise the estimate. If management refuses to revise the estimate, the difference would be considered a misstatement and would be considered with all other misstatements in assessing whether the effect on the financial statements is material. However, the auditor would also consider whether individual differences which have been accepted as reasonable are biased in one direction, so that, on a cumulative basis, they may have a material effect on the financial statements. In such circumstances, the auditor would evaluate the accounting estimates taken as a whole.

Effective Date

27. This Standard on Auditing becomes operative for all audits commencing on or after 1st April, 2000.