

Practical Guidance No. 6 (Issued – June 2010)

Topic: Valuation of inventories

Introduction

1. For companies whose principal activities are mainly trading, import and export of goods and manufacturing, the inventory balance is usually a material item on the balance sheet. Coupled with the fact that some inventories may be more susceptible to the risk of obsolescence, it is important for auditors to perform adequate audit procedures to obtain audit evidence on the valuation assertion of inventory balances.
2. Clarified Singapore Standard of Auditing (“SSA”) 315 states that the assertions about account balances at the period end include “Valuation and allocation – assets, liabilities, and equity interests are included in the financial statements at appropriate amounts and any resulting valuation or allocation adjustments are appropriately recorded” [Paragraph A111(b)(iv)].
3. This Practical Guidance focuses on valuation of inventories (excluding construction or project work-in-progress) and is intended to provide some practical guidance to auditors when performing audit procedures in the following areas:
 - (a) Unit cost test under the first-in, first-out (“FIFO”) and weighted average cost formulas;
 - (b) Net realisable value test; and
 - (c) Translation of inventories denominated in foreign currencies.

For a more detailed discussion on the issue of inventory obsolescence, please refer to Practical Guidance No. 1 on “Inventory Obsolescence”.

Guiding Principle

4. Financial Reporting Standards (“FRS”) 2 “*Inventories*” establishes that inventories shall be measured at the lower of cost and net realisable value (FRS 2, paragraph 9). Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale (FRS 2, paragraph 6).
5. FRS 2 also states that the cost of inventories shall comprise all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition (FRS 2, paragraph 10).
6. In addition, the cost of inventories may not be recoverable if the inventories are damaged or have become wholly or partially obsolete or if their selling prices have

declined. The cost of inventories may also not be recoverable if the estimated costs of completion or the estimated costs to be incurred to make the sale have increased. The practice of writing inventories down below cost to net realisable value is consistent with the view that assets should not be carried in excess of amounts expected to be realised from their sale or use (FRS 2, paragraph 28).

7. In each financial period, a new assessment is made by management to determine the carrying value of inventories to ensure that inventories are stated at lower of cost and net realisable value. When the circumstances that previously caused inventories to be written down below cost no longer exist or when there is clear evidence of an increase in net realisable value because of changed economic circumstances, the amount of the write-down is reversed (i.e. the reversal is limited to the amount of the original write-down) so that the new carrying amount is the lower of the cost and the revised net realisable value. This occurs, for example, when an item of inventory that is carried at net realisable value, because its selling price has declined, is still on hand in a subsequent period and its selling price has increased (FRS 2, paragraph 33).
8. FRS 21 “The Effects of Changes in Foreign Exchange Rates” states that non-monetary items that are measured in terms of historical cost in a foreign currency shall be translated using the exchange rate at the date of the transaction (FRS 21, paragraph 23b). In the application of FRS 21, inventories are non-monetary items.

Performing unit cost test

(a) First-in, First-out

9. FRS 2 states that the FIFO formula assumes that the items of inventory that were purchased or produced first are sold first, and consequently the items remaining in inventory at the end of the period are those most recently purchased or produced (FRS 2, paragraph 27).
10. In performing unit cost test for inventories under the FIFO cost formula, for each selected sample of an inventory item stated in the inventory list, the auditor needs to verify the unit cost stated in the inventory list to the respective suppliers’ invoices to ensure there are no discrepancies in the unit cost stated in the inventory list and movement of these inventory items are really in FIFO manner. If the turnover of the specific inventory type is relatively fast, the auditor can also obtain a copy of the most recent suppliers’ invoices prior to year-end for each selected sample and compare the unit cost per the invoice to the unit cost per the inventories list. The unit cost per the invoice and the unit cost per the inventories list should not have any discrepancies. If there are discrepancies noted, these discrepancies should be investigated, analysed and discharged accordingly. If the samples selected pertain to inventories carried forward

from prior year and there are no current year purchases, the auditor should consider verifying the unit cost to the most recent available supplier's invoices in the prior year. Alternatively, the auditor can agree the unit cost to the prior year audited inventory list to ascertain that there is no change to the unit cost. This is possible if the auditor had concluded that there were no exceptions noted in the inventory list from prior year.

11. If there are discrepancies in the samples tested for unit cost test, the auditor needs to consider the requirements of Clarified SSA 530 "Audit Sampling". Specifically, paragraph A18, A19 and A22 of Clarified SSA 530 requires the auditor to project misstatements for the population to obtain a broad view of the scale of misstatement (paragraph A18). When a misstatement has been established as an anomaly, it may be excluded when projecting misstatements to the population. However, the effect of any such misstatement, if uncorrected, still needs to be considered in addition to the projection of the non-anomalous misstatements (paragraph A19). In the case of tests of details, the projected misstatement plus anomalous misstatement, if any, is the auditor's best estimate of misstatement in the population. When the projected misstatement plus anomalous misstatement, if any, exceeds tolerable misstatement, the sample does not provide a reasonable basis for conclusions about the population that has been tested. The closer the projected misstatement plus anomalous misstatement is to tolerable misstatement, the more likely that actual misstatement in the population may exceed tolerable misstatement (paragraph A22).
12. Furthermore, it is not uncommon for inventories to be purchased from overseas suppliers. In such instances, the auditor needs to ensure that the related inward freight charges, if material, have been taken into account in the cost of inventories in accordance with paragraph 10 of FRS 2. Some companies may not have capitalised such inward freight costs. The auditor can consider estimating the amount of inward freight costs to be capitalised by assessing the inventory turnover for each category of inventory and applying the inward freight costs associated with that category of inventory. For example, if the inventory turnover is, say, 60 days, this indicates that the inward freight costs for the last 2 months of the financial year may need to be capitalised as part of the inventory cost if material since inventories purchased in those 2 months are deemed to be still on the balance sheet of the company as at the year end date.

(b) Weighted average

13. FRS 2 states that under the weighted average cost formula, the cost of each item is determined from the weighted average of the cost of similar items at the beginning of a period and the cost of similar items purchased or produced during the period. The

average may be calculated on a periodic basis, or as each additional shipment is received, depending upon the circumstances of the entity (paragraph 27).

14. Often, companies rely on their inventory systems to calculate the weighted average costing of inventories. Unless the integrity of the inventory systems has been tested and verified, the auditor should not rely solely on the weighted average costing generated by the inventory systems and deem it to be appropriate. The auditor should request for the detailed movements of inventories, verify to the relevant supporting documents such as supplier invoices (for purchases) and sales invoices (for sales) and test check the accuracy of the weighted average costing.
15. The auditor may face a situation where the company's inventory system cannot generate the detailed movements of inventories during the financial year. In such instances, the auditor can consider assessing the inventory turnover of the selected inventory item. If the inventory turnover of that selected item is fast, vouching to the most recent supplier invoices may be an acceptable alternative to testing the weighted average costing assuming that the auditor has verified the sales and purchases transactions with no exceptions noted and therefore can be relied upon to compute the inventory turnover of that selected item. The appropriateness of the alternative audit procedure is a matter of professional judgement.
16. However, in the event that inventory turnover is very slow, the auditor may have to test the individual inventory movements to ascertain that the weighted average costing is applied correctly. By virtue of having a slow inventory turnover, this probably indicates that inventory movements are minimal during the financial year and it may not be too difficult for the company to produce the information for the auditor to perform the testing.

Performing net realisable value test

17. In performing net realisable value test, the auditor should inspect the sales invoices subsequent to year end as this is more reflective of the realisable value of the inventories as at that date. If there are no subsequent year end sales, the auditor should consider if sales completed close to year end can be used as an alternative. If not, the auditor should consider replacing the samples without subsequent year end sales to complete the testing. Paragraph 10 of Clarified SSA 530 states that if the audit procedure is not applicable to the selected item, the auditor shall perform the procedure on a replacement item. Paragraph A14 of Clarified SSA 530 further states that the auditor must be satisfied that the original selected item is not applicable for the audit procedure such that it does not constitute a deviation and an appropriately chosen replacement is examined.

18. In respect of those samples which do not have any subsequent year end sales or current year sales, the auditor should investigate further by obtaining a listing of slow-moving inventories from the management and assess whether all slow-moving or obsolete inventories have been adequately provided for based on discussion with management on the listing of slow-moving inventories provided. If the sample selected is not in the listing of slow-moving inventories, the auditor should discuss with the management and evaluate the reasonableness of management's assessment.
19. FRS 2, paragraph 32 states that a decline in the price of material indicates that the cost of the finished products exceeds net realisable value, the materials are written down to net realisable value. In assessing the net realisable value, the auditor should give consideration to the intended use of the raw materials. The best available measure of the net realisable value of raw materials may be their replacement cost.

Translation of inventories in foreign currencies

20. Inventories are non-monetary items and should be translated at their transaction rates if they are denominated in foreign currencies. In situations where companies have translated their year-end inventory balance at the year-end closing rate or the average rate for the year, the auditor should quantify the error arising from the different rates used in the translation.
21. One possible approach is to compute the inventory turnover and determine the average exchange rate based on the turnover to quantify the impact. If the impact is material, the related translation difference should be adjusted for. This approach may be applied on the assumption that the company does not have many product lines and each product line have similar turnover period. In addition, the use of average exchange rates should only be used when there are no major fluctuations noted in the exchange rates over the relevant period, and that the purchase patterns do not vary significantly from batch to batch.

Conclusion

22. The requirement for inventories to be stated at the lower of cost and net realisable value is stipulated in FRS 2. As inventory is a common significant balance sheet item, the auditor will need to be vigilant in performing the audit procedures to ensure they are not materially misstated.

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