



**Western Cape
Government**

Western Cape Education Department
Directorate: Procurement Management

Addendum 30

WESTERN CAPE EDUCATION DEPARTMENT INVENTORY MANAGEMENT POLICY

1. PURPOSE

- 1.1 This Policy aims to support implementation of the Provincial Treasury Instruction (PTI) Chapter 16A Part 8, Logistics Management. Whilst the PTI sets out the requirements for inventory accounting and management practices, the policies speak to the Departmental aspects of Inventory Management and the standard operating procedures provide the method to execute specific tasks.
- 1.2 The policies and standard operating procedures (SOPs) contained in this policy are consistent with other frameworks such as the National Treasury Inventory Management Framework (IMF) which sets out at a high level, the requirements for inventory accounting and management practices while guidance on application of the framework is contained in the Inventory Management Guide (IMG).
- 1.3 Adherence to the policies and SOPs will provide substantive compliance with relevant PTI's but also enhance the Department's coverage of all aspects pertaining to the management of inventory.

2. BACKGROUND, SCOPE AND REGULATORY FRAMEWORK

2.1 BACKGROUND

- 2.1.1 An institution involved in the production of goods or delivery of services may require certain materials, supplies or finished goods in order to carry out its function. In certain cases these items may be ordered in as needed and be applied immediately to their purpose. In other cases these items may need to be held for a period of time in a warehouse/storeroom or on the job site.
- 2.1.2 Like any asset, inventory needs to be efficiently managed and decisions need to be made whether inventory should be held, and how much to hold.
- 2.1.3 The Inventory Management Framework, issued by National Treasury in 2009, articulates the importance of inventory management as follows:
 - (a) Public Sector institutions should manage inventory in such a way that they are able to maximise a return on their investment in order to deliver more services

or a higher level of service to the communities they serve. Where services are paid for by rates and taxes the question of accountability for public funds arises. The importance of inventory management in the public sector is therefore based on the need to:

- i. demonstrate accountability for public resources;
- ii. improve transparency and credibility of information used for making policy choices; and
- iii. improve efficiency.

(b) Improving inventory management can lead to:

- i. increases in investment revenue or freeing up of resources to be used elsewhere due to a reduction in stock held in inventory; and
- ii. a reduction in losses due to theft, wastage, damage, spoilage or misuse.

In an environment characterised by limited resources it is natural for managers to forgo inventory management efforts in lieu of more pressing needs. However, any institution irrespective of the size of its inventory will gain from inventory management which can mean lower purchasing and inventory holding costs, better quality of products while a reduction in losses or otherwise freeing up resources to be utilised in other areas may lead to increasing the rate of delivery of basic services.

2.2 THE INVENTORY MANAGEMENT LIFE-CYCLE

- (a) Inventory management is the process of efficiently and effectively overseeing and managing the constant flow of inventory units to prevent inventory from becoming too high, or dwindling to levels that could put the operations of the Department at risk.
- (b) Material requirement planning assists Demand Management to ensure that the operational requirement of the Department is broken down into its lowest level of units required. Various inputs are required to fulfill this function for example defining stock holding policies, bill of materials and procurement and

production lead times. These inputs are defined and quantified using various inventory management strategies and techniques.

- (c) The process of inventory classification results in items being classified as assets or inventory after evaluating it against asset and inventory classification criteria. The quantification of cost forms part of periodic financial maintenance which includes the initial measurement of costs. Recognition and measurement ensures that all the costs associated with the inventory item is identified and recognised in the accounting records of the Department.
- (d) As the life cycle of an inventory item continues various actions could be required for example, reconciliations, disposals or write off. The movement of inventory as they go through the various stages of the operation is critical. Tracking materials as they are used to execute a service also helps to identify the need to adjust reordering quantities before inventory approaches minimum order quantities.
- (e) As with every valuable asset, item control needs to be in place to ensure that the item is physically safeguarded against theft and against physical deterioration. Therefore strict physical control and warehouse management policies need to be in place. Warehouse management also includes the efficient management of a warehouse to maximise efficiency and minimise cost.
- (f) As all processes are subject to review and improvement, Inventory management needs to be monitored through regular review. Performance measurement assesses the effectiveness of inventory management processes and identifies improvement areas.

2.3 REGULATORY FRAMEWORK FOR INVENTORY MANAGEMENT

- 2.3.1 The legislative framework provided by the Public Finance Management Act, 1999 (PFMA), regulations and guidelines focuses on improving financial management and service delivery.

- (a) Section 38 of the Act confers general responsibilities on the Accounting Officer. It determines at Section 38 (1) (d) that the Accounting Officer of a department:

"..is responsible for the management, including the safe-guarding and the maintenance of the assets, and for the management of the liabilities, of the Department, trading entity or constitutional institution; "

- (b) Section 51 (1)(c) of the PFMA confers general responsibilities on the accounting authority for a public entity as follows:

"..is responsible for the management, including the safe-guarding of the assets, and for the management of the revenue, expenditure and liabilities, of the public entity; "

3. INVENTORY DEFINED

- 3.1 The Modified Cash Standard (MCS), issued by National Treasury and effective from 1 April 2013, defines inventories as:

Inventories are assets:

- (a) in the form of materials or supplies to be consumed in the production process;*
- (b) in the form of materials or supplies to be consumed or distributed in the rendering of services;*
- (c) held for sale or distribution in the ordinary course of operations; or*
- (d) in the process of production for sale or distribution*

- 3.2 Inventory are described as items that have an expected short life due to their inherent nature i.e. they are either perishable, will be consumed in the production process or be converted into cash within a short time frame. These items are often stored in warehouses or storerooms and are issued/used as and when required. However, the mere fact that an item of inventory is held in a warehouse/storeroom is not a criterion for defining inventory.

- 3.3 It may be necessary for certain items of inventory to be delivered directly to end users without being held in storage. These items are commonly referred to as "direct issues". The fact that the items are not held in storage for any length of time is due to either the characteristic of the item (not suitable for storage) or the method of inventory

control defined for the item e.g. just in time inventory strategies will result in the replenishment of the item as and when the item is required without making provision for holding any quantities on hand.

Inventories include:

- i. goods purchased and held for resale;
- ii. finished goods produced or work-in-progress being produced by the Department;
- iii. materials and supplies awaiting use in the production process;
- iv. goods purchased or produced by an entity, which are for distribution for no charge or for a nominal charge; and
- v. inventories relating to provision of services rather than goods purchased and held for resale or goods manufactured for sale.

4. PLANNING FOR INVENTORY

4.1 Inventory demand management is the process through which the strategic and operational commitments of the Department are translated to its future requirements (both dependent and independent demand). This process must ensure the correct quantity, quality, and specification of the correct inventory item is planned for, supplied to the correct location at the correct time and within the allocated budget.

4.2 Demand is generally classified as either dependent or independent demand. The terminology can be slightly confusing if one considers that all demand is dependent on something, however the terminology is used consistently in the field of supply chain management.

- (a) Dependent Demand is where the demand for input materials or supplies is driven by the demand for the final product or service; and

- (b) Independent Demand is the demand for the final product or service, in the public sector independent demand may largely be driven by the approved budget to deliver approved service delivery levels.

5. LINKING DEMAND SCHEDULES WITH THE OPERATIONAL PLAN

- 5.1 Inventory demand planning involves determining the exact inputs of materials and consumables required to meet specific service delivery objectives. Provincial Treasury Instruction 4.3.1 identifies the Operational Plan as the primary tool for achieving this:

"The accounting officer or accounting authority must develop and implement an annual operational plan for his or her supply chain management unit"

- 5.2 Provincial Treasury Instruction 4.3.3 further describes the contents of the operational plan as follows:

"The annual operational plan must consist of at least the following information:

- (a) Goods and services to be procured;*
- (b) Method of procurement;*
- (c) Times to execute the procurement action;*
- (d) Estimated value (including applicable taxes);*
- (e) Confirmation that funds are available;*
- (f) Responsible office or regional office."*

- 5.3 From the aforementioned requirements it is clear that an operational plan will consist of a number of plans including service delivery schedules, cash flow and resource plans.

6. INVENTORY RECOGNITION, MEASUREMENT AND DISCLOSURE

- 6.1 Inventory recognition and measurement is the process followed to bring the already identified and classified inventory item onto the inventory system and into the financial records of the Department.

- 6.2 As such, inventory recognition and measurement relates directly to the accounting treatment of inventory and how institutions disclose inventory in the financial statements.
- 6.3 The accurate measurement of inventory also has a direct impact on inventory valuation, which plays a vital role in understanding the costs of inputs to a product or service and has an impact on the decision-making processes to minimise resources tied up in inventory.

7. TYPES OF MEASUREMENT

- 7.1 Two types of measurement exist namely, initial measurement also known as the inventory take on value and subsequent measurement.
- 7.2 Although it is not yet required of departments to present their financial statements on an accrual basis and therefore not required to apply standards of GRAP, GRAP 12 in particular both defines inventory and provides guidance on the determination of costs of inventory including cost formulas and must therefore be applied.
- 7.3 The paragraphs that follow provide the applicable standards of GRAP to be applied when determining costs.

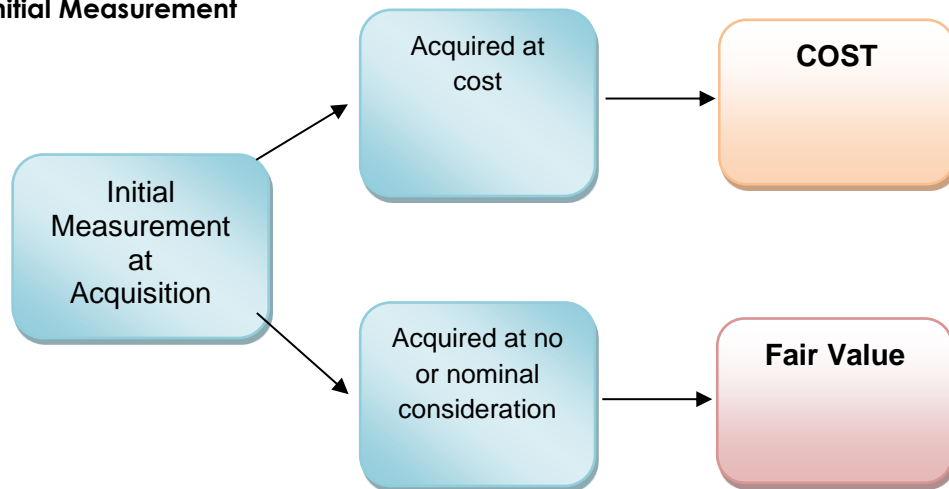
8. INITIAL MEASUREMENT

- 8.1 When first recognising inventories, GRAP 12 provides the following:

*"...15 Inventories that qualify for recognition as assets shall initially be recognised at **cost**.*

*...16 Where inventories are acquired at no cost, or for nominal consideration, their cost shall be their **fair value** as at the date of acquisition."*

Figure: Initial Measurement



8.1.1 Acquired at Cost

8.1.1.1 For inventories that are to be measured at Cost, GRAP 12 states that the cost of inventories shall comprise:

- (a) All costs of purchase. Costs of purchase where applicable comprise:
 - i. purchase price;
 - ii. import duties;
 - iii. other taxes except those recoverable from taxing authorities;
 - iv. transport and handling costs; and
 - v. other costs directly attributable to the acquisition.
- (b) Costs of conversion. Conversion costs are mainly incurred in a manufacturing environment where raw materials are brought together and transformed through the manufacturing process into finished goods. Conversion costs include:
 - i. costs directly related to the unit of production such as direct labour; and
 - ii. a systematic allocation of fixed and variable production overheads incurred in converting materials into finished goods.

- (c) Other costs incurred in bringing the inventories to their present location and condition:

Other costs are included in the cost of inventories only to the extent that they are incurred in bringing the inventories to their present location and condition.

- (d) Less trade discounts:
 - i. rebates; and
 - ii. other similar items which would reduce the cost of acquisition.

8.1.2 Cost Exclusions

8.1.1.2 GRAP 12 paragraphs 26 - 28 provide examples of costs excluded from the value of inventories and expensed in the period in which they are incurred as follows:

- (a) abnormal amounts of wasted materials, labour, or other production costs;
- (b) storage costs, unless those costs are necessary in the production process before a further production stage;
- (c) administrative overheads that do not contribute to bringing inventories to their present location and condition;
- (d) selling costs;
- (e) borrowing costs except where they meet certain requirements set out in GRAP 5; and
- (f) financing costs (represented by the difference between a higher purchase price paid for a deferred settlement in excess of normal credit terms).

8.1.3 Acquired at no or nominal value – Fair Value

Fair value is used as an approximation of cost where there was no actual cost incurred in acquiring the inventories. GRAP 12 at paragraph 16 stipulates:

“the cost at acquisition of inventories acquired at no cost or for nominal consideration shall be their fair value as at the date of acquisition. Fair value is therefore used as an approximation of cost”

Paragraph 7 defines fair value as follows:

- i. Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction;
- ii. Fair value is the estimated cost in situations where no cost was incurred to obtain the inventory; and
- iii. Fair value is determined by obtaining values from reputable sources for similar inventory items in the same condition.

8.1.4 Inventory Valuation - Calculations of Cost (cost formulas):

- i. GRAP 12 provides that the same cost formula can be used for all inventories having a similar nature and use i.e. items are interchangeable.
- ii. Where items are interchangeable, there are two cost formulas to choose from as follows:

First in First Out (FIFO); or Weighted average cost

8.1.5 First in first out (FIFO) rule

First in first out (FIFO) assumes that those items received into inventory first are used or issued first. The value of inventory remaining is then calculated as the sum of the costs of the items still remaining.

8.1.6 Weighted average cost

The weighted average cost formula calculates the cost of each item issued as a weighted average of all of the items received into the store. Each time a new batch of the inventory item is received into the store the weighted average cost per unit is recalculated taking into account the unit cost of the new items and the weighted average cost per unit before the new receipt.

8.2 SUBSEQUENT MEASUREMENT

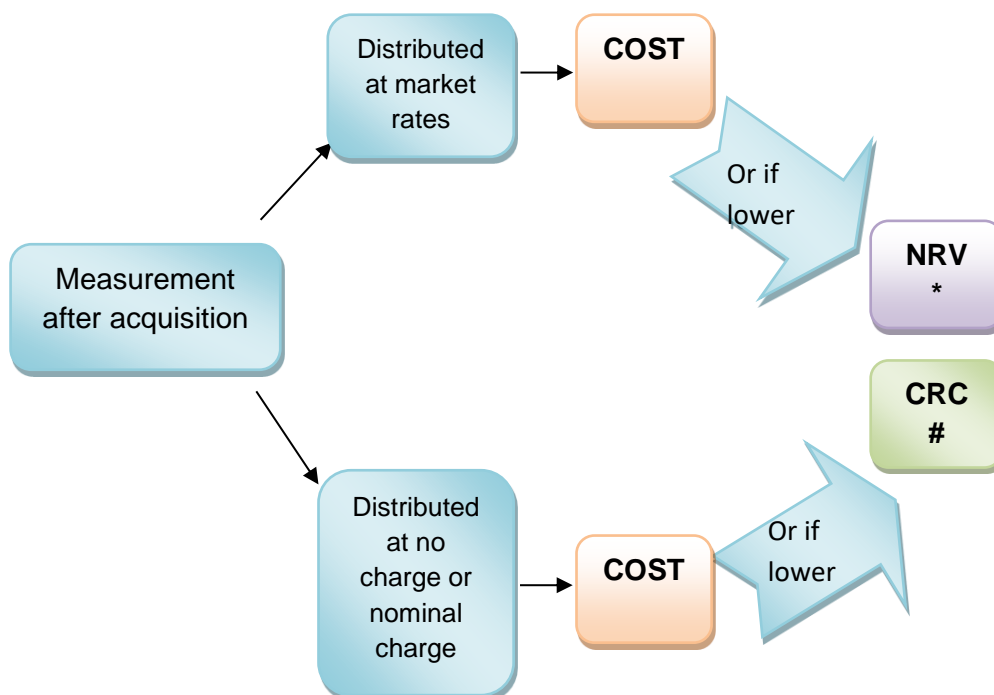
8.2.1 In the event where inventories are measured subsequent to initial recognition (for example, at the end of the financial year, GRAP 12 provides the following:

“...17 Inventories shall be measured at the lower of cost and net realisable value, except where paragraph 18 applies.

...18 Inventories shall be measured at the lower of cost and current replacement cost where they are held for:

- a) *distribution at no charge or for a nominal charge, or*
- b) *consumption in the production process of goods to be distributed at no charge or for a nominal charge.*

Figure: Subsequent Measurement



8.2.2 The intent of the above provision is that inventories should not be carried on the Statement of Financial Position at a value greater than their worth. At acquisition, worth is measured by cost, or fair value. At a later date, the worth of the inventories may have decreased.

8.3 Net Realisable value

- (a) When inventories are valued subsequent to acquisition their value may have declined. Hence, when valuing inventories after acquisition and when they are held for distribution at a market price they are measured at the lower of cost and net realisable value.
- (b) Paragraph 07 of GRAP 12 defines net realisable value as follows:
 - i. Net realisable value is the estimated selling price in the ordinary course of operations less the estimated costs of completion and the estimated costs necessary to make the sale, exchange or distribution;
 - ii. Net realisable value refers to the net amount that an institution expects to realise from the sale on inventory in the ordinary course of operations. Fair value reflects the amount for which the same inventory could be exchanged between knowledgeable and willing buyers and sellers in the marketplace. The former is an institution specific value; the latter is not; and
 - iii. Net realisable value for inventories may not equal fair value less costs to sell.

8.4 Current replacement cost

- (a) When measuring the value of inventories subsequent to acquisition and the inventories are to be distributed at no charge or for nominal value, their value is recorded at current replacement cost. Current replacement cost is used instead of net realisable value in situations where the net realisable value is not easy to determine.

Paragraph 07 of GRAP 12 defines current replacement cost as follows:

- (b) Current replacement cost is the cost the Department would incur to acquire the asset on the reporting date. Current replacement cost is a good estimation for net realisable value in this instance, because the future economic benefits or service potential of the inventories can be assumed to

be the amount that the Department would need to pay to replace those inventories should they be deprived of them.

- 8.4.1 All items of inventory that are procured, produced, donated or received as a result of transfers from other institutions must be recognised in the accounting records of the Department in accordance with GRAP 12.14 as follows:

"...14 Inventories shall be recognised as an asset, if and only if,

- (a) it is possible that future economic benefits or service potential associated with the item will flow to the Department; and*
- (b) the cost of the inventories can be measured reliably.*

- 8.4.2 The value of the inventory must be measured against the criteria defined by GRAP 12 as follows:

"...15 Inventories that qualify for recognition as assets shall initially be recognised at cost.

...16 Where inventories are acquired at no cost, or for nominal consideration, their cost shall be their fair value as at the date of acquisition."

- Where items of inventory are interchangeable inventory items at year-end are reflected using either the weighted average cost or FIFO cost formulas;
- Where items of inventory are not ordinarily interchangeable, specific identification of individual costs shall be used, and
- Only unissued stock in bulk stores are to be counted and recognised while stock issued to sub stores e.g. offices must be considered issued stock and not disclosed.

- 8.4.3 When an item of inventory has been included in the accounting records, it must be disclosed in the annual financial statements according to the appropriate accounting policies:

- i. Institutions that present their financial statements on an accrual basis must apply the standards of GRAP 12; and

- ii. Institutions that are not yet preparing financial statements on an accrual basis must comply with the guidance provided in the Preparation Guide to the Annual Financial Statements.

8.4.4 Any changes to the format for reporting of inventory in the Annual Financial Statements will be indicated in the Departmental Financial Reporting Framework as issued annually by the National Treasury. Inventory will be disclosed in the relevant annexure as prescribed to the Departmental Financial Reporting Framework as issued annually by the National Treasury.

8.4.5 The Opening Balance for a specific reporting year must be represented by the closing balance as at 31 March of the previous reporting year. Adjustments to prior year balances: This represents adjustments to prior year inventory which were only corrected in the current year. The following can give rise to adjustments:

- (a) Surpluses and shortages identified during the last stock take for the previous year which had not been corrected on the balances before the end of the previous year. The surpluses and shortages therefore represent the difference between recorded inventory amounts and actual inventory levels;
- (b) Reclassification of inventory to assets after the previous year end. All assets previously classified as inventory need to be accounted for and transferred from Inventory to either the major or minor assets register; and
- (c) Reclassification of Assets to Inventory after the previous year end. All inventory that were previously classified as assets need to be accounted for and transferred from the asset register to the inventory register.

8.4.6 Additions/Purchases-Cash: All cash additions for the year must be reflected. The cash additions as per the Inventory system should reconcile with the amount reflected for inventories in goods and services in the financial statements.

8.4.7 Additions-Non-cash: The fair value or cost price, if supplied, of inventory received in kind or as donations from sources outside of the government or as transfers without

costs from other institutions during the reporting year is disclosed here. Adequate supporting documentation of such receipts should be kept.

- 8.4.8 Disposals: All approved disposals of inventory must be disclosed. This would include obsolete, damaged or lost inventory that are not available for distribution or production.
- 8.4.9 Issues/transfers: All inventory issued to cost centres or external stores for production, distribution or consumption must be recorded.
- 8.4.10 Adjustments: This represents correction of errors that occurred in the current financial year that relate to inventory. It includes the difference between the initial recognition amount (cost of inventory purchased) and weighted average.
- 8.4.11 Closing Balance: This will be the value of the inventory as at 31 March of the accounting year after a stock take has been undertaken, the physical quantities compared to the system quantities, corrections made to the system and any movements between the counting date and 31 March of the reporting year affected.

8.5 INVENTORY CONTROL

- 8.5.1 The availability of materials at locations which hold the key to service delivery depends upon the effectiveness of the overall Supply Chain. Inventory control and inventory visibility are two very critical elements in any supply chain for these are the cost drivers.
- 8.5.2 When the number of items in inventory is large and significant investment is needed to create such inventory, it becomes the concern of management to have proper control over ordering, procurement and consumption of inventory. However, for institutions that deal with large inventories, it is difficult to devote equal attention in terms of personnel and financial resources to each of the inventory items, hence the need for selective control.
- 8.5.3 Inventory control is the planned approach of determining what to order, when to order and how much to order and how much to stock so that costs associated with buying and storing are optimal without interrupting production or service delivery.

8.5.4 The objectives of Inventory Control

- (a) To ensure adequate supply of goods to programmes and avoid shortages;
- (b) To make sure that the financial investment in inventories is minimum;
- (c) To ensure efficient purchasing, storing, consumption and accounting for materials;
- (d) To maintain timely record of inventories and to maintain the stock within the desired limits;
- (e) To ensure timely action for replenishment;
- (f) To provide an adequate reserve stock for variations in lead times of delivery of materials; and
- (g) To provide a scientific base for both short-term and long-term planning of materials.

8.6 DISPOSAL AND WRITE-OFF

8.6.1 GRAP 12.14 requires inventory to be recorded in the financial records of an institution as follows:

"...14 Inventories shall be recognised as an asset, if and only if,

- a) it is possible that future economic benefits or service potential associated with the item will flow to the Department; and*
- b) the cost of the inventories can be measured reliably.*

8.6.2 It is clear from the above that an institution may not recognise and physically hold, items of inventory that have no future economic benefit to the Department.

8.6.3. Provincial Treasury Instruction Chapter 16A at Part 10 gives effect to the requirement of GRAP 12.14 as follows:

"the accounting officer or accounting authority of an institution must ensure that the supply chain management system of the Department provides for an effective and efficient disposal management system which must minimize the holding of surplus and under-performing assets."

8.7 THE NEED FOR AN EFFICIENT AND EFFECTIVE DISPOSAL MANAGEMENT SYSTEM

- 8.7.1 While an effective and efficient system of disposal management is required to “*minimise the holding of surplus and underperforming assets*”, it should be understood that the need to dispose of inventory is a direct indicator of the inability of management to plan adequately to achieve programme delivery objectives and the manner in which inventory is being managed.
- 8.7.2 Notwithstanding the above, there is a need to ensure that items that have no future economic benefit for the Department are identified and disposed of in a timely manner to minimise holding costs and that such items are disposed of in the most efficient manner and to the best economic advantage of the Department.
- 8.7.3 A key outcome of inventory management is maintaining optimal levels of inventory and minimising inventory holding costs. Inventory holding costs are an important consideration when looking at the efficient use of resources. Inventory items stop providing economic value to an institution if they become obsolete, redundant or damaged. Among other adverse effects, it uses valuable storage space, results in the inefficient utilisation of resources because of the need to manage these items and ultimately inflates inventory for as long as the items are recognised in the accounting records of the Department.

8.8 REASONS FOR DISPOSAL

- 8.8.1 Inventory items are considered to have no future economic benefit when they become redundant, obsolete or damaged.
- 8.8.2 Redundant/Surplus stock - Redundant stock is the term used to define inventory that has become surplus to the programme delivery objectives of the Department but may still generate income or be of economic benefit if sold.
- (a) A critical inventory management decision arises when the Department finds itself with an excess of stock on hand. Stock holding literally translates into “money on the shelf” and “dead stock” (inventory not needed) represents cash flow that could have been used in other areas.

- (b) The best way to eliminate the cost of surplus inventory is to avoid it all together. Ultimately inadequate materials planning and execution systems is central to the problem of surplus or excess stock.
- (c) Where surplus inventory is identified, their disposal creates benefits in at least two ways; namely, the salvage revenue obtained from surplus unit disposal, and the savings in inventory holding costs since less stock is being held.
- (d) However, careful consideration of both the quantity and timing of disposal of surplus stock is required. Due to ongoing operational usage of an item identified as surplus, the Department may eventually be required to repurchase units of this item. Eliminating too much of this item may thus force the Department into making repurchasing arrangements which increase the cost of ordering. As a result, a cost tradeoff exists between salvage revenue and reduced inventory holding costs versus ordering costs. Inventory managers must fully analyse inventory detail when making decisions to dispose of surplus stock.

8.9 Identifying redundant/surplus stock

- (a) Given the aforementioned adverse impact on operational efficiency and cash flow, surplus stock must be identified and dealt with as quickly as possible.
- (b) Identifying surplus can sometimes be a challenge. Some of the most obvious indications that the Department is potentially holding surplus stock is when the warehouse/storeroom runs out of physical space to store items or consumption analysis indicates that the item is not "moving". Although such simple decision rules can provide a quick basis for identifying surplus stock, analytical models can consider a variety of specific inventory details.
- (c) The outcome of analytical modeling efforts is not only identifying the quantity of surplus stock but also helps manage the tradeoff between disposing of surplus stock and order costs resulting from future need for the item.

9. Obsolete Stock

- (a) An item of inventory becomes obsolete when it is no longer appropriate for the purpose it was obtained due either to the availability of better alternatives or a change in user requirements. Obsolete inventory must be written-off as soon as it is identified.
- (b) Obsolete items can create huge losses and in a more intuitive sense, obsolete inventory is a sign that the Department may have "fallen behind the times," because the demand for the item has clearly fallen. Alternatively, obsolete inventory might also indicate poor management practices, in that programme managers may have ordered or manufactured too much of an item due to poor planning, poor inventory management or inflexible operations. Programme managers must ensure that resource planning is performed by knowledgeable individuals supported by accurate and reliable information relating to product specifications.

10. Damaged Items

- (a) Damaged items can be defined as items which are impaired or inadequate, flawed or spoilt and are not in the original state in which it was initially procured. Damaged items are usually identified through scheduled or spot checks on inventory or user intervention.
- (b) Inventory could be damaged due to incorrect handling, wrong storage conditions or misuse. Damaged stock results in a direct financial loss for the Department and could adversely affect programme delivery.
- (c) A key responsibility of warehouse/storeroom managers is to safeguard inventory against theft and damages and the incidence of damaged stock is also a direct indication of the failure to safeguard inventory.

11. Identification of inventory for disposal

Once inventory items that qualify for disposal have been identified, such items will follow the same process for disposal as assets, which are dealt with in Chapter 22, Asset Disposal.

12. Warehouse Management

12.1 Warehouse management is a critical component of an effective overall supply chain management system, ensuring that the correct product is delivered in the right quantity, in good condition, at the required time, and at minimal cost.

12.2 The effective management of warehouses is vital in minimising costs and involves stock room organisation, provides for the appropriate safeguarding of inventory while it is being stored against theft and damages and monitors the progress of inventory through the supply chain.

13. Warehouse Organisation

13.1 Warehouse organisation on its own can greatly improve efficiencies and it is not necessary to have the latest and greatest warehouse layout, shelving, and lifting equipment. Simply keeping the warehouse neatly organised will improve productivity in replenishing inventory and locating and preventing items from getting misplaced or damaged.

13.2 The goal should be to have a clear, visible space for all categories of inventory. Some methods proven to have an impact on efficiency and overall warehouse operations for warehouse organisation are described below.

14. Bins & Bin Labels

(a) Using bins to identify various things is a clean, organised way of keeping a store from getting cluttered. Identifying these bins with labels, helps control the chaos of inventory just piling up without a place to go.

- (b) A bin can be a space in the warehouse created for specific purposes such as "returns" "damaged items", "return to supplier", and "disposal.
- (c) The use of Bins is intended to assist in storeroom organisation and item storage. While the Bin can be used to assist in locating the place where a particular class of item is stored it must not be confused with the inventory record of the item. Unless seamless integration between the bin location and the inventory system (whether manual or computerised) exists, there will always be a delay between the removal or storage of an item in its bin location and the point at which the inventory record is updated.

15. Shelving

Where the size of the warehouse allows, shelves could be combined with bins to provide greater efficiency in warehouse organisation. These shelves should be neatly organised with categories of product that are easily recognised by signs and clear, clutter free organisation.

16. Safeguarding Inventory

- 16.1 Warehouse management also involves safeguarding inventory while it is being stored, against theft and damages.
- 16.2 Inventory could be damaged due to incorrect handling, wrong storage conditions or misuse. Particular attention should be paid to identifying and classifying inventory requiring special storage and handling to ensure that adequate provision is made to preserve the shelf life and integrity of the item.
- 16.3 Inventory must also be safeguarded against theft. Physical counts are detective controls but do not prevent theft. Safeguarding inventory should also include security measures to prevent unauthorised access to and removal of inventory from stores.
- 16.4 Failing or neglecting to safeguard inventory from theft and damages will result in a direct financial loss for the Department and could adversely affect programme delivery.

17. INVENTORY AUDITS

Effective controls reduce the risk of loss and help ensure that information is complete and accurate and financial statements are reliable. Assurance must exist that transactions related to inventory have been properly processed and that appropriate physical handling and control over inventory exist.

18. Physical Counts

18.1 A Physical Count is the process of verifying and counting inventory in an effort to ensure and improve inventory accuracy. The objective of physical counts is to guard against loss of inventory because of theft, accidental destruction, and errors. Physical counts can take place either annually, cyclical or on an ad hoc basis.

- i. Annual physical counts ensure that by the end of the financial year, depending on internal financial / audit requirements, everything in inventory will have been counted;
- ii. Cycle Counting is the process of continually counting inventory in an effort to ensure and improve inventory accuracy. Cycle counting involves setting up a predefined route and number of items to count per scheduled period per material category. By the end of the financial year, depending on internal financial / audit requirements, everything in inventory will have been counted;
- iii. Ad Hoc Counts is the process that is followed when any documented inventory discrepancies found during normal binning and picking operations triggers a priority cycle count for that item or location.

19. Stock Verification & Adjustment

- (a) Stock Verification & Adjustment is the process that is performed in conjunction with the Cycle Counts / Ad Hoc Counts or Annual Inventory Count process. A Recount process flows from the stock verification process to facilitate the

counting of materials that were flagged for recount due to inventory discrepancies or on instruction from the warehouse supervisor.

- (b) The purpose of a stock adjustment is to maintain current, accurate inventory records.

19.1 Stock adjustments ensure:

- i. physical stock quantities reflect system inventory reports and records;
- ii. that the correct approval process is followed when making any stock adjustments;
- iii. the effective measurement and management of stock accuracy of the System; and
- iv. variances are identified in a count and investigated and applicable remedial actions put into place.

19.2 General rules applying to the areas of stockholding:

- (a) No unauthorised person shall obtain entry to the premises, buildings, rooms or areas where goods are kept, unless accompanied by an authorised warehouse employee/practitioner;
- (b) A key register must be instituted for effective control over keys for daily use by the delegated warehouse employee/practitioner. The delegated warehouse employee/practitioner must keep a duplicate key of all cabinets, cupboards, padlocks and other storage places, separately in a secure place;
- (c) Inventory items must be stored in appropriate facilities in accordance with the manufacturers specifications/ legal requirements and municipal by laws;
- (d) Inventory items must be grouped in terms of the level of physical protection required e.g. hazardous or perishable;
- (e) Breakable items must be stored in such a manner that breakages are limited to the absolute minimum;

- (f) Fire extinguishing equipment must be available in all stores. Such apparatus shall be serviced regularly by reputable service providers and the date of service indicated thereon;
- (g) Shelf utilisation must be effective and shelves must not be overloaded, whilst injudicious high stacking exceeding the fire and safety regulations, is forbidden;
- (h) Continuous attention must be paid to the possible presence of rodents and insects, which can damage inventory and storage facilities. Warehouses must be rodent-proof;
- (i) Binning
 - i. Only duly appointed employees/practitioners will determine/ authorise changes of the binning location;
 - ii. All materials must be stored within a recognised bin within the warehouse, and this must be reflected on the corresponding system whether manual or electronic;
 - iii. The delegated employee/practitioner completing the binning procedure must bin the material correctly, in the indicated bin location, as per the binning transfer order or Goods Receipt Slip presented per material;
 - iv. Bin locations which are found to be full, or have a different material located therein, must be brought to the attention of the delegated employee/practitioner who must suggest an alternative bin location;
 - v. Under no circumstances will an alternate bin location for the material be allocated unless otherwise instructed by the system or delegated employee/practitioner authorised to do so; and

- vi. For any binning exceptions that occur, corrections must be authorised by the delegated employee/practitioner.

(j) Picking and Packing

- i. Only duly appointed employees/practitioners must complete the picking and packing function;
- ii. Picking and packing activities must be planned and controlled by storage location;
- iii. Variances must be immediately escalated and audited and must lead to corrective action to ensure that the variances are not repeated;
- iv. The system must be updated immediately to reflect the successful completion of the picking/packing task; and
- v. Each order must be prepared and packaged as per the end-users instructions/requirements or as required by the manufacturer.

19.3 Annual complete stock take

- (b) At least one stock take per annum must be conducted by independent counters (staff not employed in the warehouse or stockroom being counted);
- (c) Physical Inventory Counts must be performed timeously as per the Physical Inventory Count Schedule by the delegated employees/practitioners;
- (d) The delegated authority must appoint, in writing, competent persons to take stock and to report their findings. To ensure proper segregation of duties, the person appointed must not directly be in charge of the store;
- (e) Explanation/reasons must be investigated/determined independently for all variances;

- (f) The System must be updated timeously and accurately on completion of the count;
- (g) A stock take certificate for Department Inventory must be compiled once all stock take certificates have been received, reviewed and matters resolved and forwarded to the Accounting Officer for sign-off;

19.4 Minimum Requirements for stock take.

When conducting stock take, information about the stock take must be recorded either manually or electronically. At least the following must be recorded:

- Inventory operation (name of warehouse, stockroom or other);
- Stock take name (e.g. quarterly count of A items for quarter ended June 2013);
- Date and time of count;
- Authorisation number and dated signature or electronic authorisation of counter;
- Authorisation number and dated signature or electronic authorisation of supervisor;
- Item code (must be unique for "the same" items);
- Item description (will be linked to the item code);
- Item location (shelf, bin, etc);
- Quantity on hand as per inventory records (manual or computerised system);
- Quantity on hand as per count in good condition;
- Quantity on hand as per count in poor condition (expired, obsolete, unserviceable etc);
- Variance (adjustment required to manual or computerised records);
- Second count carried out (indicate y/n); and
- Variance reason.

19.5 Inventory loss control

- (a) This is the process that results from a loss/discrepancy usually as a result of theft. Items that cannot be verified must not be accounted for in the financial records of the Department;
- (b) When discrepancies are identified and subsequent investigation confirms the loss, the loss control procedure must be instituted as the continued recognition of the item in the inventory will distort both financial data and impact on inventory management procedures;
- (c) The disjuncture between the requirement to remove these items from the inventory and the time it takes to conclude the loss control procedure is acknowledged, nevertheless the following will apply:
 - (i) An item of inventory that cannot be verified or accounted for must be placed into suspense allowing for the item to be excluded from inventory valuation and future inventory counts and to prevent the item from being included in resource planning techniques such as materials requirement planning; and
 - (ii) The item is removed from the inventory records when the loss control procedures is finalised.

19.6 Stock verification adjustment

- (a) Appropriate segregation of duties must exist between the counting and the stock adjustments process;
- (b) Inventory adjustments may not be carried out unless the correct procedure has been followed and all the delegated powers of authority have been adhered to;
- (c) Explanation / reasons must be investigated / determined independently by the Warehouse Supervisor for all variances;

- (d) The following additional information must be recorded for each adjustment:
- Date and time of adjustment;
 - Authorisation number and signature or electronic authorisation of adjuster;
 - Adjustment;
 - Reason for adjustment; and
 - Action required to follow-up discrepancy.