TOPIC 2.4: INVENTORIES

This section of the manual sets out the FSOP's that need to be executed by the municipality regarding Inventories. The FSOP's are drafted in the following categories:

2.4.1. Overview of the accounting for Inventories
2.4.2. Identification of Inventory
2.4.3. Acquisition procedures
2.4.4. Procedures during the useful life of Inventories
2.4.5. Procedures at the end of the useful life of Inventories
2.4.6. AFS disclosure requirements
2.4.7. Exemptions related to the application of GAMAP 12

2.4.1. OVERVIEW OF THE ACCOUNTING FOR INVENTORIES

When accounting for inventories the municipality must ensure that the necessary finance standard operating procedures are executed to address the following issues, which are summarised here, but for which the detail FSOP's are set out in the rest of this section.

Category	FSOP Section
1. **Identification of Inventory.** The municipality should ensure that that all assets that meet all the criteria for inventories, as set out in this section, are classified as such. These criteria include that it should be controlled by the municipality, future economic benefits are expected, and that it is to be consumed in the business processes or held for resale.	**Section 2.4.2**
2. **Acquisition (ordering) procedures.** Certain procedures need to be performed by the municipality regarding the ordering, receipt, recording and reconciliation of inventories to ensure an effective internal inventory control system. The accounting treatment for purchases of inventories and the measurement of inventories are also addressed here.	**Section 2.4.3**
3. **Procedures during the useful life of Inventories.** The different cost formulas which the municipality may use to calculate the value of its inventories are explained. Special attention is given to the valuation of purchased and purified water stock. The section explains the circumstances which may lead to inventory being written down to its net realisable value, and the accounting treatment thereof. The basic principle is that inventories should not be carried in excess of amounts expected to be realised from their sale or use. Physical stock-take procedures to be performed at year-end are also addressed in this section.	**Section 2.4.4**
4. **Procedures at the end of the useful life of Inventories.** This section sets out the correct procedures to follow when inventory are sold or issued for internal consumption.	**Section 2.4.5**
5. **AFS disclosure requirements.** The municipality must ensure that all **disclosure requirements for Inventories as listed in GAMAP 12** are met.	**Section 2.4.6**
6. **Exemptions related to the implementation of GAMAP 12.** A number of exemptions from the requirements of GAMAP 12 have been offered to high capacity municipalities (HCM), medium capacity municipalities (MCM) and low capacity municipalities (LCM) by NT. The requirements have been discussed in full from section 2.4.2 onwards, but the exemptions are listed here to provide guidance to municipalities implementing this standard on a piecemeal basis: **EXEMPTIONS - 30 June 2008** ➢ Any HCM that prepares its AFS in accordance with GRAP for the year ending 30 June 2008 are exempted from the entire GAMAP 12 as far as it relates to **immovable capital assets inventory** if it accounts for these properties in accordance with the requirements of GAMAP 17. ➢ Any HCM applying GAMAP 12 in its 30 June 2008 AFS HCMs are also exempted from the **entire GAMAP 12 to the extent that it relates to water stock that was not purchased** by the municipality. ➢ MCM and LCM can prepare IMFO AFS for 2008, and therefore ignore GAMAP 12 in totality, but if they prepare GRAP AFS the same exemptions listed in the two bullet points above apply to them.	**Section 2.4.7**

Category	FSOP Section
EXEMPTIONS - 30 June 2009 ➢ HCMs and MCMs must for the year ending 30 June 2009 comply with all the requirements of GRAP 12 on Inventories, and must restate the comparative figures. Transitional provisions discussed in section 2.4.7 must be applied. ➢ LCMs can prepare IMFO AFS for the year ending 30 June 2009 and therefore ignore GRAP 12 and GAMAP 12 in totality, but if they prepare GRAP AFS they must comply with all requirements of **GRAP 12** on Inventories.	

2.4.2. IDENTIFICATION OF INVENTORIES

Inventories can basically be described as assets held for sale in the ordinary course of business or in the form of supplies or consumables to be consumed during the service delivery process.

Inventories are assets:

- In the form of materials or supplies to be consumed in the production process;
- In the form of materials or supplies to be consumed or distributed in the rendering of services
- Held for sale or distribution in the ordinary course of operations; or
- In the process of production for the sale or distribution

Inventories include goods purchased and held for resale such as land, refuse bags, water and other property, as well as materials and supplies to be utilised during the delivery of services, e.g. water in the pipes, coal and fuel. Water will be regarded as inventory when the municipality purchases water in bulk with the intention to resell it to the consumers or to use it internally. However, water in dams, that are filled by rain and that has not yet been treated, and is under the control of the municipality can not be measured reliably as there is no cost attached to the water, and it is therefore not recognised in the statement of financial position.

Inventory also includes goods held for distribution to others at no cost or for a nominal value, e.g. medicines.

The decision whether a certain item should be classified as inventory depends on the purpose or use to the municipality. Property is recognised as inventory when it is acquired for the specific purpose of being traded or it is being developed with a view to sell for example township developments. Conversely, a decision to sell property previously used as office buildings does not qualify the office buildings to be recognised as inventory, as the property was not held specifically for the purpose of resale.

Are spare parts classified as inventory or property, plant and equipment?

Spare parts, stand-by and maintenance equipment (e.g. tools, consumable lubricants) are classified as inventory, unless they are expected to be used for more than one financial period or are considered a major spare part or servicing equipment. In this case, these items are classified as property, plant and equipment and will be depreciated. This applies to all assets held for use within the entity.

#	FMBPR	FSOP	FSOP Type	Responsible Official	Date of Execution of FSOP
1	Classification of items as inventory depends on the intention of the municipality and not the nature of an item.	An item should be regarded as inventories when it fits **all** of the following criteria: • **The item is controlled by the entity as a result of a past event** – it is the **property** of the municipality because it was bought in the past or it was donated to the municipality in the past. If no past event can be identified, the item can not be regarded as inventory. • **There are future economic benefits expected from the items** – the item will be used in future in the service delivery process of the municipality, therefore items that will not give rise to future economic benefits, can not be regarded as inventories with an asset value. • **The items are held in the form of materials or supplies to be consumed in the production process or in the rendering of services or for resale –** items that are not held to be consumed in the production process or in the rendering of services or for resale, can not be regarded as Inventory. Therefore items that can be used over and over without being consumed can not be classified as inventory and should probably be included in the PPE of the municipality. **See Annexure 3 entitled Defining of Inventory** The municipality must ensure that immovable assets that meet the "inventory" definition are also accounted for in accordance with GRAP 12 (previously GAMAP 12): • The municipality should identify land and buildings that will be sold within the next twelve months after year-end.	**AP**	**Manager: Expenses**	Monthly

#	FMBPR	FSOP	FSOP Type	Responsible Official	Date of Execution of FSOP
		• Remove those items from the asset register and reclassify them as inventory. (Buildings will not depreciate if they form part of inventories). • Only classify these properties as Inventory if they are held for sale **in the ordinary course of business**. • If the properties are **not** held for sale **in the ordinary course of business**, they should be classified as Non-current assets held for sale			

2.4.3. ACQUISITION PROCEDURES

a) Ordering of inventory

#	FMBPR	FSOP	FSOP Type	Responsible Official	Date of Execution of FSOP
1	The accounting officer of a municipality must ensure that the municipality has and maintains an appropriate procurement and provisioning system which is fair, equitable, transparent, competitive and cost-effective.	**Procedures to be performed on ordering of inventories:** • Stores re-order levels must be set for all store items after consultation processes with the relevant role-players taking into account frequency of use, delivery periods or lead time, volume discounts, cost of storing, etc. A re-order listing should be printed as frequently as necessary and be reviewed by the Stores Controller. • The Stores Controller should use this listing as a primary source of information to complete the purchase requisition, and should also take into account special requests from users for planned usage of inventories. • A delegated officer should approve the requisition form, confirming that monies are available on the budget to	**FCP**	**Manager: Expenses**	Monthly Ongoing

#	FMBPR	FSOP	FSOP Type	Responsible Official	Date of Execution of FSOP
		finance the acquisitions. To ensure segregation of duties, it is important that the approval of the purchase requisition is not done by the same person who completed the purchase requisition. • The purchase requisition must be completed and must be approved by a Chief User. The procurement section should prepare a purchase order in triplicate, based on the requisition form. The system controller will sign the purchase order. Ensure the preparation of the purchase order and approval is executed by 2 different persons. • The original purchase order is forwarded to the supplier and the other copies are filed with procurement. • The transit clerk will match the purchase order to the requisition to verify that the correct items have been ordered. • An exception report of all outstanding orders should be generated on a weekly basis. This report must form the basis for the follow up of orders and for matching goods that are delivered to stores. • The exception report of outstanding orders should be reviewed daily by the Head of Procurement and any orders, which have not been delivered as per agreement with the buyer, must be followed up immediately.			Weekly Daily
2	Control over the receipt of inventories	**Procedure to be performed on the receipt of inventories:** When the delivery is made to the delivery area, the incoming stock will be checked by the receiving officer against the purchase order and the accompanying invoice before accepting the goods to ensure that: • The goods received are what was ordered in terms of description, quantity and quality	**FCP**	**Manager: Expenses**	Ongoing

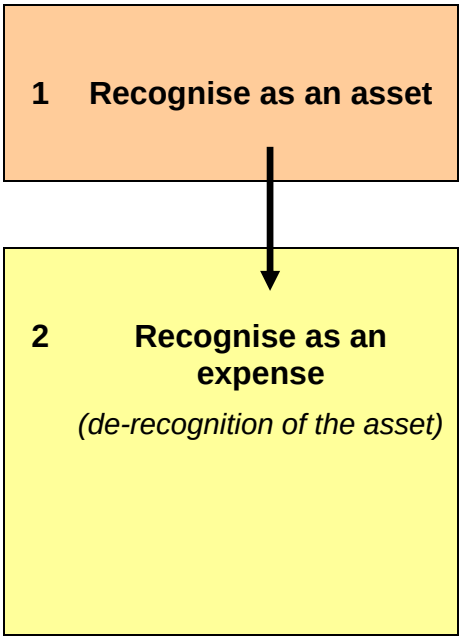
#	FMBPR	FSOP	FSOP Type	Responsible Official	Date of Execution of FSOP
		• The goods received are in agreement with the invoice in terms of description, quantity and quality The invoice is stamped and signed before it is forwarded to the Procurement section where payment is effected.			
3	**Section 63 (2)(c) of the MFMA stipulates:** The accounting officer must take all reasonable steps to ensure that the municipality has and maintains a system of internal control of assets and liabilities, including an asset and liabilities register as may be prescribed.	**Recording of stock in stores register:** The Stores Controller **must maintain a register** that reflects full particulars of inventories received, inventories issued and inventories on hand. The register must be updated immediately with all receipts and issues of stock and the theoretical stock per the register should at all time equal the actual stock on hand.	**FCP**	**Manager: Expenses**	Ongoing
4	Month-end procedures	**Reconciling invoices to Monthly Statements:** At the end of the month a statement from all suppliers will be delivered to the municipality, listing all invoices of the month together with the total cost of inventories received. The statements must then be **reconciled with the invoices paid** through the stock system for the month. The detail of each invoice must be checked against the details of the statement: • Invoice number • Date • Name of supplier • Item, size, quantity, unit price and total price • Delivery date • Signature of receiver Reconciling items must be followed-up with suppliers to	**FCP**	**Manager: Expenses**	Monthly

#	FMBPR	FSOP	FSOP Type	Responsible Official	Date of Execution of FSOP
		ensure that all liabilities are raised in the financial records of the municipality and to highlight incorrect invoices listed on statements.			

b) Accounting for purchases of Inventory

An item cannot be recognised as inventory unless it has satisfied the definition of an asset. Initially inventory is recognised as a current asset when the municipality gains control over it. Usually at that stage, the cost can be determined reliably (amount payable to the supplier or its fair value if it was donated) and future economic benefits from the sale of such items or the ability to deliver services as a result of the acquisition of the item are expected to be realised.

There are two aspects to inventory:



The cost of the inventory is recognised in the statement of financial position (usually as a current asset) when received.

Inventory de-recognition relates to the point when inventory is no longer held as an asset in the statement of financial position.

When inventory is de-recognised, the carrying amount of the inventory is recognised as an expense. In some cases, the de-recognition coincides with the recognition of related revenue (if sold), which means that reference should be made to GRAP/GAMAP 9 for guidance on exactly when inventory should be recognised.

When can stationary and other similar consumables be expensed or when should they be capitalised as inventory?

Stationary and other similar consumables would probably fall within the definition of inventory (if it is concluded that it is an asset). Paragraph 6 of GRAP 3 states, the Standards of GRAP need not be applied when the effect of applying them is immaterial. In most cases the value of stationery on hand and other similar consumables is immaterial and in these circumstances recognition as inventory (in the statement of financial position) is not done. Should the balance at year end be material then recognition in terms of the accounting standards will be required.

Municipalities should also take timing into consideration when immediately expensing items purchased. For example, where items are purchased and kept for lengthy periods of time, these items may need to be recognised as inventory in the statement of financial position even though they may not be considered to be significant at the date of purchase.

#	FMBPR	FSOP	FSOP Type	Responsible Official	Date of Execution of FSOP
1	Inventories encompass goods purchased and held for resale including, for example, merchandise purchased by a retailer and held for resale, or land and other property held for resale. Inventories also encompass finished goods produced, or work in progress being produced, by the entity and include materials and supplies awaiting use in the production process	Inventory for the municipality would be assets in the form of materials or supplies that will be consumed in the production process or in the rendering of services. The Stores Controller needs to forward all invoices and statements for inventories received by the entity to the Procurement Section. If inventory purchased is identified, the expense should be allocated to the "Inventory on hand" - vote number in order to capitalise the inventory. The expenditure is therefore not allocated to an expense vote.	**AP**	**Manager: Expenses**	Ongoing
2	Reviewing subsequent payments to suppliers may result in the identification of items not recorded at year-end	Scrutinise all invoices received at year-end or after year-end that pertains to inventories rendered to the municipality but not yet paid for. Inspect these invoices for inventories that should be capitalised and the accrual to be raised as a creditor.	**AP**	**Manager: Expenses**	At 30 June each year

c) Initial measurement of inventories

The **initial measurement of inventory** is a cost. The cost of inventory comprise the purchase price, the development cost and other costs incurred in bringing the inventory to the place of sale or consumption and to get it ready for sale or consumption.

If inventory is acquired at not cost or for no consideration, it is measured at its fair value at the date that it qualifies for recognition as an asset. Subsequently the fair value assigned on initial recognition will be deemed the cost price of the inventory.

Cost price

The cost price of inventory encompasses the purchase price, including import duties, transport and handling costs as well as any other costs directly attributed to the acquisition of inventories.

VAT is not part of the cost price if it is reclaimed from SARS.

Trade discounts and rebates (excluding cash discounts and early settlement discounts) are related to the purchase of inventory and should be deducted in determining the purchase price. Financing element of deferred settlement beyond normal credit terms are also excluded from the cost of purchase.

When inventory is imported and payable in a foreign currency, the cost of inventory is determined using the exchange rate at the date of the transaction. Other costs incurred such as import duties, landing cost and insurance will also be included in the cost price as it can be directly attributed to the acquisition of the inventory.

Transport cost incurred to get the inventory to the location where it will be sold or consumed, is included in the cost of inventory, in other words, transport costs include the cost of getting the inventory from the supplier to the municipal premises.

The cost of providing a safe place for storage of inventory until it is sold or consumed during the service delivery process does not form part of the cost price of inventory. Storage costs include the cost of personnel manning the warehouse, security costs, insurance etc.

Rebates

Rebates to be received from the supplier, which represent a refund of part of the purchase price, should be estimated at the date of purchase of the inventories and should be deducted from the cost of the inventories. If however, the rebates represent a refund of selling expenses incurred by the buyer of the inventories, the rebates should not affect the cost of the inventories.

Example – rebates

A supplier has agreed to grant the municipality a rebate of 2 % if the municipality buys at least 1000 kilolitres of water from the supplier (at a cost of R10,000 per kl) during a period of 12 months.

If, based on past experience, it is very likely that the municipality will meet the target, each kilolitre of water will be recognised at a cost of R9,800 (10,000 x 98 %), with a

receivable of R200 recognised for the anticipated rebate. On the other hand if it is not probable that the target will be reached, each kilolitre should be recognised at a cost of R10,000. Should the receipt of a rebate then become probable at a subsequent date, it should be recognised at that date. Any portion thereof that relates to water already sold/consumed should then be recognised as an expense (cost of sales), while the remainder should be deducted from inventory.

Settlement discounts

Any settlement discount to be received for prompt settlement of the purchase price due should be estimated at the date of purchase of the inventories and should be deducted from the cost of the inventories.

Example – settlement discounts

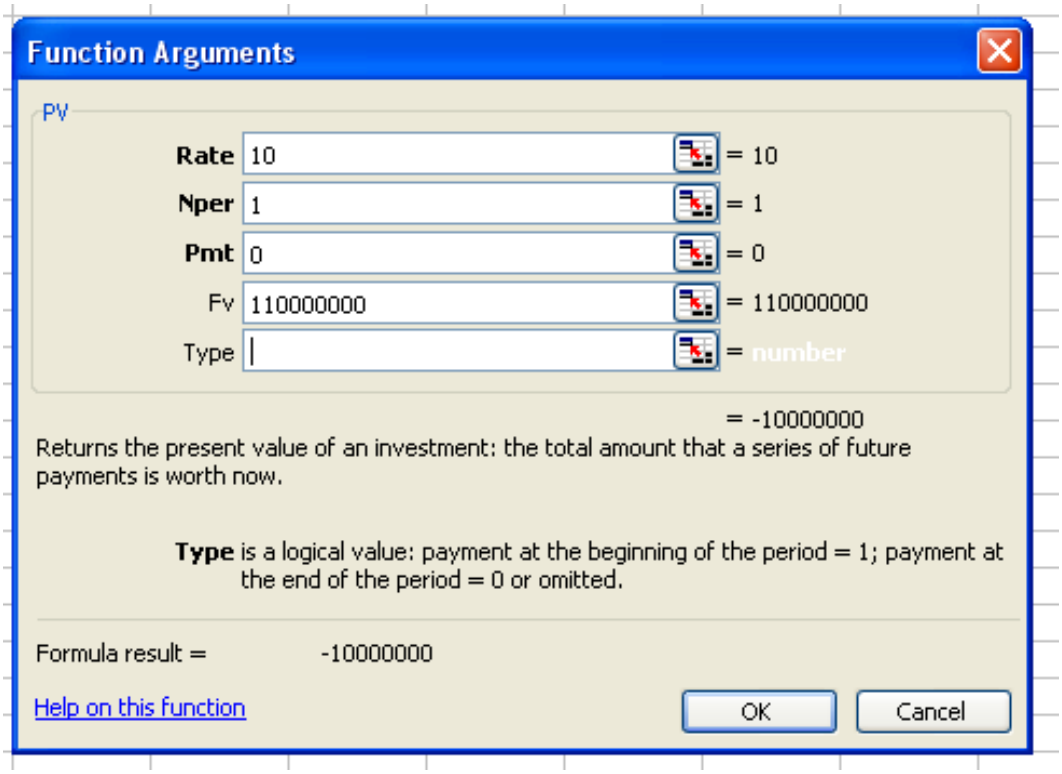
A municipality buys inventory with a cost of R100,000 from supplier B, who offers a 10 % discount if the amount due is settled within 15 days. If the municipality intends to settle the amount within 15 days, the cost of the inventory would amount to R90,000 (debit inventory and credit liabilities with R90,000). However, if the municipality does not intend to settle within 15 days, the cost of the inventory would amount to R100,000.

Deferred settlement terms

If a municipality purchases inventories on deferred settlement terms/over an extended period granted by the supplier of the goods/service, the effect of the time value of money should be taken into account, if material. This is done by discounting the future cash flows back to a present value. This present value is then recognised as the cost of inventory. Any difference between this present value and the amount actually paid is accounted for as interest over the period of the financing. It should be noted that this treatment is to be followed even if the selling price has not been inflated to compensate the seller for the effect of the extended payment period.

Example – deferred settlement terms

A municipality purchases computers from a supplier for R110 million and the payment is due in 3 months (which is considered to be beyond normal credit terms). The supplier does not charge the municipality any interest however this transaction has led to a financing transaction due to the deferred settlement terms. Assuming the current market interest rate of 10.5 % the present value is calculated as follows:



The computers will be recognised at a cost of R100 million and the difference of R10 million will be recognised as interest and will be expensed over the period of the financing using the effective interest rate method.

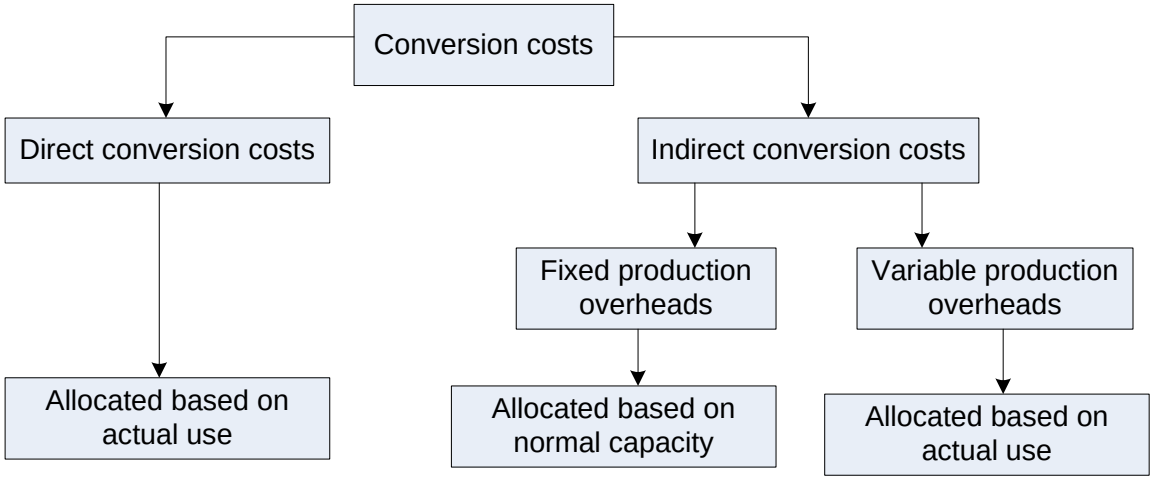
Cost of development or production (i.e. conversion or production process costs)

Conversion costs are the manufacturing or processing costs (including normal spillages) that relate to the conversion of raw materials into finished goods. The cost of conversion includes direct costs (costs directly related to the units of production), for example direct labour – these labour costs will include pension costs and other fringe benefits relating to factor workers. Conversion costs also include an allocation of indirect fixed production overheads and indirect variable production overheads.

	Indirect variable production overheads are the indirect costs of production that vary directly, or nearly directly, with the volume of production, for example indirect materials, water consumption during production, and electricity used by the production machines. The allocation of indirect variable production overheads is relatively straight forward: variable overheads are allocated to each unit of production on a basis of the actual use of the production resources.

Indirect fixed production overheads are the indirect costs of production such as factory rental, salaries of factory supervisors, insurance of PPE and depreciation of PPE. These costs remain relatively constant within the relevant range, regardless of the volume usually based on the normal capacity of the production facility, which is the average production expected to be achieved over a number of periods under normal circumstances, taking into account appropriate normal capacity. If there is a substantial difference between normal capacity and actual capacity which continues for an extended period, the municipality should consider revising normal capacity.

Illustration of conversion costs allocation



When normal capacity is used for the allocation of fixed production overheads, the fixed costs allocated per unit should not be increased in periods of low production- any unallocated fixed costs should merely be charged directly to cost of sales. In period of abnormally high production, the amount of fixed costs per unit should, however, be decreased to ensure that inventories are not valued above costs. The amount allocated to inventory is thus limited to the actual expenditure incurred. Variable production overheads are allocated to each unit of production on the basis of the actual use of the production facilities.

Where a municipality for example is purifying its own water, the cost of purification will be recognised in the cost price of the water.

Other costs

In certain instances, additional costs are required to get the inventory in a saleable or usable condition. Costs required before the inventory is ready for sale or consumption, are included in the cost price of the inventory. These costs include:

- the costs to design a product for a specific customer;
- the amortisation of development costs relating to a specific product;
- decommissioning and restoration costs incurred as a result of the manufacturing of inventory during a specific period; and
- packaging costs incurred to prepare inventory for sale.

The following costs are excluded from the cost of inventories and are recognised as expenses in the period in which they are incurred:

- abnormal amounts of wasted materials, labour, or other production costs;
- impairment losses on machinery and equipment used in the manufacturing process;
- costs to distribute and transport goods to customers;
- storage costs, unless the costs are necessary in the production process before a further production stage;
- administrative overheads that do not contribute to bringing inventories to their present location and condition; and
- selling costs

Cost of inventories of a service provider

A service provider measure its "inventory" similar to the principles explained above, i.e. at cost of production. These costs consist primarily of labour and other costs of personnel directly engaged in providing the service, including supervisory personnel, and attributable overheads. The following costs are excluded:

- cost of labour not engaged in providing the service;
- labour and other costs relating to sales and general administrative personnel

  (the above costs are recognised by the service provider as expenses in the period in which they are incurred); and
- margins or non-attributable overheads that are often factored into prices charged by service providers.

Cost of inventories acquired at no cost, or for nominal consideration

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

	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.

What if there is no market to determine the fair value of items of inventory?

If the market for inventory is not active, a municipality establishes fair value by using a valuation technique. Valuation techniques include:

- using recent arm's length market transactions between knowledgeable, willing parties (replacement cost), if available; or
- reference to the current fair value of another item of inventory that has substantially similar characteristics in similar circumstances and locations; or
- using projected future cash flows; or
- a valuation technique commonly used by market participants to price similar inventory being assessed, where the technique has been demonstrated to provide reliable estimates of prices obtained in actual market transactions.

The objective using a valuation technique is to establish that the transaction price would have been on the measurement date in an arm's length exchange.

Fair value is estimated on the basis of the results of a valuation technique that makes maximum use of market inputs, and relies as little as possible on entity-specific inputs. A valuation technique would be expected to arrive at a realistic estimate of the fair value if:

a) it reasonably reflects how the market could be expected to price the inventory; and

b) the inputs to the valuation technique reasonably represent market expectations for the inventory.

The municipality should clearly document their valuation technique as part of its financial policies and review the valuation technique on a yearly basis in order to determine whether it is still reasonable and whether any assumptions have been applied need to be appropriately adjusted depending on the market.

#	FMBPR	FSOP	FSOP Type	Responsible Official	Date of Execution of FSOP
1	According to **GRAP 12.17** (previously **GAMAP12.7)** inventories shall be measured at the lower of cost and net realisable value. The **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.	The **accounting policy** of the municipality should clearly state that inventories are **measured at the lower of cost or net realisable value.** The municipality will have to amend the accounting policy to set out how **inventories: land and buildings**, are accounted for, if not previously accounted for as inventories. The municipality must ensure that the abovementioned accounting policy is adhered to by the municipality.	**AP**	**CFO**	At date of implementation of GRAP and thereafter at 30 June each year
2	According to **GRAP 12.19** (previously **GAMAP 12.9)** 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.	The Stores Controller and Procurement section **should be aware** of all costs that need to be included in the cost price of Inventories (this may be ensured by relevant staff members attending training sessions/workshops). Procurement needs to **scrutinise invoices to identify directly attributable cost,** that must be **included** in the carrying amount of inventories, as well as **trade discounts and rebates** that must be **deducted** from the purchase price as those costs is not part of the carrying amount of inventories. See Annexure 4, entitled Determining cost of inventories.	**AP**	**Manager Expenses**	At 30 June each year
3	**SAICA Circular 9/2006** identifies the following types of transactions giving rise to an adjustment to the cost of purchase of an item of inventory.	Identify transactions that involve cash discounts, settlement discounts and other rebates (either given or received), Ensure that these transactions are accounted for in terms **SAICA Circular 9/2006.**	**AP**	**Manager Expenses**	Ongoing and at 30 June each year

#	FMBPR	FSOP	FSOP Type	Responsible Official	Date of Execution of FSOP
	This circular only deals with the initial accounting by sellers (buyers) of goods in transactions that involve cash discounts, settlement discounts and other rebates (either given or received), and extended payment terms.	The municipality should also ensure that its accounting system is set up accordingly. See **Annexure 10 for practical examples** of the accounting entries for trade and settlement discounts.			

2.4.4. PROCEDURES DURING THE USEFUL LIFE OF INVENTORIES

a) Subsequent measurement of inventories

Inventories are **subsequently measurement** at the lower of cost and net realisable value OR at the lower of cost and current replacement cost where they are held for:

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

The recognition of an asset is dependent on future economic benefits or service potential being probable. It follows that those future economic benefits / service potential should amount to at least the recorded value of the asset.

If the future revenue expected to be generated by the sale of inventory on hand is less than the cost of that inventory then the inventory should be written down. The measurement of expected future revenue should also take into account the costs of selling the inventory, for example marking costs, distribution costs, packaging costs and sales commission.

Inventories may be worth less at the reporting date than when they were originally purchased, for a number of reasons:

- damages to the items;
- items becoming wholly or partially obsolete (they have no use anymore due to new and better items which can be used in their place or they are outdated or have expired);
- decline in the inventories' selling price;
- if the estimated costs of completion or the estimated costs to be incurred to make the sale, exchange or distribution have increased.

If this occurs, the net realisable value (or current replacement cost) of the items should be considered and inventory should be written down to its net realisable value (or current replacement cost), if lower than its cost.

	Net realisable value is defined as the estimated selling price in the ordinary course of business les the estimated costs of completion and the estimated costs necessary to make the sale. Net replacement cost is the cost the entity would incur to acquire the asset at the reporting date.

In principle, no item in inventory should be carried at an amount in excess of the net amount that it is expected to realise and no future period should be burdened with a loss on realisation of an overvalued item currently held.

All costs to realise the sale of such item should therefore be estimated and deducted from the estimated selling price in order to arrive at the net realisable value of the item. Write-downs to net realisable value are normally determined on an individual item basis. However, in some cases it may be necessary to evaluate groups of inventories.

Groups of items may be required where these items relate to the same product line, have similar processes, are produced and marketed in the same geographical area, and cannot be practicably evaluated separately from other items in the product line. It is not acceptable however, to write inventory down on a basis of an entire classification, for example, finished goods.

Materials and other supplies held for use in the production of inventories are not written down to below cost if the finished products in which they will be incorporated are expected to be sold, exchanged or distributed at or above cost. However, when a decline in the price of materials indicates that the cost of the finished products exceeds the net realisable value, the materials are written down to net realisable value. In such circumstances, the replacement cost of the materials may be the best available measure of their net realisable value.

Distributing goods at no charge or for a nominal value

An entity may hold inventories whose future economic benefits or service potential are not directly related to their ability to generate net cash inflows. These types of inventories may arise when an entity's objective is to distribute certain goods at no charge or for a nominal amount. In these cases, the future service potential of the inventory for financial reporting purposes is reflected at the lesser of the amount the entity originally paid to acquire the asset or its replacement cost.

For example, a clinic distributes certain medicines for free. The clinic would not simply write down the cost of the inventory to zero because no cash is received from the distribution but it would rather reflect the service potential of the assets in the statement of financial position.

Assuming the clinic has 1,000 units of medicine at year-end in stock at an original cost of R20 per unit. The total value of the medicine at the end of the financial year is R20,000.

As these medicines are distributed for free, the clinic must compare this value with the current replacement cost which is R18 per unit i.e. R18,000. An amount of R2,000 will immediately be expensed in the statement of financial performance as a write-down of the cost of the inventory to the current value of its service potential.

The determination of an item's net realisable value or replacement cost involves the use of judgement and caution should be exercised when making use of estimates. It should also be based on conditions that exist at the reporting date. Events after the financial year-end should only be considered to the extent that they confirm conditions that existed before the reporting date.

As the net realisable value or replacement cost of inventory is measured at each reporting date, situations could arise where inventories written down in one year may have to be written up in the following year if the items are still in inventory and the net realisable value or replacement cost has improved. It is important that any reversal of a past adjustment is limited to the value of this adjustment. The inventory can only be

measured at the lower of the original cost and the net realisable or current replacement cost.

For example, an inventory item with an original cost price of R10,000 was written down to its net replacement cost of R7,500 at 30 June 20x5 as a result of new legislative requirements. Due to subsequent changes in the legislative environment during 20x6, it is estimated the item can now be replaced at a cost of R12,000. As the net replacement cost at 30 June 20x5 is higher than the original cost, the item should only be valued at cost, being R10,000 and the previous write-down in cost of R2,5000 should be reversed.

#	FMBPR	FSOP	FSOP Type	Responsible Official	Date of Execution of FSOP

1	According to **GRAP 12.36** (previously **GAMAP 12.31)** the cost of inventories may not be recoverable if those inventories are damaged, if they 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.
	
	According to **GRAP 12.37** (previously **GAMAP 12.32)** inventories are usually written down to net realisable value item by item. In some circumstances, however, it may be appropriate to group similar or related items. This may be the case with items of inventory relating to the same product line that have similar purposes or end uses, are
		The following steps will have to be performed at year end to account for the write down of inventories to net realisable value:
		• Finance needs to issue a memo to all departments requesting them to identify inventories that may not be fully recoverable if:
		  • inventories have been damaged
		  • inventories have become wholly or partially obsolete,
		  • their selling prices have declined, or
		  • their estimated costs of completion or estimated costs to be incurred to make the sale have increased.
		See Annexure 9: Memo – write down of inventories to Net Realisable Value
		
		• The recoverable amounts of these inventories need to be calculated by calculating the Net Realisable Value (NRV) **as per Annexure 5 Entitled: Valuation of inventories** below.
		• The write down loss per inventory needs to be calculated as the difference between the NRV and the book value of the asset.
		• The write down loss needs to be accounted for in the period that it occurs by crediting inventories and debiting an expense called write down of inventories.
			AP	**Manager Expenses**	30 June each year

#	FMBPR	FSOP	FSOP Type	Responsible Official	Date of Execution of FSOP
	produced and marketed in the same geographical area, and cannot be practicably evaluated separately from other items in that product line. It is not appropriate to write inventories down on the **basis of a classification** of inventory, for example, finished goods, or all the inventories in a particular industry or geographical segment. Service providers generally accumulate costs in respect of each service for which a separate selling price is charged. Therefore, each such service is treated as a separate item.	**Accounting entries:** **Debit** **Credit** Write down of Inventory to NRV xx Inventory xx Inventories are written down to net realisable value on an item basis and not based on the classifications (groups) of inventories such as finished goods or raw materials.			
2	Monthly reconciliations	**Sub-ledger** Monthly reconciliation between Inventory Control Account and the Inventory Sub-ledger. • The receipt, issue and write-down of inventories should be recorded in the Control Account of the General ledger and the Inventory sub-ledger account (inventory register) of the municipality. A monthly reconciliation of Inventories in its different classifications (i.e. Finished Goods, Raw Materials, Work in progress, etc.) between the General ledger and the sub ledger (Inventory listings) should be performed and deviations found during this reconciliation process should be cleared.	**AP**	**Manager Expenses**	Monthly

#	FMBPR	FSOP	FSOP Type	Responsible Official	Date of Execution of FSOP
		• At each year-end the inventory balance as per the control account in the General ledger will be disclosed in the Statement of Financial Position and an inventory listing should be produced from the stores register that equals the value of stores as is reflected in the control account. It is very important that the Inventory control account is balanced with the inventory sub-ledger on a monthly basis. Should there be accounting entries for the year ended 30 June 20xx, put through during the period 1 July 20xx to 31 August 20xx (Date of completion of the AFS) and the sub-ledger cannot be updated with those entries (because the sub-ledger has been closed-off on 30 June), ensure that the following procedures are performed: ▪ Ensure that a manual reconciliation of the inventory sub-ledger to the general ledger is performed and that large or unusual reconciling items are investigated. ▪ Ensure that the reconciliation is reviewed by a senior official and initialled as evidence thereof. ▪ Ensure that supporting documentation exist for all reconciling items and that reconciling items are followed-up and cleared on a timely basis after year-end.			

b) Cost formulas

The cost of inventory on hand at the reporting date should be the actual cost of the specific items on hand. In some instances it may be possible to determine the actual cost of the item(s), but it may not be possible to determine the actual cost of items that are constantly bought and utilised during the year, for example fuel. When some of the fuel has been carried forward form the previous year and additional fuel has been bought during the year at different prices, which of those quantities are still on hand at the reporting date?

According to GAMAP 12/ GRAP 12, except for the specific identification of the cost, the cost of inventory may be determined using either the first-in-first out method or the weighted average method, as long as the same cost formula is applied to all items of similar nature and use from year to year. For example, if the municipality's inventories consist of maintenance materials and land developed for resale, the maintenance materials can b e valued according to the weighted average method. In this example, all land development projects must be valued according to the weighted average method.

Specific identification

The specific identification of inventory cost means that specific costs are attributed to identified items of inventory. The method is only appropriate when inventory items are separately identifiable and are dissimilar in value.

First-in, first-out (FIFO)

The first-in-first-out method assumes that items purchased first are sold first and the items on hand at the end of the period are the most recent purchased items. Within a normal business cycle, the cost of inventory on hand at the end of the financial year will be higher than the cost at the beginning of the financial year.

Weighted average method

According to the weighted average method, the aggregate cost of similar items available for sale is divided by the number of units available for sale. The weighted average is usually calculated after each purchase.

#	FMBPR	FSOP	FSOP Type	Responsible Official	Date of Execution of FSOP
1	According to **GRAP 12.34** (previously **GAMAP12.29)** the cost of inventories shall be assigned by using the first-in, first-out **(FIFO)** or weighted average cost formula. A municipality shall use the same cost formula for all inventories having a similar nature and use to the municipality. For inventories with a different nature or use, different cost formulas may be justified. **(GRAP 12.34/GAMAP 12.28)**	The **accounting policy** of the municipality should clearly state what basis is used in calculating the cost of inventories. All inventories of similar nature and use should be valued using the same basis of calculating the cost of inventories. If inventories with a different nature or use is identified and there is a need to value these inventories using a different cost formula, the accounting policy should clearly indicate what basis of valuation is used for the various inventories held by the municipality. The **FIFO** formula assumes that the items of inventories that were purchased first are sold first, and consequently the items remaining in inventories at the end of the period are those most recently purchased or produced. 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 municipality. Another cost formula that can be used is the **specific identification of cost,** which means that specific costs are attributed to identified items of inventory. This is appropriate for inventories that are not ordinarily interchangeable and goods or services produced and segregated for specific projects. An example is where the municipality purchase refuse bins for resale where the cost	**AP**	**CFO**	Date of implementation of GRAP

#	FMBPR	FSOP	FSOP Type	Responsible Official	Date of Execution of FSOP
		can be attributed to the identified bins. See **Annexure 5** : Valuation of inventories See **Annexure 8**: Practical example of the determination of the value of inventories.			
2	Water stock must be accounted for as inventory. This will include water purchased and not yet sold at statement of financial position date insofar as it is stored (controlled) in reservoirs and pipes at year end. Water stock also includes any water purification costs incurred for non-purchased water. Pre-purified, non-purchased water should not be capitalised as part of inventory. The **cost of water purchased** and not yet sold at statement of financial position date comprises the **purchase price, import duties and other taxes** (other than those subsequently recoverable by the municipality from the taxing authorities, such as VAT) and **transport, handling and other costs directly attributable to the**	**Valuation of purchased and purified water stock** 1. The capacity (volume) of water that is stored (controlled) in reservoirs and pipes needs to be calculated. • Detailed plans of the municipality's water reticulation systems needs to be obtained which indicate the length and diameter of the water pipes used in the reticulation system. The volume of water stored in the pipes needs to be calculated based on these detailed plans. • If detailed plans of the municipality's water reticulation system are not available, then the municipality's engineering department or a consulting firm needs to be appointed for the re-measurement and drafting of these plans. • All reservoirs of the municipality need to be identified and each reservoir's capacity should be determined. • Dip readings should be taken at every reservoir as at 30 June each year. Municipalities that will prepare their first GRAP compliant annual financial statements as at 30 June 2009, needs to	**AP**	**CFO**	Date of implementation of GRAP

#	FMBPR	FSOP	FSOP Type	Responsible Official	Date of Execution of FSOP
	acquisition of finished goods, materials and services. **Importantly, trade discounts, rebates and other similar items are deducted in determining the costs of purchase.**	take the dip-readings as at 30 June 2008 to enable them to disclose a comparative figure for water inventory. 2. Municipalities that purify and purchase water should determine the mix of purified vs purchased water controlled by the municipality. • The municipality should ensure that systems are in place to determine what percentage of water on hand at year has been purchased and what percentage has been produced (purified). • Water stock that was purchased should be disclosed at cost in the AFS. • Purified, non-purchased water should be disclosed at purification cost in the AFS. 3. Determine what valuation methodology will best serve to value water on hand i.e. production cost per unit, FIFO or weighted average method. The municipality shall use the same cost formula for all inventories having a similar nature and use to the municipality. 4. Value purified water on hand at year end by determining a production cost per unit of water purified and then applying this to the volume of purified water on hand at year end. The production cost per unit must be based on: • Cost directly related to the units of production			At 30 June each year At 30 June each year

#	FMBPR	FSOP	FSOP Type	Responsible Official	Date of Execution of FSOP
		such as direct materials and direct labour. This could include expense items such as wage costs of plant workers and chemicals used in the production process. Another example is the DWAF monthly fee paid for the volume of water purified. • A systematic allocation of fixed production overheads, which are indirect costs of production that remain relatively constant, regardless of the level of production, such as depreciation of manufacturing equipment and the production facility (water purification plant). • A systematic allocation of variable production overheads, which are indirect costs of production that vary in accordance with variances in the volume of production. Examples are indirect labour such as the salary of a factory foreman, and also indirect materials. 5. Closing inventories of purchased water, where the price of water purchased during the year, differs from one purchase to the next, needs to be valued by using either the FIFO or the weighted average method. • The FIFO method will most likely present the most accurate cost calculation for purchased water as water that is purchased first is also sold first. • Thus value purchased water at year end by utilising the FIFO methodology and multiplying purchased water on hand at year-end with the latest purchase price.			

#	FMBPR	FSOP	FSOP Type	Responsible Official	Date of Execution of FSOP
		6. Where the municipality is unable to assign purification cost to specific volumes of water purified, the weighted average method will be a more practicable approach.			

c) Physical stock take procedures

#	FMBPR	FSOP	FSOP Type	Responsible Official	Date of Execution of FSOP
1	**Section 63 1(a)** of the MFMA states that the accounting officer of a municipality is responsible for the management, including the safeguarding and the maintenance of the assets of the municipality. **Section 63 2(c)** of the MFMA states that the municipality must maintain a system of internal control of assets and liabilities, including an asset and liabilities register, as may be prescribed	**Physical stock take procedures** • Physical stock taking is the process of counting or measuring all items in stock and recording the results. The reason for doing this is as follows: ➢ To verify the accuracy of stock records ➢ To support the value of stock shown in the balance sheet by physical verification ➢ To reduce the possibility of fraud, theft and losses ➢ To reveal any weaknesses in the system for the custody and control of stock • Physical stock take procedures must be performed at year-end or as close as possible to year-end. • No stock should be received or issued by the store section after midday on the day before the stock take will be performed. Notices of the stock take must be posted at prominent places so that everybody concerned is aware of the stock take. The external auditors should also be notified in writing of the date and time of the stock take procedures. • The Stores Controller should ensure that all receipts and issues of stores are accounted for on the stores register at the date of the stock take. • The storeroom should be neat and clean and all similar stock items should be grouped and stored together to make the performance of the stock count	**FCP**	**Manager Expenses**	30 June each year

#	FMBPR	FSOP	FSOP Type	Responsible Official	Date of Execution of FSOP
		easier. • The stock take should be performed by two independent delegated persons not involved in the day to day activities of the stores section. • On the day of the stock count, a stock listing generated from the stock system should be provided to the stock takers. See **Annexure 1** for an example of a stock sheet and **Annexure 2** for an example of a stock count sheet. The stock sheet is a list of all the stock on hand at year –end and can be used to value the stock at year-end and to write off redundant stock. The stock count sheet is to be used during the stock take to record the actual stock counted.			
2	Stock count procedures	• The stock count must be performed on a systematic basis from one point of the storeroom to the other ensuring that all stock is counted. All stock that is counted should be clearly marked (with stickers or some other method) to ensure that all stock was counted and to avoid double counting. • All items where deviations between theoretical and actual stock are identified should be recounted and the Transit Clerk should be notified to investigate possible reasons for deviations. When the amount of stock found by physical examination fails to agree with the balance on the stock records, a discrepancy exists. If the stock found exceeds the recorded figure	**FCP**	**Manager Expenses**	30 June each year

#	FMBPR	FSOP	FSOP Type	Responsible Official	Date of Execution of FSOP
		there is a surplus and, conversely, if the physical stock is less than the book figure, there is a deficit. After the Stock Controller has agreed that a discrepancy exists, the procedure depends upon the nature and value of the discrepancy. Large amounts will have to be investigated. The degree of investigation is a matter of judgement in the circumstances of each case. The following list of steps to be taken should be considered: ➢ Examine the transactions since the date of the last check to make sure that there are no errors or obvious omissions or duplications in recording. ➢ See that there has been no confusion over units of issue ➢ Check the basic documents (i.e. receipt, issue, transfer, return-to-store notes) for any exceptionally large or apparently unusual transactions. ➢ Have the physical stock take results verified by a senior staff member. ➢ Interrogate the stock receiver to find out if there is any explanation or suspicions as to how the discrepancy has arisen ➢ Examine the results of the last stocktaking to see whether there was a discrepancy on that occasion. In odd cases it may be found that a deficiency at one stock-take is followed by a surplus on the next and this may be because the first check was inaccurate.			

#	FMBPR	FSOP	FSOP Type	Responsible Official	Date of Execution of FSOP
		➢ In serious cases, where theft or fraud is suspected, notify the Accounting Officer. ➢ Where necessary, review and improve on physical security			
3	Reporting on the results of the stock take	• The individuals responsible for the stock take should identify slow moving and obsolete stock as well as stock that need to be impaired. • A report should be prepared on the results of the stock take procedures and should be submitted to the Head of Department (HOD). The accounting records must be updated with the results of the stock take to ensure that the inventories figure disclosed on the Balance Sheet represents actual stock at year end that was valued correctly. After the stock take a senior member of management should sign a stock certificate. This document is a declaration of the value of the stock on hand and is substantiated by an inventory listing and stock taking sheets. See **Annexure 11:** Example of a stock taking report to the accounting officer	**FCP**	**Manager Expenses**	30 June each year
4	Roles and responsibilities	A clause should be included in the duty sheet of officials that they are responsible for the management, including the safeguarding, of the assets and the management of liabilities within the official's area of responsibility.	**LCP**	**CFO**	Date of implementation of GRAP

2.4.5. PROCEDURES AT THE END OF THE USEFUL LIFE OF INVENTORIES

The carrying amount of inventories issued or sold during the year shall be recognised as an expense in the statement of financial performance during the period in which the revenue is recognised. Where the inventory was distributed at no cost and consequently no revenue recognised, the expense is recognised when the goods are distributed, or the service is rendered. However, some inventory items may be allocated to other assets, for example an item used as a component of property, plant and equipment. In such cases, the cost of inventory is recognised over the useful life of the asset through depreciation.

The amount of any write-down of inventories to net realisable value or replacement cost and all losses of inventories shall be recognised as an expense in the statement of financial performance. The amount of reversal of any write-down of inventory, arising from an increase in net realisable value or replacement cost, shall be recognised as a reduction in the amount of inventory recognised as an expense.

#	FMBPR	FSOP	FSOP Type	Responsible Official	Date of Execution of FSOP
1	According to **GRAP 12.43** (previously **GAMAP 12.38)** when inventories are sold or put into use, the carrying amount of those inventories shall be recognised as an expense in the period in which the related revenue is recognised. The amount of any write-down of inventories to net realisable value and all losses of inventories shall be recognised as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories, arising from an increase in net realisable value, shall be recognised as a reduction in the amount of inventories recognised as an expense in the period in which the reversal occurs.	The following procedures should be followed on the issue of inventories: • Stock should only be issued on the receipt of a properly authorised requisition form. • The stock cards and computerised stock system should be updated with the issue of inventory and sequentially numbered Issue Vouchers that are produced from the stock system. • The receiver of the stock should sign the Issue Voucher on receipt of the stock confirming that he received the required number of stock items. • A copy of the Issue voucher and requisition should be filed for audit purposes. • The Inventory control account is updated with the stores issue through an interface between the stock system and the control account. The accounting entry for the issue of stores would be to debit the relevant expense account and to credit the Inventory on hand control account.	**AP**	**Manager Expenses**	Monthly
2	Write-down procedures	The following procedures should be followed on write-down of obsolete or damaged stock to net realisable value or the recording of stock losses: • All write-down of obsolete or damaged stock to fair value should be authorised by the HOD. • The write-down of inventories shall be recognised as an expense in the same accounting period as the write-down or loss occurs.	**AP**	**Manager Expenses**	Monthly

#	FMBPR	FSOP	FSOP Type	Responsible Official	Date of Execution of FSOP
		• Details of the write-down of inventories as well as the reasons for the write-down should be filed for audit purposes.			
3	Internal consumption of inventory	When inventories are sold or issued for internal consumption, the carrying amount of those inventories should be recognised as an expense in the period in which the related revenue is recognised. The amount of any write-down of inventories to net realisable value and all losses of inventories should be recognised as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories, arising from an increase in net realisable value, should be recognised as a reduction in the amount of inventories recognised as an expense in the period in which the reversal occurs. See **Annexure 6 –** Recognising inventories as an expense	**AP**	**Manager Expenses**	Monthly
4	Inventory used to construct an asset	If inventories are used to construct an asset, these inventories should be capitalised to the cost of the asset and not expensed. See **Annexure 7 –** Capitalisation of inventories	**AP**	**Manager Expenses**	Monthly

2.4.6. ANNUAL FINANCIAL STATEMENT DISCLOSURE REQUIREMENTS

Ensure that the following information is disclosed in the AFS, as required by GRAP 12.46 (previously **GAMAP 12.41)**:

(a) the accounting policies adopted in measuring inventories, including the cost formula used;
(b) the total carrying amount of inventories and the carrying amount in classifications appropriate to the municipality;
(c) the amount of inventories recognised as an expense during the period;
(d) the amount of any reversal of any write-down which is recognised as revenue in the period in accordance with paragraph 38;
(e) the circumstances or events that led to the reversal of a write-down of inventories in accordance with paragraph 38; and
(f) the carrying amount of inventories pledged as security for liabilities.

2.4.7 EXEMPTIONS RELATED TO THE IMPLEMENTATION OF GAMAP 12

Refer to section 2.4.1 Overview of the accounting for inventory, for a discussion on the exemptions related to the implementation of GAMAP 12.

For **municipalities making use of the exemptions** granted for GAMAP 12, the interim requirements applicable during the exemption period are as follows:

- Items of **immovable capital assets that meet the 'inventory' definition**:
  - must be accounted for in accordance with GAMAP 12 if they were previously accounted for as inventory.
  - may be accounted for in accordance with either GAMAP 12 or GAMAP 17 if they were not previously accounted for as inventory.
- If accounted for in accordance with GAMAP 17, narrative disclosure must be included in the 'PPE' note stating that PPE may include inventory.

- Any water purification costs incurred for **non-purchased water** must be capitalised as part of inventory. Pre-purified non-purchased water should not be capitalised as part of inventory.
- Narrative disclosure must be included in the 'Inventory' note stating that the municipality has capitalised all purchased water inventory, but that only purification costs were capitalised in respect of non-purchased water inventory.

- Certain **disclosures**, set out in the communication from National Treasury, titled 'Application of accounting standards (updated August 2007)', must be made as part of the 'Investment property' accounting policy in respect of each of the 'Investment property' exemptions.

From 1 July 2008 (reporting date 30 June 2009) **GRAP 12, on Inventories,** becomes effective for High capacity and Medium capacity municipalities, while for Low capacity municipalities it becomes effective from 1 July 2009 (reporting date 30 June 2010).

The **transitional provisions** of GRAP 12 states that all changes resulting from the application of the Standard of GRAP on Inventories shall be accounted for in accordance with the requirements of the Standard of GRAP on Accounting Policies, Changes in Accounting Estimates and Errors (therefore **retrospectively**).

- **Low and medium capacity** municipalities are however allowed **three years** from the date of initial adoption of GRAP 12 to comply with the measurement requirements of the Standard.
- Certain **disclosures**, as set out in Directives 3 and 4 of the ASB, are required if transitional provisions of GRAP 12 are applied.

ANNEXURE 1: Example of a stock sheet

<Name of municipality>							
STOCK LIST TEMPLATE - 30 JUNE 20XX							
						Page number:	
Location:							
						Signed:	(HOD)
Description of stock items	**Supplier Name**	**Purchase Date**	**Quantity**	**Purchase price/ replacement value**	**Total value**	**Redundant Yes/No**	**Reason**

ANNEXURE 2: Example of a stock count sheet

<Name of municipality>											
STOCK COUNT TEMPLATE – 30 JUNE 20XX											
Location:						**Page number:**					
		Team no ……	**Team no ……**			**Signed Team no ……..**					
Condition of Stores						**Signed Team no ……..**					
Stock items Number	**Description of stock items**	**Quantity First count**	**Quantity Second count**	**Purchase price/ replacement value**	**Total value**	**Redundant / Obsolete / Damage**		**Reason**	**Differences**		**Remarks**
						Yes/No	**Total**		**Surplus**	**Shortages**	

ANNEXURE 3: Defining inventory

Examples of inventory

The majority of inventories held by the Municipality would be in the form of materials or supplies to be **consumed in the production process** or in the rendering of services. Typically such inventories will include electricity and water meters, piping, electrical cabling, motor vehicle spares, building materials and fuel, amongst others.

There are some municipalities that **manufacture goods** either for internal use or for sale externally. Examples are the manufacture of asphalt and manhole covers as well as the purification of non-purchased water. This FSOPM will assist such municipalities to determine costs of such inventories, including that which is still in the course of production.

Municipalities may also **purchase goods for resale**. Common examples are the purchase of water for resale as well as refuse bags or bins.

Lastly, there are municipalities that undertake **land developments for resale**

ANNEXURE 4: Determining cost of inventories

Example: Determining cost of inventories purchased

Municipality A acquired inventories of refuse bags for resale on 1 January 2008. The normal list price of the refuse bags is R120 000 (Vat inclusive @ 14%) but the vendor is willing to grant a trade discount of 5% to the entity. Municipality A is not registered for VAT purposes. The entity accepts the order at the discount price and incurs transport costs of R3 420 (VAT inclusive at 14%) to have the inventories delivered to its warehouse.

If the inventories are purchased on credit, the delivery costs are not paid immediately. The journal entry relating to the above will be as follows:

Date	Transaction	Debit R	Credit R
1Jan 2008	Inventories [(120 000 x 0.95)]	114 000	
1Jan 2008	Inventories	3 420	
1Jan 2008	Creditor (inventories)		114 000
1Jan 2008	Creditor (delivery)		3 420
	Being recording of purchases		

The inventories are therefore recorded at an amount of R117 420 which can be proved as follows:

Transaction	R
Normal price of goods	120 000
Less 5% discount	(6 000)
Purchase price including VAT	114 000
Add delivery cost	3 420
EQUALS: COST OF INVENTORIES	**117 420**

If Municipality A was registered for VAT purposes, the journal entry relating to the above would be as follows:

Date	Transaction	Debit R	Credit R
1Jan 2008	VAT [(120 000 x 0.95 + 3420) x 14/114]	14 420	
1Jan 2008	Inventories (120 000 x 0.95 x 100/114)	100 000	
1Jan 2008	Inventories (3 420 x 100/114)	3 000	
1Jan 2008	Creditor (inventories)		114 000
1Jan 2008	Creditor (delivery)		3 420
	Being recording of purchases		

The inventories are therefore recorded at an amount of R103 000 which can be proved as follows:

Transaction	R
Normal price of goods	120 000
Less 5% discount	(6 000)
Purchase price including VAT	114 000
Add delivery cost	3 420
EQUALS: COST OF INVENTORIES (including VAT)	**117 420**
Less VAT	(14 420)
EQUALS: COST OF INVENTORIES (excluding VAT)	**103 000**

COSTS OF LAND DEVELOPMENT

According to GAMAP 12.15 the classification between land included under inventories, land included under property, plant and equipment and investment properties requires careful consideration. Where an **entity owns undeveloped land which in future will be used for service delivery**, usually this will be **classified as property, plant and equipment.** Where there is an **intention to develop such land and** to **sell or transfer** or contract it to **a third party** it should be **classified as inventories** rather than property, plant and equipment.

Where an **entity develops land** in anticipation of encouraging or facilitating economic or housing development, and it is **probable** that such developed land will **not be sold** or transferred to a third party **within the short term**, then **the land and subsequent costs of development** should be classified in terms of the Statement of Generally Accepted Municipal Accounting Practice on ***Property, Plant and Equipment*** **until** construction or development is **complete** where **after it** should be classified as **an investment property** (see the International Public Sector Accounting Standard on *Investment Property* for guidance). (GAMAP 12.16)

Municipalities may develop land to generate future rental income. Such developments should also be included under investment properties.

If a municipality has the **intention to develop land and sell or transfer it to a third party**, and it is probable that this event will occur within the short term (one year), the cost of development should be classified as inventories rather than fixed assets. The following costs should be included in the costs of development of the land, recorded as inventories:

- The purchase price of the land acquired for such development.
- Surveying and conveying cost
- The cost of providing infrastructure provided that the risks and rewards of ownership, relating to the infrastructure, will be transferred to the purchaser of the developed land. Where the municipality retains ownership, such infrastructure development will be included as an infrastructural asset in the municipality's assets.
- Development overheads incurred in facilitating such developments.

The following **costs are excluded from the cost of development of the land**, and are therefore not recorded as inventories, but should be expensed or capitalised:

- **Infrastructure costs that relate to extending the capacity of existing infrastructure, where the municipality maintains ownership of the existing and extended infrastructure.** An example is the extension of a road network to link up to roads constructed on the land being developed. The roads constructed

on the land being developed cannot be included in the cost of inventories as they will not be included in the asset that is to be transferred to the purchaser. These roads will remain the property of the municipality. The extension of the existing road network to link up to the roads built on the developed land is also not added to the inventories cost as the municipality will maintain ownership of this extended infrastructure, once the developed land is sold.

- **Development overhead costs which are not separately identifiable, which occur on an infrequent basis and are normally treated as an operational expense.** An example will be the costs of a department that is entrusted with planning and monitoring developments. It would therefore be incorrect to apportion general administrative costs to such developments.
- **Interest costs**, as in terms of the overall GRAP framework, interest costs must be treated as an expense and may not be capitalised or taken into account in determining the value of inventories.

Example: Determining the cost of inventories: Land developments

Municipality A, decided on 1 July 2006, to develop a section of land it owns and sell it to a property developer ABC Limited on 30 August 2007. The following information relates to the financial year ended 30 June 2007:

- The land has a book value of R100 000 on 1 July 2006 and has never been revalued, hence the book value recorded as a fixed asset on 1 July 2006 is the historic book value.
- Municipality A has incurred the following development costs during the financial year ending 30 June 2007.

Costs	R
Building roads on the land – ownership transferred	500 000
Extending the current road network adjacent to the land in order to link up to the roads built on the land as per the above	150 000
Cost of extension of the existing water purification plant to accommodate potential new home owners on developed land	200 000

The cost of inventories at 30 June 2007 can be calculated as follows:

Cost Component	**R**
Land – transferred from fixed assets to inventories	100 000
Roads on land	500 000
Extension of current road network (Note1)	-
Extension of water purification plant (Note1)	-
Total cost of inventories: developed land	**R600 000**

Note 1: The extension of the current road network and the water purification plant are additions to existing assets, owned by the municipality, and ownership of these additions resides with the municipality. These extensions do not form part of the asset to be sold and should therefore be added to the fixed assets of Municipality A.

DETERMINING THE COST PRICE OF EFFLUENT INVENTORIES PURIFIED FOR RESALE

Municipalities may produce purified effluent for resale. If the municipality has a material amount of purified effluent available for resale at statement of financial position date the effluent should be recorded at the lower of cost or net realisable value at statement of financial position date. **The cost of effluent should include the following:**

- Costs directly related to the units of production such as direct materials and direct labour. This could include expense items such as wage costs of plant workers and chemicals used in the production process
- A systematic allocation of fixed production overheads, which are indirect costs of production that remain relatively constant, regardless of the level of production, such as depreciation of manufacturing equipment and the production facility (water purification plant).
- A systematic allocation of variable production overheads, which are indirect costs of production that vary in accordance with variances in the volume of production. Examples are indirect labour such as the salary of a factory foreman, and also indirect materials.

The allocation of fixed production overheads to inventories is based on the normal capacity of the production facilities. Normal capacity is the production expected to be achieved on average over a number of periods or seasons under normal operating circumstances, taking into account the loss of capacity resulting from planned maintenance. The actual level of production may be used if it approximates normal capacity. Unallocated overheads are recognised as an expense in the period in which they are incurred. During a period of abnormally high production, the amount of fixed production overheads allocated to inventories is decreased to avoid inventories being measured above cost.

Variable production overheads can be allocated to inventories with reasonable ease, as the costs are normally directly related to production volumes. The number of units manufactured serves as the basis for allocating costs.

Example: Determining costs of production of purified effluent
Municipality A purifies effluent for resale during the year ending 30 June 2007. The following actual information relates to the production facility for the financial year:

Cost Component	R
Direct materials	50 000
Direct labour – wages paid to employees who work exclusively on production of effluent	30 000
Production overheads	
▪ Variable	5 000
▪ Fixed	15 000
Total production cost (actual)	100 000
Normal production	500 000 litres
Actual production	450 000 litres

The resulting journal entries based on the above information would be:

Transaction	Debit R	Credit R
Inventories	98 500	
Cost of inventories expense (Note1)	1 500	
Direct materials control account		50 000
Direct labour control account		30 000
Variable production overheads control account		5 000
Fixed production overheads control account (Note 2)		15 000
Being allocation of variable and fixed costs of production		

Note 1: The allocation of fixed production overheads to inventories should be based on the normal capacity (500 000 litres) of the production facilities and not on the actual production (450 000 litres). Only R13 500 [(R15 000/500 000 litres) x 450 000 litres] of the fixed production overheads are allocated to inventories. The unallocated overhead of R1 500 (R15 000 – R13 500) is recognised as an expense.

Note 2: If 550 000 litres were produced during the year the municipality should allocate a maximum of the actual fixed production overheads to inventories, being R15 000. [(R15 000/500 000 litres) x 550 000 litres = R16500, but limited to actual cost of R15 000].

The cost of effluent should be expensed to the statement of financial performance as effluent is sold or allowed to run back into a natural water source as the level of effluent exceeds the reservoir capacity.

ANNEXURE 5: Valuation of inventories

Example: Illustration of cost formulas

The following receipts and issues were recorded during the year ended 30 June 2007:

Date	Transaction	Units	Purchases R	Issues R
January 2	Purchase100 units @ R1 each	100	100,00	
January 5	Purchase150 units @ R1,20 each	150	180,00	
Feb. 7	Issue175 units @ R2 each	(175)		350,00
March 10	Purchase120 units @ R1,50 each	120	180,00	
April 12	Issue 45 units @ R2,20 each	(45)		99,00
May 20	Issue 130 units @ R2,40 each	(130)		312,00
May 29	Purchase 40 units @ R1,60 each	40	64,00	
June 30	Issue 45 units @ R2,50 each	(45)		112,50
June 30	On hand	15	524,00	873.50

The closing inventories and cost of sales will be valued as follows:

FIFO

The 15 units closing inventories relates to the last 40 units purchased, because according to the FIFO method, what was purchased first has also been issued first.

Cost Component	R	Comment
15 units @ R1, 60 each	24	Closing stock
Less total purchases	(524)	As above
Equals:	500	Cost of sales

Weighted average

Cost Component	Basis of calculation	Stock Values
Cost of purchases	R524	
Units purchased	410 units	
Cost per unit	524/410=R1,28 per unit	
Closing inventories	15 units x R1,28 per unit	R19,20
Cost of sales	R524 – R19,20	R504,80

Example: Determination of Net Realisable Value (NRV)

Finished goods	Cost	Net Realisable Value
Item 1	3 000	3 500
Item 2	4 000	4 300
Item 3	5 200	4 700
Total	**12 200**	**12 500**

If the write down – test is applied to the total group of inventories, the finished goods will be carried at R12 200 as this cost is less than the net realisable value.
This method is however not allowed by GRAP as it allows for setting off losses on some items against yet-to-be realised gains on others. The correct application would result in inventories of finished goods being recorded at the total of the lowest of cost or net realisable value determined on an item by item basis as follows:

Finished Goods	NRV	Calculation
Item 1	R3 000	(R3 000 is less than R3 500)
Item 2	R4 000	(R4 000 is less than R4 300)
Item 3	R4 700	(R4 700 is less than R5 200)
TOTAL	**R11 700**	

This results in inventories of finished goods being recorded as R11 700 at statement of financial position date with a write down of R500, recorded as an expense in the statement of financial performance, for the year (R12 200 – 11 700 or R5 200 – 4 700).

	Debit	Credit
Write down of inventory to NRV (Expense)	500	
Inventory		500

ANNEXURE 6: Recognising inventories as an expense

If the land developed during the financial year ended 30 June 2006 at a cost of R600 000, is sold during the financial year ended 30 June 2007 for R900 000, the cost of this inventories will be recognised as an **expense: cost of sales - R600 000**, and matched against the **Revenue obtained from the sale of R900 000** in the financial year ended 30 June 2007.

Some inventories may be allocated to other asset accounts, for example, inventories used as a component of self-constructed property, plant or equipment. Inventories allocated to another asset in this way are recognised as an expense during the useful life of that asset.

ANNEXURE 7: Capitalisation of inventories

If Municipality A constructs an item of equipment during a financial year and uses inventories amounting to R50 000 in the construction, then this amount is not expensed during the financial year but capitalised to the cost of the equipment and then depreciated over the estimated useful life of the equipment.

The journal entries will be as follows:

Transaction	**Debit R**	**Credit R**
Equipment [capitalised costs of producing equipment excluding inventories used. Assumed to be R500 000]	500 000	
Bank/creditor		500 000
Equipment	50 000	
Inventories		50 000
Being inventories used in production of equipment		
Depreciation: equipment	110 000	
Accumulated depreciation: equipment		110 000
Being depreciation on equipment provided over useful life of 5 years. (R550 000 / 5 = R110 000 per year)		

ANNEXURE 8: Practical example of the determination of the value of inventories

The following transactions relating to inventories of milk for resale at clinics take place during the year ended 30 June 2007 for the Municipality.

Transactions during the month of June 2007:

Inventory on hand at the start of the month: 20 units - 14 @ R 1.80 each
- 06 @ R 2.00 each

5 June	Purchased 60 units @ R 3 each
10 June	Purchased 35 units @ R 4 each
11 June	Sold 30 units
15 June	Purchased 40 units @ R 5 each
19 June	Sold 50 units
22 June	Purchased 100 units @ R 4 each
30 June	Sold 60 units

Units are normally sold at a price of R 6 each, but because of a water leak in the storeroom where the units are stored, the remaining tins have started to discolour and the labels have fallen off. The Sister in charge of the Clinic states that the contents of the tins are still fit for human consumption, but estimates that the remaining tins can be sold for R 3 per tin. On 30 July 2007 the tins on hand at 30 June 2007 are all donated to a Children's Home. The Municipality uses the FIFO method to value these inventories.

Required

Determine the value of the inventories above for inclusion in the AFS for the year ended 30 June 2007 and discuss the accounting treatment of the above transaction in terms of GRAP12/GAMAP 12 and IPSAS 14: Events after the reporting date.

Solution:

According to GRAP/GAMAP 12 inventories should be shown at the lower of cost or net realisable value, calculated, in this case, according to the FIFO method. Therefore in terms of the FIFO method the closing units (115 units) should be valued at the latest purchase price as the units that are bought first are sold first. However, as a result of the damage to the tins the net realisable value as estimated at 30 June of R 3 per tin is less than the purchase prices of the last tins purchased, namely R 4 and R 5 per unit respectively and therefore at 30 June 2007 the tins will be valued for stock take purposes at 115 tins @ R 3 per tin = R 345. This will result in a write down to NRV being recorded in the statement of financial performance of R 130 (cost price of R 475 less NRV of R 345)

The donation of the tins to the Children's Home on 30 July 2007 is an adjusting event after the reporting date in terms of IPSAS 14 as it proves that the NRV estimated in the above paragraph at R 345 is not recovered by the municipality as the municipality has decided to donate the inventories to the Home for no compensation. The AFS at 30 June will therefore have to be adjusted and the inventories above will have to be reflected at R 0, with an expense item in the statement of financial performance called write down of inventories to NRV being recorded equal to the cost price of the 115 units calculated

according to the FIFO method, namely R 475 as opposed to the initial estimate of R 130 as discussed in the paragraph above.

ANNEXURE 9: Memo – write down of inventories to net realisable value

<Name of municipality>
INTERNAL MEMO

TO:	**ALL DEPARTMENTS**
FROM:	**FINANCE DEPARTMENT**
DATE:	**30 JUNE 20XX**

WRITE-DOWN OF INVENTORIES TO NET REALISABLE VALUE

According to the accounting standards (GRAP 12.17 / GAMAP 12.07) inventory should be measured at the lower of cost price and net realisable value. We therefore need to identify inventories that should be written down to their net realisable value.

The **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.

During the physical stock take procedure please identify inventory items with a cost price higher than their NRV and indicate these items on the Municipality's stock sheets.

The following are examples of inventories that may qualify in terms of the above:

- Inventories that have been damaged
- inventories that have become wholly or partially obsolete,
- their selling prices have declined, or
- their estimated costs of completion or estimated costs to be incurred to make the sale have increased.

We also need to determine the net realisable value of these stock items and would appreciate it if you could assist us in this regard.

Do not hesitate to contact me, should you require any information in this regard.

Pease forward this information to my office no later than.....

Your co-operation is appreciated

_____
CHIEF FINANCIAL OFFICER

ANNEXURE 10: Practical example of the accounting entries for trade and settlement discounts

A municipality purchased inventory to the amount of R 100,000 and received a trade discount of 10%.

In the past, the municipality would have processed the following accounting entries:

INVENTORY			
Trade creditor	90,000		
TOTAL	**90,000**		

TRADE CREDITOR – ABC			
		Inventory	90,000
		TOTAL	**90,000**

Example of the accounting entries for settlement discounts
A municipality purchased inventory to the amount of R 100,000 and received a trade discount of 10%. The department also received a settlement discount of 10% for early payment of its account.

In the past, the municipality would have processed the following accounting entries:

INVENTORY			
Trade creditor – ABC	90,000	Closing stock	90,000
TOTAL	**90,000**	**Total**	**90,000**

TRADE CREDITOR – ABC			
Bank Trade discounts received	81,000 9,000	Stock	90,000
Total	**90,000**	**TOTAL**	**90,000**

BANK			
		Trade creditor – ABC	81,000
		TOTAL	**90,000**

TRADE DISCOUNTS RECEIVED			
		Trade creditor – ABC	9,000
		TOTAL	**90,000**

The correct accounting treatment of settlement discounts according to SAICA circular 9/2006:

INVENTORY			
Trade creditor ABC	90,000	Trade creditor ABC - Settlement discount Closing stock	9,000 81,000
TOTAL	**90,000**		**90,000**

TRADE CREDITOR – ABC			
Bank Settlement discount received	81,000 9,000	Inventory	90,000
TOTAL	**90,000**	**TOTAL**	**90,000**

BANK			
		Trade creditors	81,000
		TOTAL	**81,000**

Explanatory notes
The accounting treatment of settlement discounts in the past resulted in an over-statement of income in the statement of financial performance as well as an overstatement of assets in the statement of financial position.

ANNEXURE 11: Memo – stock taking report to the accounting officer

INTERNAL MEMO	
TO:	**Accounting Officer**
FROM:	**……**
DATE:	**30 June 20XX**

REPORT ON THE STOCKTAKING AT …….. ON……

1. Introduction

- The stocking taking of the store in……. has taken place on ……..
- The following people were involved in the stocktaking process.
  1.
  2.
  3.
  4.
  5.
  6.

- The teams were well organised and it took them ……. hours / days to complete the stock-taking process

2. General

- The store in …….. is situated in…….. street
- The store is suitable / not suitable (reason) to serve for the purpose it is needed for.
- The general condition of the store ……
- The placement of the stock ……..and did help us /did not help us in the stocktaking process.
- The following can be done to improve the
  - stores
  - placement of stock
  - stock taking process

3. Surpluses and shortages on inventory

- Attached please find a list (Appendix 1) of surpluses and shortages found on the different stock items. The differences were cost at R……..

- The discrepancies were recounted in the presence of the store manager and accepted by him.
- He did investigate the differences and his comments are included in appendix 1 next to each stock item.
- As can be seen in Appendix 1 the total surplus is R ……..and total shortages are R ……

4. Redundant / Obsolete / Damage stock

- Attached please find a list (Appendix 2) of redundant / obsolete / damage stock.
- Reasons are given next to each stock item. The stock was cost at R……
- The total cost of redundant / obsolete stock is R …… and the total of damaged stock is R……..
- Where it was found that damage stock was due to negligence, the necessary action will be implemented. The report of the Board of Inquiry will follow soon.

5. Slow moving stock

Attached please find a list (Appendix 3) of slow moving stock. The reasons for the slow moving of the items are explained and if it was found that it is not necessary to keep the item in stock the item has been included under Appendix 2

6. Summary

ANNEXURE 11: Periodic versus perpetual inventory systems

The **perpetual system** refers to a system where both inventory and cost of sales is updated for each purchase and sale transaction. The balancing figure represents the value of inventory on hand at the end of the reporting period. This balance is verified through the annual stock count performed by the entity.

Inventory at the beginning of the year **+** purchases for the year **–** cost of sales **=** Inventory at the end of the year

As can be seen from the above equation, the inventory on hand can be calculated without the use of a stock count. The calculated balance will however not reflect any actual thefts and/or losses. Therefore, it is important to perform a stock count (as an additional control measure) to verify the balance in the financial system.

The adjusted formula is as follows:

Inventory at the beginning of the year **+** purchases for the year **–** cost of sales **–** thefts and losses identified in the stock take **=** Inventory at the end of the year

Example: calculating the closing balance for inventory using the perpetual system

The balance of inventory on hand a the beginning of the year is R55,000[1]. During the year the municipality purchased inventory worth R100,000[2]. A stock count at year-end reflected 18,000 units on hand (cost of R5 per unit). Assuming that 13,000 units were sold during the year at R10 per unit.

Cost of inventory sold R65,000 (13,000 x 5)[3]

Value of sales R130,000 (13,000 x 10)[4]

Calculate the closing balance of inventory at year-end.

INVENTORY			
Opening balance[1]	55,000	Cost of sales[3]	65,000
Accounts payable (purchases) [2]	100,000	Closing balance	90,000
TOTAL	**155,000**		**155,000**

ACCOUNTS PAYABLE			
Bank	90,000	Inventory purchases[2]	100,000
Closing balance	10,000		
	100,000		**100,000**

ACCOUNTS RECEIVABLE			
Sales of inventory[4]	130,000	Bank Closing balance	125,000 5,000
	130,000		**130,000**

SALES			
		Accounts receivable[4]	130,000

COST OF SALES			
Inventory[3]	65,000		

The **periodic system** simply accumulates the total cost of purchases of inventory in one account (the purchases account), and updates the inventory account on a periodic basis (often once a year) through the use of a physical stock count. The balancing figure is the cost of sales for the year.

Inventory at the beginning of the year **+** purchases for the year **–** Inventory at the end of the year **=** Cost of sales

Periodic inventory systems record inventory purchase or sale in a "purchases" account. This account is updated continuously; however the "inventory" account is only updated at the end of the year after the stock take.

The value of inventory at hand at the end of the financial year will include any thefts and losses due to the fact that this value was obtained through the annual stock take.

Example: periodic system using the same information above.

The balance of inventory on hand a the beginning of the year is R55,000[1]. During the year the municipality purchased inventory worth R100,000[2]. A stock count at year-end reflected 18,000 units on hand (cost of R5 per unit) [5]. Assuming that 13,000 units were sold during the year at R10 per unit.

Cost of inventory sold R65,000 (13,000 x 5)[3]

Value of sales R130,000 (13,000 x 10)[4]

Calculate the closing balance of inventory at year-end.

PURCHASES			
Bank (purchases) [2]	100,000	Inventory [5] Cost of sales (100,000 – 45,000)	45,000 65,000
TOTAL	**100,000**		**100,000**

ACCOUNTS PAYABLE			
Bank Closing balance	90,000 10,000	Inventory purchases[2]	100,000
	100,000		**100,000**

ACCOUNTS RECEIVABLE			
Sales of inventory *(13,000 x 10)*	130,000	Bank Closing balance	125,000 5,000
	130,000		**130,000**

INVENTORY			
Opening balance [1] Purchases[5]	55,000 45,000	Closing balance (stock take: 18,000 x 5) [5]	90,000
TOTAL	**90,000**		**90,000**

SALES			
		Accounts receivable *(13,000 x 10)*	130,000

Note that the cost of sales figures are the same (using the periodic or the perpetual system), it is the method of calculation that is different.

Key differences between the periodic and perpetual system

Periodic Inventory System	Perpetual Inventory System
Inventory account and cost of goods sold are non-existent until the physical count at the end of the year.	Account and the balance of costs of goods sold and inventory account exist all the time.
Purchases account is used to record purchases.	No individual purchases account but the purchases are recorded in the Inventory Account.
Purchase Return account is used to record Purchases Returns account.	No individual Purchase Returns account but the purchases return are recorded in the Inventory Account.
Cost of goods sold or cost of sale is computed from the ending inventory figure	Record cost of goods sold/cost of sale - inventory is reduced when there is a sale.
For goods returned by customers there are no inventory entries.	Returns from customers are recorded by reducing the cost of goods sold and adding back into inventory.

Self Assessments

1. Inventory should be stated at

(a) Lower of cost and fair value

(b) Lower of cost and net realisable value

(c) Lower of cost and nominal value

(d) Lower of cost and net replacement cost

(e) Both (b) and (d)

(f) Both (a), (b) and (d)

2. Which of the following costs of conversion **cannot** be included in the cost of inventory

(a) Factory rental expense

(b) Costs of direct labour

(c) Salary of invoicing clerk

(d) Factory overheads based on normal capacity

3. The cost of inventory should **not** include

(a) Purchase price

(b) Import duties and other taxes

(c) Storage costs

(d) Administrative overheads

(e) Fixed and variable production overheads

(f) Selling costs

(g) Both (c), (d) and (f)

4. Municipality A agreed to purchase certain inventory items from Entity B. Entity B shipped the goods F.O.B destination. At 30 June 20x7 Municipality A is aware that the goods have been shipped and would be received any day

(a) Municipality A should include the goods in its inventory calculated on 30 June 20x7

(b) Municipality A should include the goods in its inventory calculated on 30 June 20x7, but should not record the obligation to pay for them

(c) Municipality A should not include the goods in its inventory calculated on 30 June 20x7, but should include the related payable in its statement of financial position at 30 June 20x7

(d) Municipality A should not include the goods in its inventory calculated on 30 June 20x7, and should not include the related payable in its statement of financial position at 30 June 20x7

5. Given the information below, if a municipality used the FIFO method what would the value of inventory on hand at 30 June 200x7 be:

   Opening balance – July 20x6 *500 units at R3.00*
   Purchases – September 20x6 *1,100 units at R3.20*
   Purchases – November 20x6 *400 units at R4.00*
   Purchases – February 20x7 *1,600 units at R4.4*

   2,700 units were sold during the year at R5.00

(a) R2,780

(b) R3,960

(c) R9,700

(d) R10,880

6. Using the same information in question (5) above, if a municipality used the weighted average method what would the value of inventory on hand at 30 June 200x7 be:

(a) R3,415

(b) R3,255

(c) R10,245

(d) R13,500

7. Municipality C failed to record the purchase of inventory on account (the inventory and related accounts payable should be have been recorded but were not). What is the effect of the error on assets, liabilities, accumulated surplus/deficit and the surplus/deficit for the year respectively?

(a) Understated, understated, no effect, no effect

(b) Understated, understated, understated, understated

(c) Understated, overstated, overstated, understated

(d) Overstated, overstated, understated, overstated

8. Identify which of the following is true for a periodic inventory system

(a) The physical inventory count is necessary to determine the true cost of goods sold for the period

(b) This system is used less and less

(c) When a sale of inventory is recorded, inventory records are also updated and kept current during the accounting period.

(d) Both (a) and (c)