

## **Existence and Valuation of Inventories in the Context of the Historical Cost System**

This Statement of Auditing Practice was approved by the Council of the Institute of Singapore Chartered Accountants (formerly known as Institute of Certified Public Accountants of Singapore) in May 1985.

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## CONTENTS

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	<i>paragraphs</i>
Introduction	1 – 3
General considerations	4 – 7
Quantities and condition of inventory	8 – 31
Observation of physical count	9 – 29
Other audit procedures	30 – 31
Valuation of inventory	32 – 37
Work in progress	36
Overall tests	37
Other matters	38 – 41
Independent outside firms taking physical inventory	38 – 39
Inventory representation letter	40
Preservation of records	41

# AUDIT GUIDANCE STATEMENT

## AGS 4

### Existence and Valuation of Inventories In the Context of the Historical Cost System

#### Introduction

1. This Statement relates to auditing procedures concerning the existence and valuation of inventories in the context of the historical cost system. It is to be read in conjunction with Financial Reporting Standard, FRS 2 *Inventories*.
2. Auditing procedures concerning the existence of inventories are dealt with separately in SSA 501.
3. This Statement relates to audits, which involve auditors in expressing an opinion on the truth and fairness of the view given by the financial statements.

#### General considerations

4. Inventory generally constitutes one of the largest items in the balance sheets for many entities and relatively small errors in computing the amount at which inventory is stated in the accounts can have a marked effect on reported profits.
5. The auditor must satisfy himself as to the validity of the amount attributed to inventory. In determining the nature and extent of the audit steps necessary for this purpose, the auditor must examine the system of internal control in order to assess its effectiveness relative to the ascertainment and evaluation of inventory. The nature and extent of the audit tests are matters for the auditor's professional judgement. Where applicable, however, and having regard to the nature of the business, these will include compliance tests.
6. The responsibility for properly determining the quantity and value of inventory rests with the management<sup>1</sup> of the business. It is therefore the management's responsibility to ensure that:
  - (a) the physical quantities owned by the entity are properly ascertained and recorded and that the condition is properly assessed;
  - (b) the amount to be carried forward in the balance sheet has been properly determined on an appropriate basis or appropriate bases by suitable accounting principles.
7. The auditor should arrange that the client's instructions for physical counts and for evaluation of inventories are available to him for examination before they are issued with a view to changes being made to remove defects which may exist.

#### Quantities and condition of inventory

8. Suggested audit procedures regarding the ascertainment of quantities and condition of inventory are set out as follows:
  - observation of physical count

<sup>1</sup> In the context of this Statement, the term 'management' refers to the directors in the case of a company and the management in the case of other entities. – para 6(a)

- other audit procedures

## **Observation of physical count**

9. Although it is not the auditor's duty to make a physical count of inventories, he must satisfy himself as to the effectiveness of the client's procedures for ascertainment of the quantities of inventories on hand and their condition. In most circumstances the best method by which the auditor can satisfy himself as to the effectiveness of the application of the client's physical count procedures is by observation of those procedures. Normally this will be done on a test basis and it will not be necessary for the auditor to observe the application of the physical count procedures to the whole of the inventories or to the inventories at all locations. The extent of the auditor's test observation will depend on his assessment of the soundness of the system prescribed by the client.
10. Therefore wherever it is practicable and inventory is a material factor in the business, the auditor should satisfy himself as to the effectiveness of the application of the client's physical count procedures by observation on a test basis of these procedures whilst the physical counting is in progress.
11. The presence of the auditor at physical counts of inventories does not relieve the management in any way of their responsibilities; in order to avoid misunderstanding the auditor should make it clear to the management that the reason for his attendance is not to make a physical count but to satisfy himself as to the effectiveness of the application of the client's procedures. The auditor, in observing a physical count, does not act as appraisers, valuers or experts in materials, nor has he any responsibility for supervising the physical counting. His presence is to enable him as an auditor to consider the adequacy and effectiveness of the client's procedures. He will, however, be ready to advise or make recommendations, just as he would on other matters when he considers that the system of internal control is weak or is not being properly carried out.
12. While it will not normally be necessary for the auditor to observe the application of the client's procedures in their entirety or at all locations, the auditor's tests should cover a representative selection of the inventory and of the procedures. Where inventory is held at a number of locations, the selection of the location or locations to be visited by the auditor may be planned so as to cover all significant locations. The extent of his tests will be for him to decide. There may be instances where it is not practicable to test the client's procedures by attendance and observation of the physical count, for example, because the inventories are situated at locations at which the auditor cannot readily attend. Where the auditor cannot observe the physical counting, for any reason, he should adopt some or all of the alternative procedures suggested in paragraphs 25 - 27 below.

## **Client's physical count procedures**

13. The amount at which inventory is stated in the accounts may be based upon a physical count at the year end or upon information taken from inventory records. Inventory records may in turn be substantiated by complete physical counting taken earlier in the year, or upon continuous or periodical physical counting, or upon combinations of these in relation to various sections of inventory. Under some accounting systems it is common practice for work in progress to be based solely upon cost records (see paragraph 35 below). Where inventory at the year end is based on a physical count earlier in the year, the client's procedures should include a review of entries in the intervening periods. Unusual variations from the normal pattern should be explained. These procedures will involve comparison of the amount at the year end with previous years and with current production and sales to check that these also appear to follow a normal pattern.
14. Where inventory is based on records substantiated by continuous or periodical physical counting, the procedures should ensure that:
  - (a) adequate inventory records are kept up to date;

- (b) each category of inventory is checked at least once a year and a record of checks maintained;
- (c) if the checking is continuous, it is done systematically over the year, or if periodic, at suitable times such as when inventories are low or have reached a specific re-order point;
- (d) all differences are properly investigated and the records amended accordingly.

A schedule of differences with action taken should be maintained.

15. The procedures for carrying out a physical count vary in detail according to the size and circumstances of the business and the nature of its inventory records. The procedures will consist essentially of:

- (a) identification of the articles and their ownership;
- (b) counting, weighing or measuring;
- (c) reporting of inventories which are damaged or otherwise defective;
- (d) recording the information.

16. Although considerations will differ in each case, there are certain general procedures which can be applied in most physical counts.

(a) *Planning*

The physical count should be planned well in advance.

(b) *Instructions*

Definite instructions, preferably in writing, should be issued in all cases, for the guidance of those who will be engaged in the actual physical counting.

(c) *Counting inventory*

The physical count should be carried out carefully and systematically by persons fully informed of the duties involved. Those taking part should include persons familiar with the various sections of inventory, and where practicable supervisors and checkers drawn from departments which have no control over the usual custody or movement of inventory. Where specialist knowledge is necessary to identify the nature or quality of items of inventory, the client should ensure that personnel properly qualified for this purpose other than those responsible for custody of the inventory are available at the physical count. In exceptional circumstances it may be desirable for the services of an independent expert to be utilised, e.g. for the chemical analysis of samples taken at the time of the physical count from bulk inventories of high value.

(d) *Arrangement of physical count area*

The whole of the physical count area should be divided into sections for control purposes, and the movement of inventory during the physical count should preferably be suspended or, if this is not practicable, it should be strictly controlled.

(e) *Cut-off*

Arrangements should be made to ensure a proper cut-off. This means that despatch documentation should have been originated for all goods despatched before physical count and, if still on hand, for all goods in which the property has passed to the customer. The latter must not be included as inventory when the count is made. The procedures should

ensure that the appropriate sales invoices are recorded in the correct financial period. Also liabilities should be set up for all goods received and included in inventory, and for all goods purchased the property in which has been passed to the client. These should be included in inventory even though they are not then on the entity's premises. Where only certain sections of inventory, such as raw materials, work in progress, finished goods, etc., are being taken physically, the arrangements should ensure a proper cut-off between the various sections.

(f) *Slow-moving, obsolete and damaged inventory*

Arrangements should be made to identify slow-moving, obsolete or damaged inventory.

(g) *Goods held for third parties*

Arrangements should be made to ensure that goods held in safe custody for others are not recorded as part of the client's inventory.

(h) *Goods held by third parties*

Arrangements should be made to confirm and record in the count sheets details of goods held for the entity by outside parties (see paragraph 23 below).

## Physical count records

17. The client's physical count procedures should also call for records of the following information, which should be available to the auditor during and at the conclusion of the physical count:
  - (a) details of inventory movement during the count;
  - (b) last numbers of goods inward and outward records;
  - (c) details of the numbering of inventory sheets issued, of those completed and of those cancelled and unused.

## Suggested audit procedures

18. The audit steps relating to observation of the physical count by the auditor will cover three stages: *before*, *during* and *after* the physical count. The procedures described below are intended to be a broad outline which will need adaptation to meet the circumstances of the client, for example, where a client's physical count is based on records substantiated by continuous physical counts.

### Before physical count

19. Before the physical count the auditor will need to study the client's physical count instructions (preferably before they are issued as referred to in paragraph 6), to become familiar with the location of the inventories and to plan the work he is to undertake during the physical count. The work to be undertaken will depend on the auditor's evaluation of the client's procedures, as contained in the instructions and explanations given by the client. The auditor will be concerned to see that the client's procedures are adequate in the light of the circumstances. These circumstances will include the location at which inventory is held, the quantities on hand and the values of the inventories, the factors affecting the condition of inventories and the possibilities of the existence of obsolete or slow-moving inventories. Where these procedures are considered to be weak or defective they should be discussed with the client before the physical count instructions are issued with a view to changes being made to remove the defects.

### During physical count

20. The main task during physical count will be to ascertain whether the client's employees are carrying out their instructions properly. It may be sufficient to watch the counting and recording

as it is done by the client's employees, but it would usually be advisable for the auditor to test the efficiency of the counting by arranging for a count or a recount of selected items in his presence. In arranging for items to be counted or recounted in his presence it will be advisable for the auditor to select items from both the count records and the factory or warehouse floor for tracing from one to the other. The test selection should include a reasonable proportion of high value items.

21. The auditor should make such notes as he considers necessary during the course of his observation, for follow-up. These notes will normally include the following:
  - (a) details of items of inventory selected by the auditor so that the particulars may be checked to the final count sheets;
  - (b) lists of items actually counted in the auditor's presence;
  - (c) details of any inventory noted by the auditor as being obviously defective, damaged or slow-moving;
  - (d) details of instances where the client's physical count procedures were not carried out.
22. Where serious inaccuracies or irregularities are revealed during the course of the auditor's observations it may be necessary to arrange for certain sections of, or the whole of, the inventory to be recounted.

#### After physical count

23. The information obtained by the auditor at the physical count should be followed up when finally reviewing the amount at which the inventory is stated in the accounts. The steps taken to do this will include the following:
  - (a) a check of the cut-off, using the details of inventory movements and of the last numbers of goods inwards and outwards notes (see paragraph 16 (e));
  - (b) a test that the final count sheets have been properly prepared from the count records and include all inventories belonging to the entity. The test will be made by reference to the details of the count sheet numbering noted by the client (see paragraph 16 (c)) and also the notes made by the auditor (see paragraph 21);
  - (c) a follow-up of all outstanding queries.
24. Inventories belonging to the client but held by others should be shown as such in the physical count records. The auditor should examine the confirmations obtained by the client from the custodians and, where the amounts of such inventories are material, the auditor should independently obtain confirmations from the custodians in selected cases. He should also examine reports on any periodic inspections of the inventories made by the client's own employees and should make supplemental enquiries to satisfy himself as to the bona fides of the situation. Where the amount is significant the supplemental enquiries may include the following steps to the extent the auditor considers necessary in the circumstances:
  - (a) discussion with the owner as to owner's control procedures in investigating the warehouseman, and tests of related evidential matter;
  - (b) review of the owner's control procedures concerning performance of the warehouseman, and tests of related evidential matter;
  - (c) observation of physical counts of the goods wherever practicable and reasonable;
  - (d) where warehouse receipts have been pledged, confirmation (on a test basis, where appropriate) from lenders as to pertinent details of the pledged receipts.

If attendance during physical count is not practicable

25. As stated in paragraph 12 above, there may be occasions when it will not be practicable for the auditor to observe the client's physical count. In such cases he should carry out such alternative procedures (distinct from and extra to those usually followed when forming an opinion on inventories) as in his judgement, as a skilled professional man, are necessary in the circumstances to satisfy himself that:
  - (a) the records of the physical count produced to him represent a substantially correct inventory of the inventories owned by the client on the physical count date, and
  - (b) the condition of the inventories has been properly assessed.
26. The alternative procedures to be followed for this purpose will depend on the circumstances which make it impracticable for the auditor to attend for the purpose of observing the physical count. In some instances, such as where inventory is held overseas, it may be possible for the auditor to arrange for a suitably qualified agent to attend the physical count on his behalf and for the agent to report to him.
27. In other instances the auditor who has numerous clients, which may have a common accounting date and which do physical counts on the date, may find that his resources in manpower are insufficient for him to attend on every client for the purpose of observing at least some part of the physical count. If the auditor finds that he cannot attend every year, this does not relieve him of his responsibilities. He will have to consider carefully whether the alternative procedures available to him will be sufficient to discharge those responsibilities in the circumstances of each of the clients concerned. Where the client has a well-developed system of internal control and of inventory recording it will usually be possible for the auditor to substantiate to his satisfaction the validity of the physical count records. This can be done by arranging for the test counts of selected items to be made at an earlier or later date when a representative can attend and observe. When the auditor has not satisfied himself as to inventories in the possession of the client through the physical count procedures, tests of the accounting records alone will not be sufficient for him to become satisfied as to quantities; it will always be necessary for the auditor to make, or observe, some physical counts of the inventory and apply appropriate tests of intervening transactions. This should be coupled with a review of the records of any client's counts and procedures relating to the physical inventory on which the balance sheet inventory is based.
28. In the case of smaller businesses, however, the systems of internal control are necessarily more elementary and in many instances the records of the annual physical count are not supported by any continuous inventory records. Sometimes it may be possible to arrange for the physical count to take place on a date close to the accounting date at a time when the auditor can attend and for records of movements of inventories in the intervening period to be maintained. These records must be in such a form that the auditor can satisfy himself as to their reasonable accuracy.
29. If, however, the auditor is unable reasonably to satisfy himself as to the reliability of the physical count, and inventory is a material factor in the business, he will have no alternative but to make an appropriate qualification in his report on the accounts.

### **Other audit procedures**

30. Additional audit procedures to enable the auditor to satisfy himself that inventory has been properly ascertained will include such of the following as the auditor may consider appropriate:
  - (a) general scrutiny of the inventory records (and comparisons with the previous year), including attention to the possibility of material omissions or the inclusion of items such as loose tools which ought not to be included because they appear elsewhere in the accounts;
  - (b) where applicable, tests by reference to statistical information covering matters such as yields which may be expected from given quantities and normal losses or gains by evaporation or absorption of moisture.



31. Where inventory is defective or is obsolete or slow moving, these factors must be taken into account in determining the amount at which inventory is stated in the balance sheet. Appropriate audit tests of the client's procedures for judging the physical condition will normally include:
- (a) scrutiny of inventory records during the tests referred to in the preceding paragraph and the tests in connection with the physical count, to ascertain what information as to condition and slow-moving items has been recorded and what action has been taken on that information;
  - (b) comparison with the inventory records relating to the previous balance sheet date;
  - (c) examination by reference to normal experience of wastage due to rejects and deterioration;
  - (d) examination of the relationship between inventories and turnover, including consideration of current trading conditions and any changes in sales or stockpiling policies;
  - (e) discussion with the management.

### **Valuation of inventory**

32. Audit procedures should be designed to ascertain whether the amount at which inventory is stated has been computed on a basis (or bases) and by accounting principles which, consistently applied and having regard to the nature and circumstances of the business, will enable the accounts to show a true and fair view of the trading results and the financial position. The accounting principles involved are dealt with in FRS 2, Inventories.
33. After examining the principles adopted by the client, the audit procedures to test the application of those principles will normally include:
- (a) test of the count sheets or continuous inventory records with relevant documents such as invoices, costing records and other sources for the ascertainment of 'cost';
  - (b) examination and testing of the treatment of overhead expenses;
  - (c) tests of 'net realisable value' (see paragraphs 28 to 31 of FRS 2);
  - (d) careful enquiry of responsible officials and examination of evidence supporting the assessment of net realisable value, with particular reference to defective, obsolete or slow-moving items, and consideration of the reasonableness of the replies from officials to the enquiries made;
  - (e) tests of the arithmetical accuracy of the calculations;
  - (f) tests of the consistency, in principle and in detail, with which the amounts have been computed;
  - (g) consideration of the adequacy of the description applied to inventories in the accounts.
34. 'Net realisable value' is defined by FRS 2 as the estimated selling price in the ordinary course of business less costs of completion and less costs necessarily to be incurred in order to make the sale. In estimating this amount consideration should be given to excess and obsolete items, the trend of the market and the prospects of disposal. It is normal to estimate net realisable value by reference to all available information, including changes in selling prices since the balance sheet date, so far as the information is of assistance in determining the realisable value of inventories at the balance sheet date.
35. In many instances the estimation of net realisable value requires the exercise of judgement by officials of the client who are responsible for the sale or realisation of the inventories. While, therefore, the auditor's review of such estimates will include consideration of the explanations

given by the responsible officials, it will be necessary for the auditor to review and test supporting evidence available to him in order to form an opinion as to whether the estimates of realisable value are fair and reasonable.

### Work in progress

36. Appropriate audit tests in relation to work in progress will include examination and testing of available records, including costing records and work tickets attached to unfinished articles, and, where there are long-term contracts, examination of the relevant contracts, including any modifications thereof, and other information such as subsequent cost reports and estimates of costs to complete. Physical checking of work in progress will often not be possible by methods similar to those adopted for materials and finished goods. Reference to costing records is frequently necessary and it may not be possible to separate the question of physical quantity from the question of the amount to be attributed to the work in progress. Where it is not possible or practicable to identify the work in progress with either the components which have gone into it or the products which will emerge from it, the auditor will be particularly concerned to ascertain:
- (a) the costing system from which the work in progress is ascertained;
  - (b) whether the costing system is reliable and in particular whether it is integrated with the financial accounting;
  - (c) the extent to which checks are made by reference to statistical information concerning outputs of main products and of by-products (if any) which ought to be obtained from materials used;
  - (d) the system of inspection and reporting thereon to enable allowance to be made in the costing records for scrapping and rectification;
  - (e) the basis on which overheads are dealt with in the costing records;
  - (f) any profit element included for which adjustments are required.

### Overall tests

37. Audit tests which may often be appropriate by way of overall assessment of the reliability of the records will include, according to circumstances:
- (a) reconciliation of changes in inventory quantities as between the beginning and end of the financial year with the records of purchases, production and sales;
  - (b) comparison of the quantities and amounts of inventories in the various categories with those included at the previous balance sheet date and with current sales and purchases;
  - (c) consideration of the gross profit ratio shown by the accounts and its comparison with the ratio shown in previous years;
  - (d) consideration of the rate of turnover of inventories and its comparison with previous years;
  - (e) consideration of the relationship of the quantities ready for sale and in course of production with the quantities shown in operating and sales budgets;
  - (f) where applicable, examination of standard costing records and consideration of the variances shown thereby and their treatment in the accounts.

## Other matters

### Independent outside firms taking physical inventory

38. In some trades it is a common practice to employ firms of independent surveyors and valuers. These firms are specialists and provided the auditor is satisfied as to their independence and standing, it is usual to accept their inventory counts as reliable. The auditor, however, normally ascertains direct with the independent firm the basis of valuation used, and assures himself that proper cut-off procedures were operated.
39. Sometimes the circumstances are such that physical count and valuation are virtually one operation where it is not practicable for the auditor to make any independent test of the basis of appraisal, so that he will have to rely on the independent specialist. A case in point might be an inventory of precious stones but the situation may be met in a number of types of business. The fact that the inventory is counted by an outside inventory firm of non accountants is not, by itself, a satisfactory substitute for the auditor's own observation or taking of some physical counts. The auditor's concern, in this respect, is to satisfy himself as to the effectiveness of the counting procedures used. If the client engages an outside inventory firm to take the physical inventory, the auditor's primary concern would be to evaluate the effectiveness of the procedures used by the outside firm and his auditing procedures would be applied accordingly. Thus, the auditor would examine the outside firm's programme, observe its procedures and controls, make or observe some physical counts of the inventory, recompute calculations of the submitted inventory on a test basis and apply appropriate tests to the intervening transactions. The auditor ordinarily may reduce the extent of his work on the physical count of inventory because of the work of an outside inventory firm, but any restriction on the auditor's judgement concerning the extent of his contact with the inventory would be a scope restriction.

### Inventory representation letter

40. It is usual and desirable practice to obtain from the management of the entity a written statement outlining in detail the method of ascertaining inventory quantities and bases of valuation. This statement may take the form of a separate inventory letter or may be included in a comprehensive letter of financial representations (see SSA 580). It in no way relieves the auditor of his responsibility for forming his opinion whether inventory has been fairly reported and presented in the accounts. The significance of inventory letters is that they constitute a record of the action taken by management and a formal reminder and acknowledgement of management's responsibilities, and for this reason considerable importance attaches to these representations.

### Preservation of records

41. Where the business is such that there is a possibility that at some future date it may be necessary for a prospectus or similar document to be issued, the client should be advised that inventory records should be retained for a long period. If records have been destroyed, for the purposes of the prospectus the reporting accountant cannot satisfy himself that inventories have been properly taken and valued throughout the period covered by the report (normally at least five years). Also, it would not be possible to review and test inventories satisfactorily in relation to the fair presentation of the trend of profits. The inventory records that should be retained include not only the fair copy summaries but also the rough count sheets made out at the time when a physical count was taken in the works or storehouse.