

ACCOUNTING GUIDELINE

GRAP

Non-current Assets



national treasury

Department:
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Note that this document is not part of the GRAP standard. The GRAP takes precedence while this guideline is used mainly to provide further explanations on the concepts already in the GRAP

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Introduction





This document provides guidance on when and how an entity accounts for its non-current assets. It combines the principles and requirements in the following Standards of GRAP into a single comprehensive guide:

- GRAP 16 on *Investment Property*;
- GRAP 17 on *Property, Plant and Equipment*;
- GRAP 21 on *Impairment of Non-Cash Generating Assets*;
- GRAP 26 on *Impairment of Cash-Generating Assets*;
- GRAP 27 on *Agriculture*;
- GRAP 31 on *Intangible Assets*; and
- GRAP 103 on *Heritage Assets*;

Chapter 1 and 2 of this guide can be applied to all non-current assets (hereafter referred to as “assets”) whilst subsequent chapters provide specific guidance on each of the above standards. For the purpose of this guide, “entities refer to the following bodies to which the standards of GRAP relate, unless specifically stated otherwise:

- Public entities
- Constitutional Institutions
- Municipalities and all other entities under their control
- Trading entities and government components applying the standards of GRAP
- Parliament and the provincial legislatures
- TVET and CET colleges

Explanation of images used in manual:

	<p>Definition</p>		<p>Management process and decision making</p>
	<p>Take note</p>		<p>Example</p>

Chapter 1: General Concepts and Principles

This Chapter discusses the core accounting requirements established in the standards relevant to all categories of assets. These principles assist entities in thinking through the following:

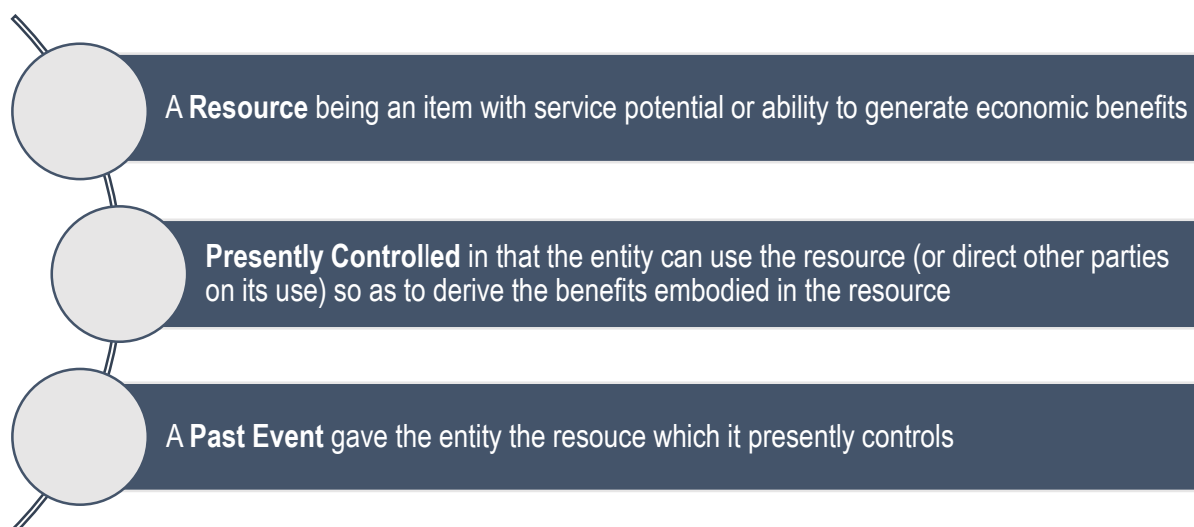


The sections that follow discuss the above in more detail with accompanied examples to illustrate the concepts.

1. The Concept of Control

The Conceptual Framework for General Purpose Financial Reporting (hereafter “Conceptual Framework”) defines an asset as **“a resource presently controlled by the entity as a result of past events”**.

There are accordingly three aspects to the definition of an asset:



In assessing control in particular, the Conceptual Framework provides the following indicators of control for consideration by an entity:

- Legal ownership;
- Access to the resource, or the ability to deny or restrict access to the resource;
- The means to ensure that the resource is used to achieve its objectives; and
- The existence of an enforceable right to service potential or the ability to generate economic benefits arising from a resource.

To have control an entity does not necessarily have to hold legal title. Similarly, because an entity uses an asset for its own purposes and even maintains the asset, it does not mean that it has control from an accounting perspective.



Some municipalities benefit from and maintain roads or land on behalf of a provincial department. While they benefit from their use and spend money maintaining them, ultimately they may not necessarily control them if the provincial department can close the road, sell the land and receive proceeds from the sale, restrict access and even allow other entity to use the same land for other purposes.

In assessing control, an entity considers any binding arrangement in relation to the asset and in particular the rights and obligations conferred upon it in such binding arrangement against the indicators listed above. Judgement is often required in order to unpack and understand the accounting consequences of specific provisions in the binding arrangement.



A **binding arrangement** is an arrangement that confers enforceable rights and obligations on the parties to the arrangement as if it were in the form of a contract. It includes rights from contracts or other legal rights and can be evidenced in several ways:

- (a) a contract concluded between parties;
- (b) legislation, supporting regulations or similar means including, but not limited to laws, regulations, policies, decisions concluded by authorities such as cabinet, executive committees, boards, municipal councils and ministerial orders); or
- (c) through the operation of law, including common law.

A binding arrangement is often, but not always, in writing, in the form of a contract or document decision between the parties.

Entities typically acquire and/or construct assets in order to deliver services linked to their mandate. These assets include office buildings, medical machinery and equipment, policing vehicles, even animals held in protected areas. An entity may however hold assets for strategic purposes or for possible future use such as vacant land or vacated buildings. These assets are not precluded from recognition if they have the ability to generate future economic benefits and/or service potential for the entity.

The most obvious means of demonstrating control of an asset is by way of legal ownership. An entity has legal ownership of land and/buildings when it is the registered title deed holder thereof. Ownership of land in particular is discussed in more detail refer to **Control of land**.

With regard to motor vehicles, the “Certificate of Registration in Respect of Motor Vehicle” serves as the title deed, specifying the registered owner of the vehicle on the National Traffic Information System (NATIS).

Other types of documentation demonstrating legal ownership include and are not limited to the following:

- ✓ warranties or guarantees;
- ✓ certificates of authenticity;
- ✓ valuation certificates;
- ✓ copyrights;
- ✓ trademarks;
- ✓ licenses or permits
- ✓ invoices (proof of payment);

Controlling access to an asset can be demonstrated through regulating physical access such as by way of fencing, security guards etc. or by other means such as regulating the price charged for the use thereof. In addition, where an entity has the right to determine how an asset is to be used by another party, when it can be sold or disposed of and to whom it can be concluded that it has the right to direct access to and to restrict or deny access of others to the asset.

1.1 Control of land

The Accounting Standards Board (ASB) issued an Interpretation in 2017 on *Recognition and Derecognition of Land* (IGRAP 18) which provides guidance on when an entity should recognise and/or derecognise land in its financial statements.

The interpretation concludes that control of land is evidenced by the following criteria;

- (a) legal ownership; **and/or**
- (b) the right to direct access to land, and to restrict or deny the access of others to land.

Where an entity is not the legal owner but has entered into a binding arrangement whereby it has received the right to direct access to land, and to restrict or deny the access of others to land, it has in substance acquired control of the land. Similarly, where an entity is the legal owner but has given the right to direct access to land, and to restrict or deny the access of others to land to another entity, it has transferred control of the land to that entity.

To demonstrate that an entity has the right to direct access to land, and to restrict or deny the access of others to land, it considers whether it can:

- (a) direct the use of the land's future economic benefits or service potential to provide services to beneficiaries;
- (b) exchange, dispose of, or transfer the land; **and/or**
- (c) use the land in any other way to generate future economic benefits or service potential.



Individuals have accessed and built residential structures on land owned by a provincial government department and have done so without the department's permission. Does this mean that the department has relinquished control of the land to these individuals?

NB: No person or organisation has any right in terms of South African law to occupy property against the permission of the owner, unless this is sanctioned by a court.

Therefore, where the land is occupied by individuals without permission, the department may approach the courts for an eviction order thereby demonstrating that it has the right to direct access to the land, and to restrict or deny the access of others to land.

Where an eviction order is granted, the department assess the terms and conditions set out therein in order to assess if it continues to control the land during and until completion of the eviction. Similarly, where an eviction order is not granted by the courts, the department assesses whether it continues to controls the land with reference to the ruling and any rights conferred thereby on the occupants.

1.1.1 Users, Custodians and Owners of Land

Prior to 1994, immovable assets (including land) owned by the state were registered under a variety of names, including the Republic of South Africa (or, in the case of land acquired prior to 1961, the Union of South Africa).

After 1994, the Constitution provided for a situation where immovable assets could be registered in the name of a provincial government or the national sphere of government based on the purpose for which the asset was being used or intended to be used.

Provision was made in the Constitution for immovable assets to be vested in the name of "the National Government of the Republic of South Africa" or "the Provincial Government of the Province of".

To this end, if the property was acquired or being used for a provincial purpose (e.g. a provincial school, hospital, etc.), it would qualify to be vested in and registered in the name of that Provincial Government. Equally, if the property was being used by and for the purposes of one or other of the national departments, the property would then be vested in and registered in the name of the National Government of the Republic of South Africa.

This vesting process is concluded after receipt of the Certificate issued in terms of section 28(1) of Schedule 6 of the Constitution and the endorsement of title deed by the Registrar of Deeds.



The Land Administration Act (Act 2 of 1995) provides for the delegation of land matters to a Premier or a Member of the Executive Council of a province or any officer in the service of the national government or a local government body. Any person to whom any power has been delegated exercises such powers in terms of the delegation granted.

Each province has established its own provincial Land Administrative Act setting out specific provisions on the acquisition, disposal and/or expropriation of provincial state land. These Acts confirm that land acquired in a province must be registered in the name of the province and must be recorded in a register of Provincial state land.

This register includes details of the department or departments responsible for the control and use of the land.

The Government Immovable Asset Management Act (Act 19 of 2007) commonly referred to as GIAMA, was promulgated on 27 November 2007. GIAMA calls for more efficient and effective use of immovable assets by government and places an obligation on accounting officers to ensure prudent management of such assets.

GIAMA distinguishes between the roles of Users and Custodians of immovable assets.



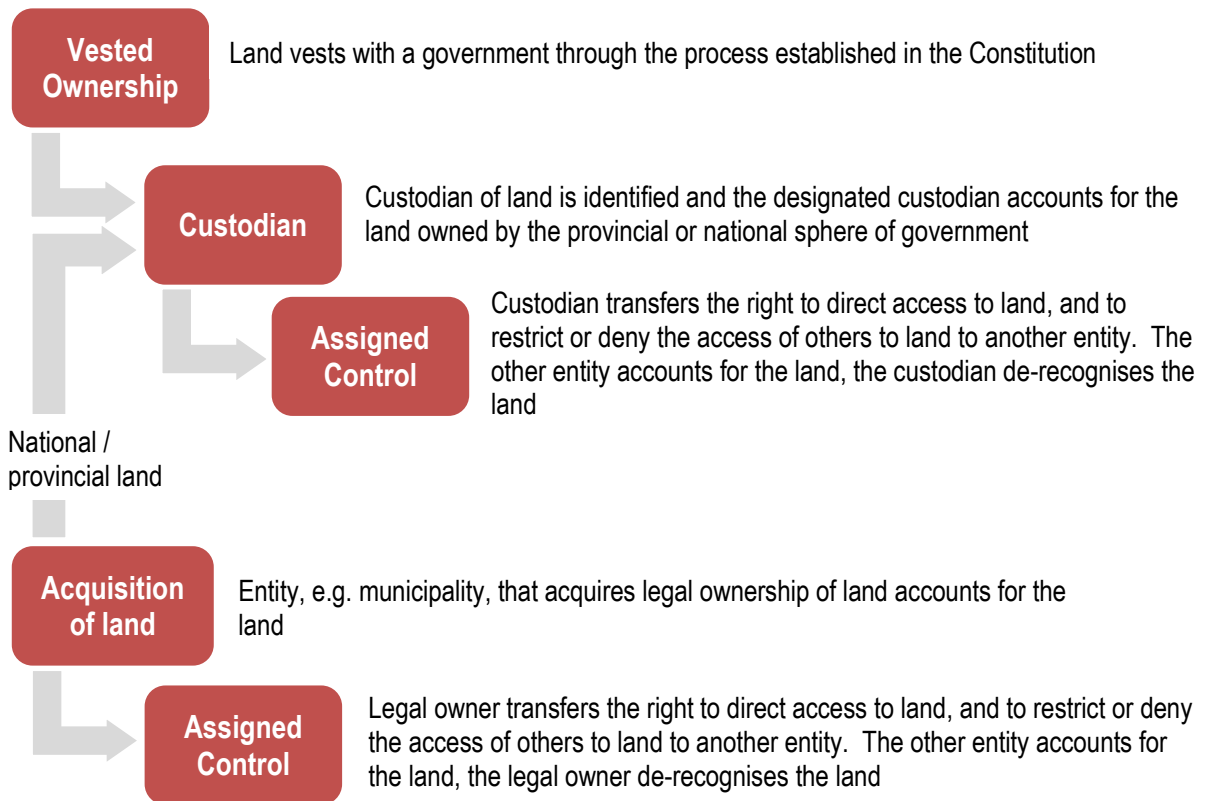
Custodian means a national or provincial department designated in terms of GIAMA that must plan, acquire, manage and dispose immovable assets. Custodians are responsible for all activities that are associated with common law ownership.

User means a national or provincial department that uses or intends to use an immovable asset in support of its service delivery objectives (and includes a custodian for an immovable asset that it uses or intends to use in support of its own service delivery objectives).

In terms of GIAMA, the Department of Public Works, Department of Rural Development and Land Reform and the Premiers in provinces or Members of the Executive Committee designated by the Premier, have custodial responsibility over all government's immovable assets.

GIAMA also provides for the transfer of custodianship to another organ of state. This however is limited to assets that vest in the national sphere of government. The provincial land administrative acts include provisions on the delegation of powers, duties or functions to an officer in the service of the provincial government (such as the Accounting Officer of a provincial department of roads and public works).

Based on the above, a custodian is not always the legal owner. IGRAP 18 concludes that the custodian has control of the land and will account for the land, provided that the entity has not transferred the right to direct access to land, and to restrict or deny the access of others to land to another party in a binding arrangement.



The above diagram attempts to illustrate the application of legislation and IGRAP 18 in a very simplistic manner. In applying the above, the entity must however consider all provisions of applicable legislation, such as delegations and exceptions as these may identify other parties as the legal owners of land as an interim or permanent measure.

Example: Legal ownership versus custodial responsibility

Custodial responsibility granted to the Department of Public Works

The Department of Public Works is, in terms of legislation or similar means, the custodian of government owned land in province X. The provincial government is the registered title deed holder of land in the province.

As the Department of Public Works is, in terms of legislation or similar means, responsible for making decisions about the disposal of land, as well as for the management of the land, the Department of Public Works, rather than the provincial government should recognise the land as its asset.

Example: Legal ownership versus custodial responsibility

Custodian grants an enforceable right to use the land to another entity

In addition to the facts set out above, the Department of Public Works enters into a binding arrangement with Entity A, in terms of which Entity A is granted a right to use the land as a testing facility for an unlimited period.

Even though the Department of Public Works, as the legislative custodian of land, has granted Entity A right to use the land for an unlimited period of time to generate service potential, the Department of Public Works cannot transfer the land or its associated rights to another entity unless that entity is also a custodian in terms of legislation. Control of the land therefore remains with the Department of Public Works.

1.1.2 Substantive and Protective Rights

An entity must have the present ability to exercise the right to direct access to land, and to restrict or deny the access of others to land in order for it to demonstrate control. This means that the right(s) must be substantive. Protective rights by their nature are merely designed to protect an entity's interests in land without giving an entity power to direct or restrict access to the benefits associated with the land.



A municipal council has the right to sell portion of land under its control, but for the sale to be effected regulatory approval from the provincial government is required. The municipality has a substantive right over the land as it can decide to whom the land can be sold, and at what price. The provincial government merely has a protective right over the land to ensure that, for example, the municipality does not dispose of the land when it could be used to achieve a specific service delivery objective. As the municipality has a substantive right over the land, the municipality controls the land and should recognise the land as an asset.

1.1.3 How to implement IGRAP 18

Step 1: Identify land owned by the entity

Here the reporting entity reviews its asset register in order to identify land that it legally controls. In the absence of a complete asset register, it is recommended that the entity makes an enquiry with the Registrar of Deeds and where applicable, the department responsible for provincial/national immovable asset register in order to identify the user and/or custodian of the land. A review of the municipal valuation roll may also provide information on the owner or potential owner based on the usage. For example, if the property is used as a public school sports field in KZN it is an indication that the land should be vested in the KZN Provincial Government.

Step 2: Identify land controlled by the entity

The reporting entity should review its contract register to identify any contracts (or Service Level Agreements) that it entered into in respect of land that it legally owns in order to assess whether it has transferred control of the land to another entity.

In addition, the register should identify any contracts where the entity as received control of land that is owned by another entity.



Lease contracts in the scope of GRAP 13 and service concession arrangements (or public, private partnerships) in the scope of GRAP 32 are accounted for in terms of these standards and not IGRAP 18.

Step 3: Recognise or de-recognise land

Based on the outcome of Step 1 and Step 2 the entity either confirms that it has correctly accounted for land it owns and/or controls or identifies land that should be recognised and/or derecognised.



IGRAP 18 is applied **prospectively** to binding arrangements relating to land that exists on initial adoption of the Interpretation (being no later than 1 April 2019, its effective date).

Any adjustments that result from the initial adoption of this Interpretation to land that exists on the date of adoption, are made against the opening balance of accumulated surplus and deficit. A deemed cost may be used if the acquisition cost of land is not available for those binding arrangements that exist on date of adoption.

Any adjustments after initial adoption of this Interpretation (other than those relating to new arrangements), should be accounted for in terms of GRAP 3 on *Accounting Policies, Changes in Accounting Estimates and Errors*.

2. Recognition of Assets

When an entity has determined that it has a resource that meets the definition of an asset (refer to **The Concept of Control**), it considers whether it can recognise the asset. The general recognition criteria embedded in the Standards of GRAP are as follows:

It is probable that future economic benefits or service potential associated with the item will flow to the entity



The cost or fair value of the item can be measured reliably

Economic benefits are cash inflows or a reduction in cash inflows. Cash inflows (or reduced cash inflows) may be derived from, for example an asset's use in the production and sale of services or the direct exchange of an asset for cash or other resources. Service potential is the capacity to provide services that contribute to achieving the entity's objectives. Service potential enables an entity to achieve its objectives without necessarily generating net cash inflows.

Assets that potentially generate economic benefits include office buildings leased out to other organs of state, sewer systems operated by municipalities, toll roads, dairy cattle, art collections etc. Assets held and used for their service potential include public hospitals and schools, police vehicles, ambulances, community parks and sports fields, office buildings etc.

An entity applies the recognition criteria to all costs in relation to an asset. These costs include costs incurred initially to acquire or construct an item and costs incurred subsequently to add to, replace part of, or service it.

For example, leasehold improvements (i.e. improvements made by the entity on leased assets), can be treated as property, plant and equipment if such costs meet the recognition criteria described above.



It is generally presumed that an asset should be recognised else there is no reason for holding the asset (if not for its service potential and/or economic benefits). Where the criteria are not met, an entity continuously reassess this position until it is able to recognise the item as an asset(s) in its financial records.

Currently only GRAP 103 on *Heritage Assets* and GRAP 110 on *Living and Non-Living Resources* allow for the disclosure of assets not recognised. These Standards are discussed in further detail in this guideline.

Examples: Future economic benefits or service potential → costs to be capitalised

- ✓ Infrastructure assets used by a Municipality to generate future economic benefits in the form revenue;
- ✓ Technical vehicles used by the Engineering Department to maintain the infrastructure assets from which the Municipality expects to generate revenue;
- ✓ Expenditure incurred on infrastructure assets which results in the enhancement or replacement of existing assets. Such as, replacement of existing purification works which will result in additional capacity being available which will result in additional revenue (future economic benefits) flowing to the Municipality;
- ✓ An entity advertises its products/ services by putting up billboards on its premises. The actual stand of the bill board will be used for more than one period. Future economic benefits associated with the billboards will therefore flow to the Municipal Entity during more than one period. The estimated costs to be incurred to remove the billboards at the end of the advertising campaign should be capitalised to the cost of the billboards as decommissioning costs;

Examples: No future economic benefits or service potential → costs to be expensed

- ✓ The cost of advertisements placed on the bill boards of the entity which change on a monthly basis;
- ✓ An entity is opening a new sales outlet in a town where it has not operated previously. In addition to obtaining a certificate to confirm that the facility meets building regulations, the entity is required to obtain general permits from the Local Municipality that allow it to conduct business in the town. The cost of these permits should not be capitalised because they are general business costs that do not relate specifically to the asset;
- ✓ Operating losses incurred when the entity runs the new facility at half capacity for a month in order to train staff;
- ✓ Incidental revenue and expenses. (It is being regarded as incidental in nature as the costs were not necessary to bring the asset to the location and condition to operate as intended by management);
- ✓ Staff training costs. The relationship between the expenditure and any future economic benefits that may be derived is not sufficiently certain;

2.1 Materiality

Materiality plays an important role in the application of an entity's accounting policies.

Although accounting policies are designed to ensure that the financial statements contain relevant and reliable information, an accounting policy need not be applied when the effect of its application is not material.

Thus in practice it is often found that entities expense items with a cost price below a capitalisation threshold on the basis of materiality as determined in accordance with their policy on assets.



Entities should keep adequate records of all the assets expensed, as these assets may become material over time especially if are used over several reporting periods.

In this regard, materiality is considered by not only taking into account the materiality of the individual item, but also considering:

- the cumulative effect of all the individually immaterial items of property, plant and equipment that were expensed during a specific financial year; and
- the cumulative year-on-year effect of all expensed items of property, plant and equipment.

Where the value of these assets become material the entity should consider the requirements of GRAP 3 on *Accounting Policies, Changes in Accounting Estimates and Errors*.

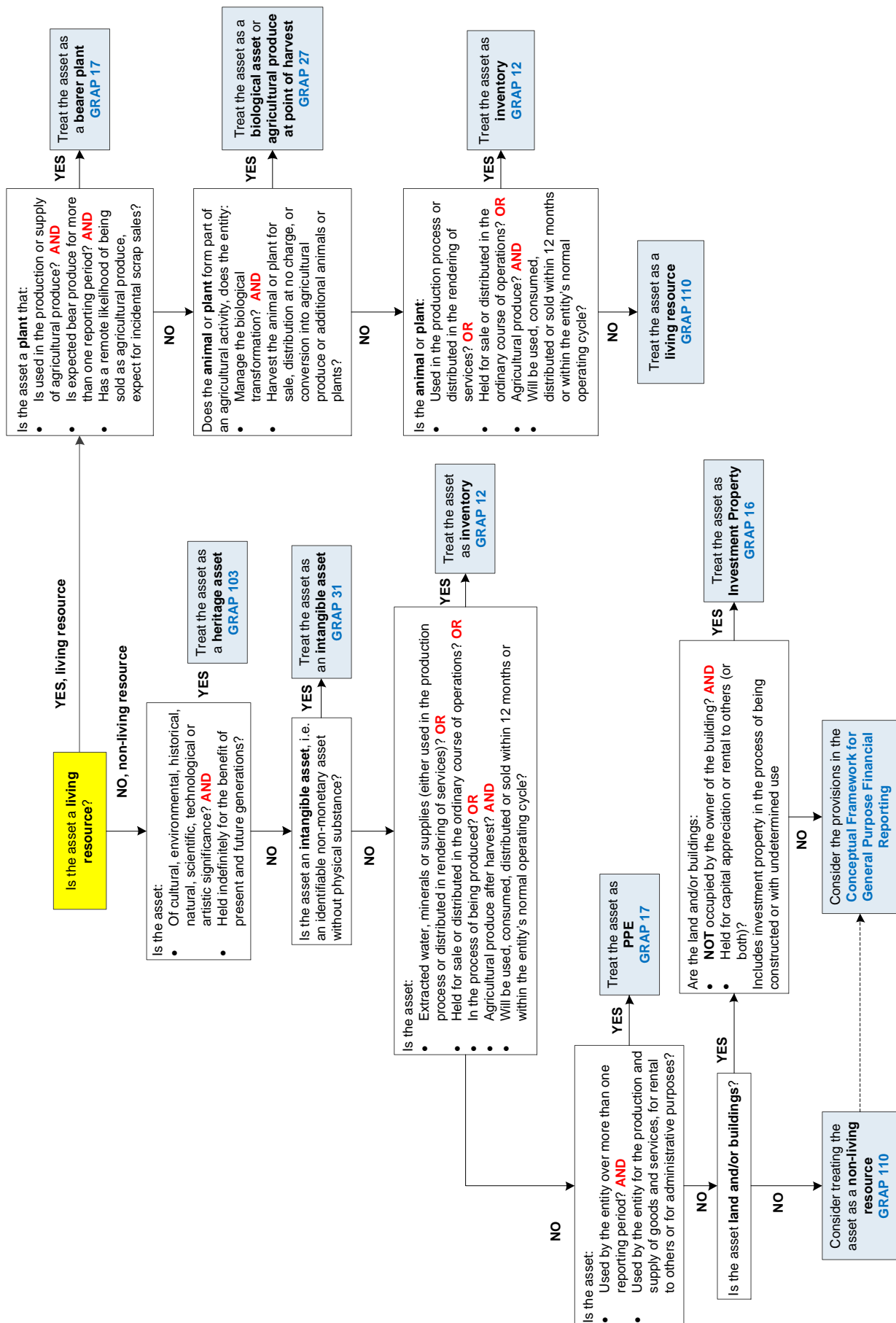
It is also important to remember that, even if every asset in a set is below the capitalisation threshold, the set of assets have to be assessed as a whole to determine whether or not to capitalise the assets. For example: one chair of R500 may not be material, but 1,000 chairs of R500 each may be. This concept is discussed in further detail in the section on the application of the **Cost Model**.



Also refer to the *Guideline on The Application of Materiality to Financial Statements*

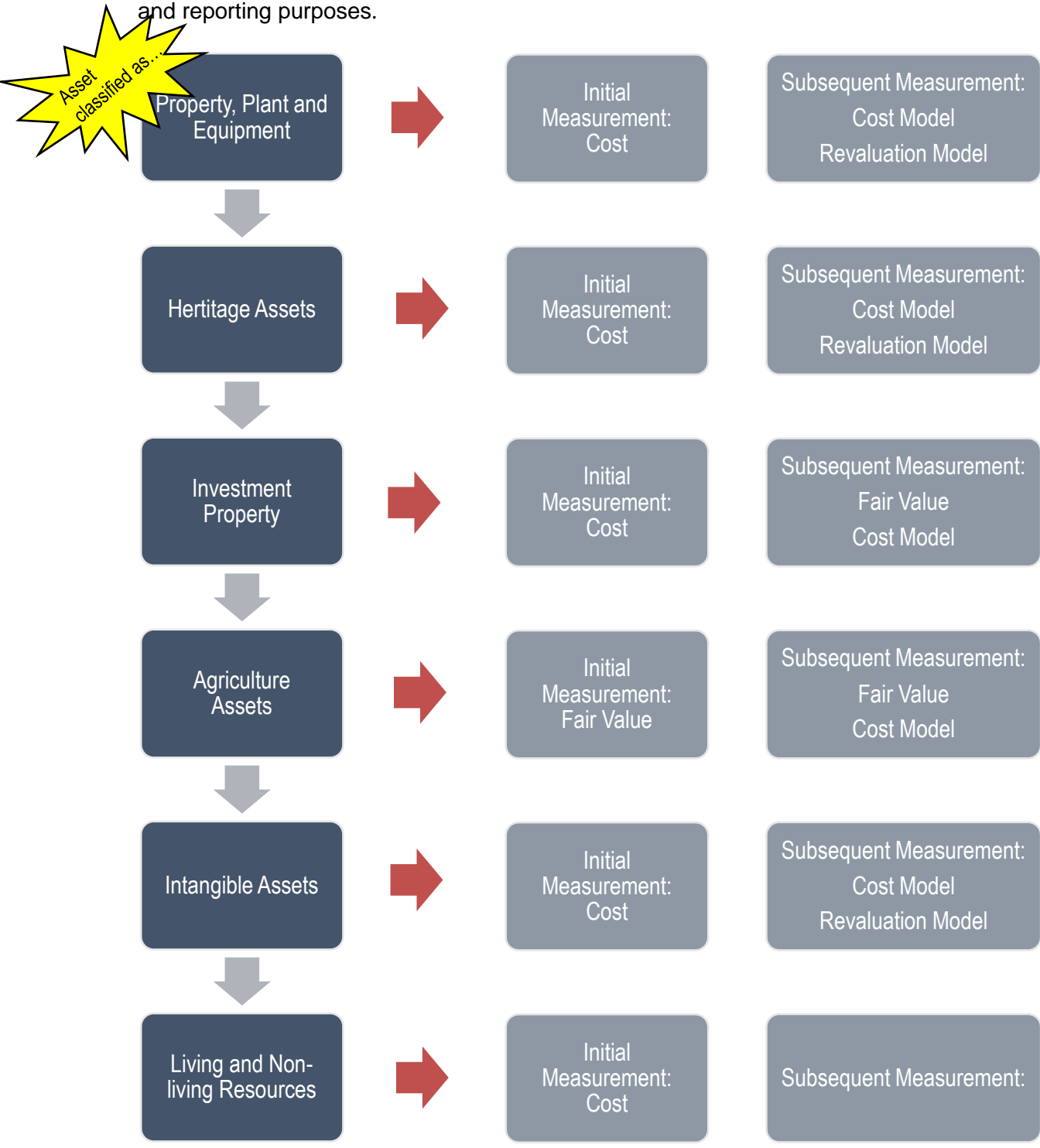
ASB website: <http://www.asb.co.za/guidelines/>

3. Classification of Assets

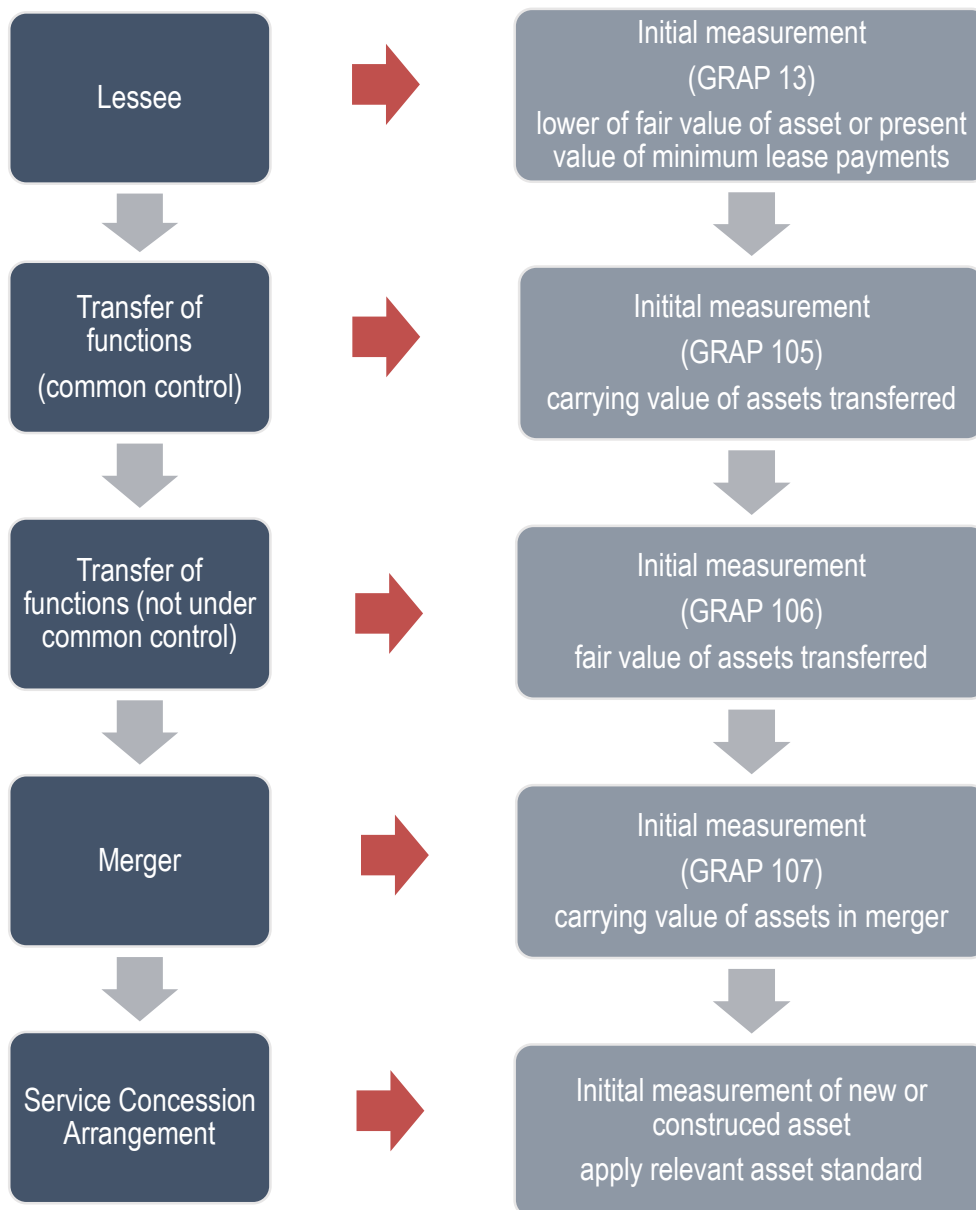


The accounting standards are designed to provide essential information on the nature and use of assets by an entity. Each standard sets out measurement and disclosure requirements that designed specifically for the type of assets within its scope. For example, if an entity uses an asset to generate positive cash inflows, the entity would want to know and measure the value of the future cash flows the asset is able to generate and reflect this value in its financial statements. In addition, the entity would use this information to assess whether the cash flows are sufficient in terms of costs associated with using, maintaining and/or holding the asset.

The selection and application of the appropriate standard is therefore critical for management and reporting purposes.



An entity sometimes obtains control of assets (or rights associated with assets) through arrangements other than outright purchases in which case the initial recognition is prescribed in standards other than those shown above.



Subsequent measurement of assets recognised under the above standards is dealt with in the relevant asset standards, for example, an entity accounts for a motor vehicle received in a transfer of functions (under common control) in terms of GRAP 105 and uses GRAP 17 for the subsequent accounting and reporting requirements (measurement, re-recognition, disclosures etc.).

4. Measurement of Assets

4.1 Measurement on initial recognition

An item that qualifies for recognition as an asset is measured at its cost.



Cost is the amount of cash or cash equivalents paid, or the fair value of the other consideration given, to acquire an asset at the time of its acquisition or construction

4.1.1 Asset acquired in an exchange transaction

Where an asset is acquired in an exchange transaction, it is measured on initial recognition at its purchase price and other costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. The cost would generally include:

- purchase price, including import duties, non-refundable purchase tax; and



Trade discounts and rebates should be deducted from the purchase price.

- the initial estimates of the costs of dismantling and removing an item and restoring the site on which an item is located. The obligation to incur such costs arises either when the entity acquires the asset, or as a result of using the asset over a certain period, except when the asset is used to produce inventory during that period. If the asset is used to produce inventory during a period, an entity applies GRAP 12 on *Inventories* to the cost of obligations for dismantling, removing and restoring the site on which the asset is located.



It is most likely that such costs would only relate to assets accounted for as property, plant and equipment in terms of GRAP 17.

Also refer to **Example 1: Provision for rehabilitation of landfill site**

Examples of other directly attributable costs are:

- employee costs as defined in GRAP 25 on *Employee Benefits*;
- those costs that arises as a result of direct involvement in the construction or acquisition of the item of property, plant and equipment;



Borrowing costs (finance cost) that are incurred in relation to the construction, production or acquisition of a qualifying asset may form part of the cost of an asset.

GRAP 5 on *Borrowing Costs* determined the criteria for the recognition of finance cost in the carrying amount of such an asset. For more detail refer to the accounting guideline on GRAP 5.

- costs to prepare the site where property, plant and equipment will be located;
- initial delivery and installation cost;
- costs of testing the asset; and



Any proceeds on items sold that were produced during the testing of equipment are deducted from the costs of testing the asset.

- professional fees.

Capitalisation of costs should cease as soon as the asset is in the location and condition necessary for it to be capable of operating in the manner intended by management.



Storage costs

Storage costs typically do not qualify as directly attributable costs to bringing the asset to its location and condition for it to operate in the manner as intended by management, as these costs are usually incurred after the asset is already in its location and condition ready to operate.

However, if an entity has to store an asset for a period of time before it can be modified, improved or put into use, then the storage cost can be capitalised.

Deferred settlement

There may be situations where an entity is allowed to settle payment for the asset beyond normal credit terms. In such a case, the difference between the cash price equivalent and the total payments is recognised as interest over the period, unless it is capitalised in accordance with GRAP 5.

Also refer to ***Example 2: Deferred settlement terms***

Assets constructed by or for an entity

As mentioned above, the cost of an asset consists of its purchase price and any directly attributable costs. Where an entity undertakes the construction of an asset on its own it must ensure that it has proper processes and procedures in place in order to identify all the attributable costs. In such instances, an entity should consider the principles in GRAP 12 on *Inventories*, specifically with regards to the allocation of fixed and variable overheads and any other costs incurred in bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management.

Where an entity appoints a contractor (as defined in GRAP 11 on *Construction Contracts*) to construct an asset it accounts for the work-in-progress over the period of construction and as per the agreement between the entity and the contractor.

Also refer to ***Example 3: Assets under construction contracts - Client***

Some additional information related to construction contracts

Note that, in the case of a construction contract, the bidding documents and the general conditions of contract have to adhere to the prescripts of the Construction Industry Development Board, in addition to the supply chain management prescripts of National Treasury.

The conditions of contract will normally specify the following (among others):

- The work that will be done;
- The time taken to complete the work;
- What will happen if there are delays or variations in the contract;
- The amount and time of any payments to be made;
- What work methods and quality will apply; and
- The procedures to be followed regarding cancellation, disagreement and disputes.

The following are some terms that are normally used in the contract along with a short description of each:

Progress payments:

The contract will normally make provision for monthly payment to the contractor based on the estimate of the value of the work completed (sometimes including certain other costs, such as materials on site). The contractor delivers the monthly statement for payment to the engineer (or another representative), who certifies the amount due, where after the employer pays the contractor within the time period specified in the contract.

Penalties:

Most contracts provide for penalties to be paid for failure to complete the project within the specified time. Penalties are normally an agreed upon amount of money per day and will be deducted from payments due to the contractor.

Retention:

Usually an amount of money is held back by the client to ensure that the contractor does his work properly. This retention money is due to the contractor, as the work is complete, but will not be paid out. This is to ensure that the contractor corrects any defective work. Normally half of the retention money is paid to the contractor when the project is delivered (or the engineer issues the Certificate of Completion) and the other half is paid within 14 days after the end of the 'defects liability period'.

Defects liability period:

This is the period in which the contractor is required to correct any defects that may be discovered and can vary between 3 to 12 months.



Assets under construction must also be assessed for impairment. Refer to section on impairment for further discussion and explanation on the calculation thereof.

4.1.2 Asset acquired in a non-exchange transaction

Where an asset is obtained at no cost or nominal cost, its cost should be measured at fair value on the date of acquisition.

Example: Investment property acquired at no cost

A property of a former TBVC state is allocated to a provincial entity without charge to rent it out for additional revenue in order to perform a function previously performed by that state. The property should be fair-valued for initial measurement purposes, after which the provincial entity can choose whether to use the fair value or cost model.

An asset may be gifted or contributed to an entity and therefore obtained at no cost. An asset may also be acquired at no cost or for a nominal cost (below market value) through the process of sequestration. In both these circumstances, the cost of the asset should be measured at its fair value at the date of acquisition.

In determining the fair value of an asset through a non-exchange transaction, an entity should apply the principles under the section on *Determining the fair value* (see section 4.2.3 below).



Measuring property, plant and equipment at initial recognition at fair value vs. measuring property, plant and equipment using the revaluation value model for subsequent measurement

Remember that the initial measurement at fair value of an asset acquired at no cost does not call for the use of, nor does it imply the use of the revaluation model for subsequent measurement.

If the class to which an item of property, plant and equipment acquired at no cost belongs is subsequently measured at cost, the fair value of the asset at initial recognition will be deemed to be the cost for subsequent measurement. This deemed cost will be subject to depreciation, if the cost model is used.

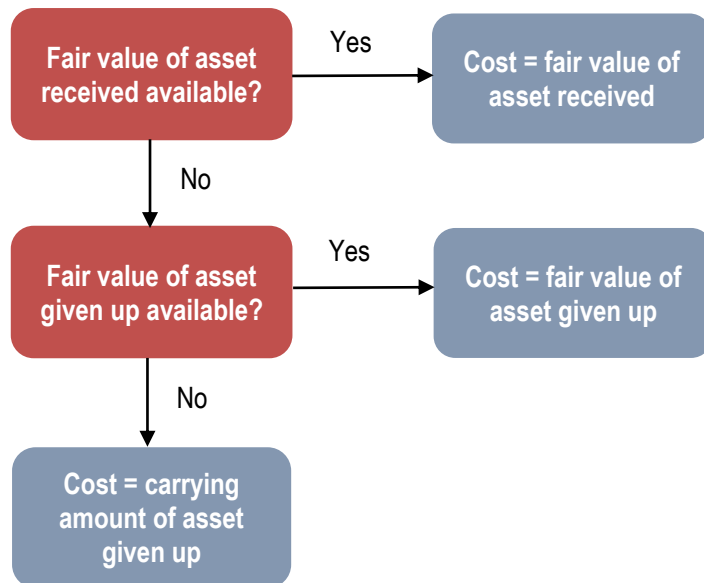
However, if the revaluation model is used for the subsequent measurement of property, plant and equipment, the revalued amount is usually either the market value determined by appraisal or the fair value by reference to other items with similar characteristics etc. The movements in the revalued amount will be recognised in a revaluation surplus in net assets.

For more detail on the revaluation model (and cost model), refer to the section on subsequent measurement.

4.1.3 Exchange of assets

An asset may be acquired in exchange for another non-monetary asset (or a combination of monetary and non-monetary assets).

In such circumstances, the “acquired” asset is measured as follows:



Also refer to *Example 4: Exchange of non-monetary assets*

4.1.4 Separation of assets into significant parts (or components)



Separation of assets into significant parts

Parts of assets only have to be depreciated separately if:

- the part identifiable has a cost that is significant in relation to the total cost of the item; and
- the part has a different useful life than that of the item (or other parts).

Management should assess all assets which might have significant separately identifiable parts in order to identify which parts should be depreciated separately.

Notwithstanding the above, management can decide to depreciate separately the parts of an asset that does not have a cost that is significant in relation to the total cost of the item.

As an example, most infrastructure assets have significant parts and different useful lives from other parts of the related asset and should therefore be identified and depreciated separately. Note that to the extent that an entity depreciates separately some parts of an asset, it should also depreciate separately the remainder of the asset (the remainder will consist of the parts of the asset that are individually not significant).



In identifying the significant parts, consideration should be given on how the asset is managed from an asset management perspective. The following can be considered:

- ✓ is the part or component replaced or renewed at regular intervals or is it a sunk cost?
- ✓ Is it managed with specific capex treatments relatively independent of other parts or components?
- ✓ Due to risk or criticality does it need to be separated for asset management planning?

The thought-process in deciding whether a part of an asset should be depreciated separately should be properly documented in the entity's policy on assets (the details need not be included as part of the accounting policy).

In order to be able to separately depreciate each item with a cost that is significant in relation to the total cost of the item, such significant part of the single asset (e.g., an infrastructure asset) should to be identified and the following should be determined for each part:

- Cost (all of the individual parts needs to add up to the total cost of the asset);
- Useful life; and
- Residual value.

Also refer to **Example 5: Significant parts – assets consisting of different parts**

Example: Significant parts - Building with other assets

Entity B acquired a building on 1 September 20X7 for R6,000,000 and which includes 5 air conditioners and an elevator. Assume that the fair value of the air conditioners is R500,000 and of the elevator R1,200,000 at acquisition date.

The useful life of the building is estimated to be 20 years and has a residual value of R1,000,000.

The air conditioners have an expected useful life of 5 years with no residual values.

The elevator has an expected useful life of 10 years with no residual value.

If one follows the approach that the identifiable assets attached to the building have different useful lives and their costs are significant in relation to the total cost of R6,000,000, the air conditioners and elevator should be treated as separate parts of the building and depreciated over their estimated useful life of 5 and 10 years respectively.

On the other hand, if one follows the approach that the costs of the identifiable assets attached to the building are not significant in relation to the total cost of R6,000,000, only the building will be recognised at R6,000,000 and depreciated over 20 years.

Whichever approach is followed, it should be properly justified.

4.1.5 Subsequent Costs

All costs incurred subsequently to add to, replace part of, or service any asset are recognised in the carrying amount of the related asset if the recognition criteria are met.

Inspection costs

A condition of continuing to operate an asset (for example, a machine) may be to perform regular major inspections. When each major inspection is performed, its cost is recognised in the carrying amount of the related asset if the recognition criteria are satisfied. The remaining carrying amount of the “previous inspection” is derecognised in accordance with the asset derecognition provisions (refer to the section on **Derecognition of Assets**) once the related asset undergoes the next inspection.

This will occur regardless of whether the cost of the previous inspection was separately identified in the transaction when the asset was acquired. If the previous inspection cost cannot be measured reliably or is not available, the estimated cost of a similar future inspection may be used as an indication of what the cost of the existing inspection component was when the item was acquired.

The carrying value of the previous inspection cost is then derecognised and the cost of the current inspection is recognised in the carrying amount of the related asset.

Also refer to **Example 6: Inspection costs**

Replacement costs

Parts of some items of property, plant and equipment may require replacement at regular intervals. The cost of replacing such a part is recognised in the carrying amount of the related asset if the recognition criteria are met. The carrying amount of the part that is replaced is derecognised in accordance with the asset derecognition provisions (refer to the section on **Error! Reference source not found.**).

Also refer to **Example 7: Cost of replacement of assets**

Day-to-day servicing costs

Costs incurred for the day-to-day servicing of an asset are expensed when incurred; these are usually known as repairs and maintenance.



Repairs and maintenance vs. improvements

As indicated above, the cost of day-to-day servicing, i.e. repairs and maintenance is expensed when incurred.

Only costs incurred to improve an asset, i.e. improvements, or to replace a part of an asset, can be capitalised if they meet the recognition criteria.

If there is uncertainty as to whether the costs incurred relating to an asset should be expensed or capitalised, the following can be considered, and if the answer is yes to one or more, the cost should be capitalised:

- Will the cost enhance the service provision of the asset beyond its original expectation?
- Will the cost increase the performance of the asset beyond its original performance?
- Will the cost increase the useful life of the asset beyond its original life?
- Is the cost incurred not primarily for labour, consumables or small parts?
- Is the cost incurred to increase the size of the asset or change its shape?
- Is the cost incurred to replace a significant part of the asset?
- Will the cost restore or enhance the heritage asset to preserve it?

Types of expenditure subsequent to initial acquisition

	Operational	Maintenance	Renewal	Upgrade	Disposal
Type of costs	Day-to-day running costs	Repair and/or servicing costs that don't extend the life of the asset beyond 1 year, or if it does are not material	Costs on existing assets that returns the asset to its original useful life and/or service potential ¹	Improvement on original design	Disposal costs
Accounting treatment	Expense	Expense	Capitalise	Capitalise	Expense (or reduce existing liability)
Budget type	Current	Current	Capital	Capital	Capital
Examples	Grass mowing Street cleaning Water testing	Pothole patching Window replacement Unblock pipes Grind footpath trip hazard Patch leaking roof Replace broken sections of pipes	New fit-out and painting of building Reseal road surface Gravel re-sheet Pump replacement Reline pipes Refurbishment Replace old with new Replace part of segment of road Restoration of a heritage asset in poor condition	Road widening Change road alignment Upgrade footpath from gravel to concrete Replace pumps with greater capacity Replace timber bridge with concrete bridge Extension of building	Demolition costs Removal of debris Repatriation of site

¹ Thereby extending the current useful life

4.2 Subsequent Measurement

4.2.1 Cost Model

Under the cost model, assets are carried at cost less any accumulated depreciation (or amortisation) and any accumulated impairment losses.

Depreciation and Amortisation²



Depreciation (or Amortisation) is the systematic allocation of the depreciable amount of an asset over its useful life.

Depreciable amount is the cost of an asset, or other amount substituted for cost, less its residual value.

The purpose of depreciation (or amortisation) is to reflect the value (or cost) of the asset that has been consumed during the year so as to reflect the performance of the asset to the users of the financial statements.



Depreciation (or amortisation) of an asset commences when the asset is available for use. An asset is available for use when the asset is in the location and condition necessary for it to be capable of operating in the manner intended by management.

Depreciation (or amortisation) of an asset continues even if the asset is not in use. Depreciation (or amortisation) ceases when the asset is derecognised.



When should an entity start depreciating major spare parts and stand-by equipment?

An entity starts depreciating major spare parts and stand-by equipment when the asset is available for use, i.e. when it is in the location and condition necessary for it to be capable of operation in the manner intended by management. This implies that depreciation may commence while the item is held in storage. Under usage based depreciation, the depreciation of items held in storage may be zero.

If major installation of the spare part is however required, it may be argued that the spare parts are not immediately available for use in the manner intended by management. In these instances, depreciation may only commence once the installation is complete.

Management should exercise judgement in applying the requirements with regard the depreciation of major spare parts and standby equipment.

Sometimes the useful life may be shorter than its economic life, because management may have a practice of disposing the assets after a specified time.

² Tangible assets are depreciated and intangible assets are amortised.

Differentiating between the useful life and economic life of an asset

Economic life is either:

- the period over which an asset is expected to be economically usable by one or more users; or
- the number of production or similar units expected to be obtained from the asset by one or more users.

Useful life is either:

- the period over which an asset is expected to be available for use by an entity; or
- the number of production or similar units expected to be obtained from the asset by an entity.

The difference between useful life and economic life can therefore be summarised as follows: Useful life is the term that the entity expects to use an asset while the economic life is the actual life span of the asset as used by all potential users.

For example, it might be the policy of an entity to purchase a new fleet of vehicles every three years and therefore the useful life of the vehicles is 3 years. The vehicles can, however, still be used for at least another 10 years before they are in an unusable condition and therefore the economic life of the vehicles will be 13 years.

Useful life of an intangible asset

An entity assesses the useful life or service potential of an intangible asset as either finite or indefinite. When an entity assessed all the relevant factors and determined that there is no foreseeable limit to the period over which an asset is expected to generate net cash inflows or service potential for the entity, the asset's useful life will be indefinite.

Where an intangible asset arises from contractual rights or legal rights, the useful life of the intangible asset should not exceed the period of the contractual or legal rights, but may be shorter. If there is a specified term that the contract or legal right can be renewed without incurring significant cost, then the useful life should include the renewal period.

**Example: Useful life of an intangible asset**

Entity G acquired a construction permit from a local municipality in the northern region under a binding arrangement for a period of 30 years. The government has awarded the permit to the local municipality for a period of 55 years.

The useful life of the construction permit in the records of entity G should be a period not exceeding 30 years as per the binding arrangement as that is the expected use that the entity will derive from the permit.



Evidence that indicates an entity would be able to renew the contractual rights or legal rights without significant cost include:

- Past experience has proved it is possible for an entity to renew a contractual right or legal right;
- Evidence clearly indicates that the conditions necessary to obtain a renewal have been met; and

The cost of renewal is not significant when compared with the future economic benefits or service potential expected to flow to the entity.

Residual value



The **residual value** of an asset is the estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset was already of the age and in the condition expected at the end of its useful life.

Example: Assessing the residual value of an asset

Entity Z acquired a Toyota Corolla on 1 July 20X8 for R225,000. In order to determine the residual value of the asset, the entity first has to determine the useful life of the asset. The entity estimates the useful life of the Toyota Corolla to be 5 years, which is shorter than the economic life of a Toyota Corolla, and therefore it can be assumed that the asset will have a residual value*.

In order to determine the residual value, the entity has to determine what the Toyota Corolla would currently sell for if it was already of the age and in the condition expected at the end of its useful life. It therefore estimates what a 5 year old Toyota Corolla currently sells for. Similar 5 year old Toyota Corollas are currently sold in the market for an average of R50,000. Entity Z therefore estimates the residual value of the vehicle to be R50,000 at end of its useful life.

**Note that the standards of GRAP specify that if an entity uses an asset for a shorter period than its economic life, it implies that such an asset will have a residual value, unless there are specific conditions to indicate differently, as another entity or person will still be able to use the asset afterwards.*

The **residual value of an intangible asset** with a finite useful life will normally be zero, except:

- Where a third party has committed to purchase the asset at the end of its useful life; or
- Where an active market for the asset exists; and
 - the residual value can be determined by reference to that market; and
 - it is probable that such a market will still exist at the end of the asset's useful life.

If the residual value of an asset increases to an amount equal to or greater than the asset's carrying amount, no depreciation is recognised until the residual value subsequently decreases to an amount below an asset's carrying amount.



Residual values

The residual value of an asset may often be insignificant and therefore immaterial in the calculation of the depreciable amount.

In certain instances entities will also be unable to dispose of the assets at the end of its useful life, or will only be able to dispose of an asset for a nominal amount.

The following are examples of assets that may have no or insignificant residual values:

- Infrastructure assets, such as waste water networks or roads;
- Computer hardware; and
- Computer software.



Must an asset always have a residual value?

No, an asset does not always have a residual value. There are also different requirements for residual values of tangible and intangible assets.

For tangible assets, such as property, plant and equipment or investment property, an asset only has a residual value when the useful life of an asset is shorter than the economic life of an asset. As entities in the public sector often plan to use an asset for its entire economic life, the residual value may be negligible or even zero.

For intangible assets with a finite useful life, the residual value is always deemed to be zero unless:

- a) A third party has committed to purchase the asset at the end of its useful life; or
- b) There is an active market for the asset; and
 - i. The residual value can be determined by reference to that market; and
 - ii. It is probable that such market will exist at the end of the asset's useful life.

Depreciation and Amortisation Methods

The depreciation (or amortisation) method used should allocate the depreciable amount on a systematic basis that reflects the pattern of how the economic benefits or service potential are expected to be consumed by the entity (i.e. over its useful life). The more commonly applied depreciation (or amortisation) methods are straight-line method, the diminishing balance methods and units of production method.

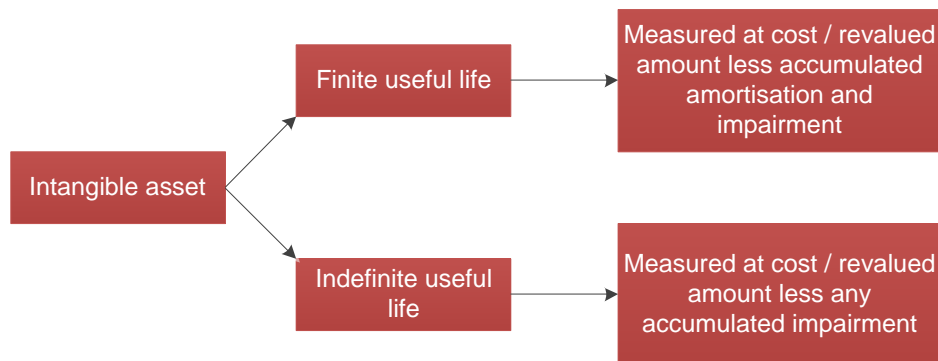


When selecting the depreciation method to adopt the entity should consider:

- ✓ the nature and size of its asset portfolio;
- ✓ how often the asset gets replaced;
- ✓ how the assets service potential is consumed; and
- ✓ whether the information is reliable and relevant, enabling it to be used to assist in other decisions across the entity.

Intangible assets with indefinite useful lives are not amortised, but are assessed for impairment annually, or whenever there is an indication that the intangible asset may be impaired.

The diagram below summarises the difference in the accounting treatment (under subsequent measurement) of intangible assets with finite useful lives versus intangible assets with indefinite useful lives:



Example: Straight-line method of depreciation

Entity B purchased an asset for R136,800 (VAT incl.) that is expected to be used for 5 years, with a residual value of R15,000. The entity chooses to allocate the asset's depreciable amount using the straight-line method over its expected useful life. Assume the entity is a VAT vendor.

The cost of the asset	R120,000 (R136,800 / 114 x 100)
The depreciable amount	R105,000 (R120,000 – R15,000)
The annual depreciation charge will therefore be	R21,000 (R105,000 / 5)

Example: Diminishing balance method of depreciation

Assume the same information as above, but the diminishing balance method is used. As a result, the carrying amount (less the residual value) of the asset is depreciated by multiplying it with the depreciation rate (20%).

The cost of the asset	R120,000 (R136,800 / 114 x 100)
The depreciable amount	R105,000 (R120,000 – R15,000)
The depreciation charge for year 1 will therefore be	R21,000 (R105,000 x 20%)
The depreciation charge for year 2 will therefore be	R16,800 [(R105,000 – R21,000) x 20%]

Example: Unit of production method of depreciation

Machinery acquired is expected to produce 1,600,000 units of inventory over its lifespan. The cost of asset is R136,800 (VAT incl.). The residual value expected is R15,000. In the first year, 500,000 units were produced.

The cost of the asset	R120,000 (R136,800 / 114 x 100)
The depreciable amount	R105,000 (R120,000 – R15,000)
The depreciation charge for year 1 will therefore be	R32,813 (500,000 / 1,600,000 x R105,000)

Recognising the depreciation (or amortisation) charge

The depreciation (or amortisation) expense should be recognised in surplus or deficit, except where the depreciation charge is capitalised against another asset.

The depreciation (or amortisation) charge will continue to be recognised even though the fair value of the asset exceeds the carrying amount. Only when the residual value exceeds carrying amount of the asset, should the depreciation (or amortisation) charge cease.

Reassessment of the depreciation (or amortisation) method

The depreciation (or amortisation) method applied to an asset should be reviewed at least at each reporting date. Any changes in the depreciation (or amortisation) method should be accounted for as a change in accounting estimate in accordance with GRAP 3 on *Accounting Policies, Changes in Accounting Estimates and Errors*.

Reassessment of the residual values and useful lives

An entity assesses at each reporting date whether there is an indication that the entity's expectation about the residual value and the useful life of an asset have changed since the preceding reporting date.

Any changes in the estimated useful life or residual value of an asset should be accounted for as changes in accounting estimates and applied prospectively in accordance with GRAP 3 on *Accounting Policies, Changes in Accounting Estimates and Errors*.

The following indicators are used to identify a potential change in the expected useful life and/or residual value of a tangible asset:

Indication that the expected useful life of an asset has change	Indication that the residual value of an asset has change
✓ the composition of the asset changed during the reporting period (i.e. the significant components of the asset changed)	✓ the composition of the asset changed during the reporting period (i.e. the significant components of the asset changed)
✓ the use of the asset has changed	✓ the use of the asset has changed
✓ the asset is approaching the end of its previously expected useful life	✓ the asset is approaching the end of its previously expected useful life
✓ planned repairs and maintenance on, or refurbishment of, the asset and/or significant components either being undertaken or delayed	✓ planned repairs and maintenance on, or refurbishment of, the asset and/or significant components either being undertaken or delayed
✓ environmental factors, e.g. increased rainfall or humidity, adverse changes in temperatures or increased exposure to pollution	✓ environmental factors, e.g. increased rainfall or humidity, adverse changes in temperatures or increased exposure to pollution
✓ there is evidence that the condition of the asset improved or declined based on assessments undertaken during the reporting period	✓ there is evidence that the condition of the asset improved or declined based on assessments undertaken during the reporting period

Indication that the expected useful life of an asset has change	Indication that the residual value of an asset has change
✓ the asset is assessed as being impaired in accordance with GRAP 21 and GRAP 26	✓ the asset is assessed as being impaired in accordance with GRAP 21 and GRAP 26
	✓ there has been a change in the expected timing of disposal of the asset
The above list of indicators are not exhaustive. There may be other indications that the expected useful lives or residual values of the assets have changed.	

Example: Reassessing the useful life and residual value of an asset

Assume the same information as in **Example: Assessing the residual value of an asset** above. At 30 June 20Y0, when reassessing the useful lives and residual values of its assets, Entity Z now decides that it will use the vehicle for a total of 10 years from purchase date.

Currently a 10 year old Toyota Corolla sells for R25,000, and therefore the entity estimates that amount as its new residual value.

Carrying amount at 30 June 20X9	R190,000 (R225,000 – ((R225,000 – R50,000) / 5))
'Old' depreciation at 30 June 20Y0	R35,000 (R225,000 – R50,000) / 5

A change in accounting estimate in accordance with GRAP 3 on *Accounting Policies, Changes in Accounting Estimates and Errors* is accounted for prospectively; therefore the entity needs to recalculate depreciation from the beginning of the current reporting period, i.e. 1 July 20X9.

It is important to note that when calculating the depreciation for the 20X9/20Y0 period, the entity will use the estimated remaining useful life at the beginning of the period.

Therefore, for the period ended 30 June 20y0, the entity will have to determine the remaining useful life at 30 June 20X9.

The remaining useful life at 30 June 20X9 is 9 years.

The 9 years is calculated as follows: remaining useful life based on original assessment of useful life at 30 June 20X9 is 4 years, add the additional years added based on reassessment, which is 5 years.

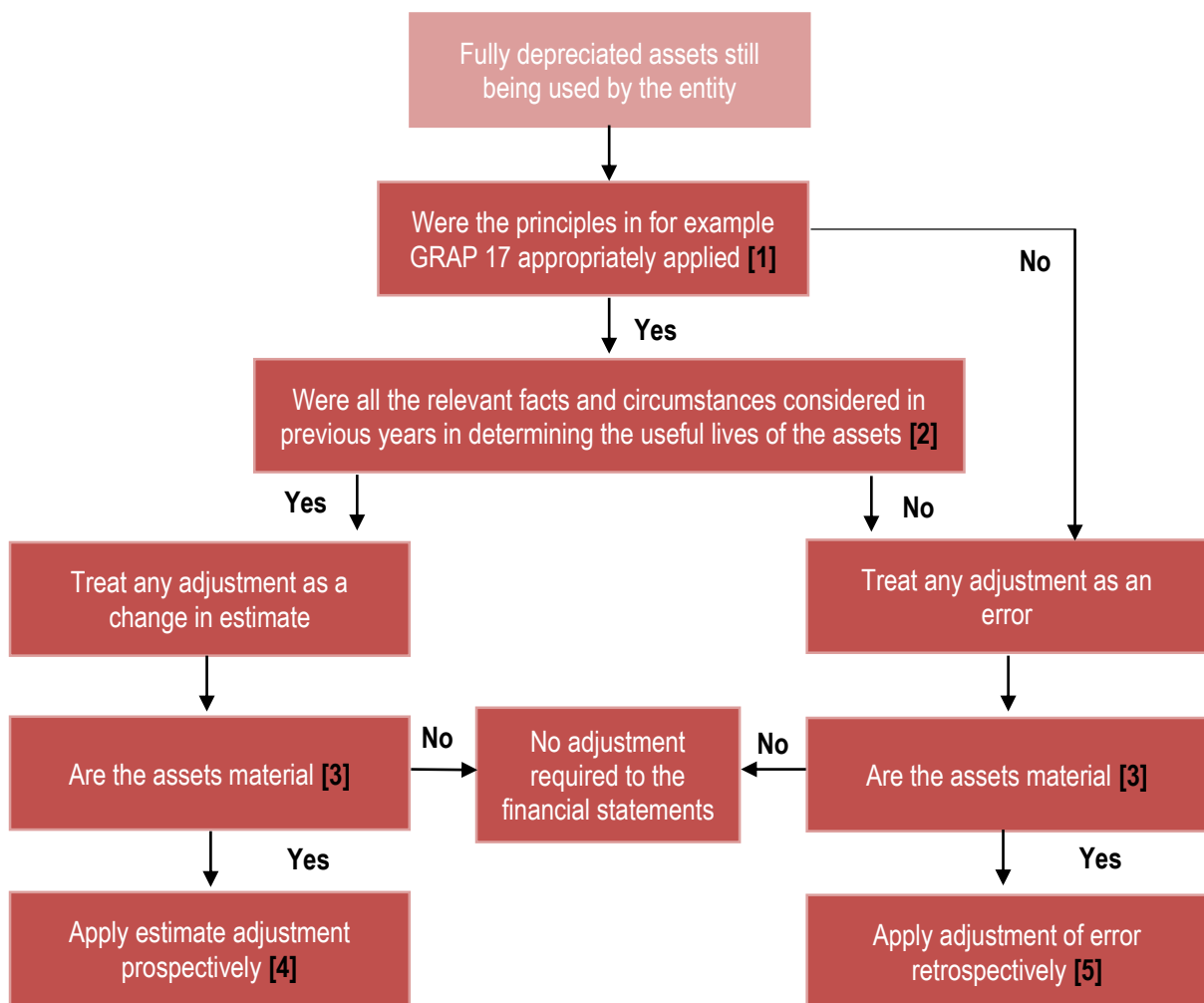
As from 1 July 20X9, the vehicle will therefore be depreciated over 9 years.

'New' depreciation for next 9 years	R18,333 ((R190,000 – R25,000) / 9)
Change in accounting estimate	R16,667 (R35,000 – R18,333)

Treatment of fully depreciated (or amortised) assets still in use

As mentioned above, an entity is required to assess the useful lives, residual values and depreciation methods of assets at every reporting date. This is done by assessing at each reporting date whether there is any indication that the entity’s expectations about the useful lives and residual values of an asset have changed since the preceding reporting date. When such indications exist, an entity is required to revise the expected useful life and/or residual values accordingly.

If an entity has fully depreciated (or amortised) assets at the reporting date that it continues using, appropriate adjustments to the financial statements may be required. In deciding whether any adjustments are required, an entity considers whether the existence of fully depreciated assets results from a change in estimate or an error.



[1]. Were the principles in GRAP appropriately applied?

An entity is required to assess the appropriateness of the useful lives, residual values and depreciation methods of assets at every reporting date. Where an entity has fully depreciated assets because it did not appropriately apply the principles of GRAP (specifically GRAP 17, GRAP 16 using the cost model or GRAP 31), and as a result did not assess the useful lives or residual values of assets at previous reporting dates, any adjustment is treated as an error. The manner in which an error is adjusted is discussed in [5] below.

[2]. Were all the relevant facts and circumstances considered in previous years in determining the useful lives of assets?

In preparing the financial statements, all relevant facts and circumstances should be considered by the entity when assessing the useful lives of assets. This is done by considering, for example:

- Technical information from engineers about the performance, maintenance and replacement of assets.
- Financial information such as budgets, forecasts, plans, and any other relevant information.

If the requirements of GRAP were correctly applied in prior periods, and all available information and relevant facts and circumstances considered, but expectations of how the asset is or will be used is subsequently changed, then the adjustment is a change in accounting estimate. The manner in which a change in accounting estimate is accounted for is discussed in [4] below.

[3]. Are the fully depreciated assets still in use material?

Fully depreciated assets still in use may be material qualitatively and/or quantitatively. These assets, and their effect on the statement of financial performance and statement of financial position, may be:

- Qualitatively material if, as a result of their nature, the asset is critical to an entity's operations and delivering on its mandate;
- Quantitatively material if the extension in the asset's useful life results in an adjustment to depreciation and accumulated depreciation that is material in value and would affect users' decisions of the statement of financial position and statement of financial performance.

If the assets and their possible effects are immaterial, then an entity is not required to adjust the financial statements.

[4]. Prospective adjustments for change in accounting estimate relating to fully depreciated assets still in use

When management has assessed that it needs to adjust the financial statements for the effect of fully depreciated assets still in use, and that adjustment is a change in estimate, an adjustment is made to the carrying amount of the asset.

In the year in which the change is made, a portion of the accumulated depreciation is reversed to surplus or deficit. The cost or revalued amount of the asset is then depreciated over its revised useful life.

The portion of the accumulated depreciation that is reversed is calculated as the difference between:

- The total depreciation recognised in the previous periods using the previous expected useful life of the asset; and
- The total depreciation that would have been charged for those periods based on the revised useful life of the asset.

In addition to the disclosure requirements prescribed by GRAP 3, an entity should, in the year during which the adjustment is made, disclose the gross movements in depreciation relating to the asset in the notes to the financial statements.

For assets other than those that are fully depreciated and are still in use, an entity may continue to apply its existing method when making prospective adjustments relating to a change in accounting estimate.

[5]. Retrospective adjustments relating to an error

An entity corrects material prior period errors retrospectively in the first set of financial statements authorised for issue after their discovery by:

- a) Restating the comparative amounts for the prior period(s) presented in which the error occurred; or
- b) If the error occurred before the earliest period presented, restating the opening balances of the assets and liabilities and net assets for the earliest period presented.

A prior period error is corrected by retrospective restatement except where it is impracticable to determine either the period-specific effects or the cumulative effect of the error.

When it is impracticable to determine the period-specific effects of an error on comparative information for one or more periods presented, the entity restates the opening balances of assets, liabilities and net assets for the earliest period for which retrospective restatement is practicable (which may be the current period).

When it is impracticable to determine the cumulative effect of an error on all prior periods at the beginning of the current period, an entity restates the comparative information to correct the error prospectively from the earliest date practicable.

4.2.2 Revaluation Model

Subsequent to recognition, an accounting policy choice can be made to carry those assets whose fair value can be measured reliably are at revalued amount less any subsequent accumulated depreciation (or amortisation) and any subsequent accumulated impairment losses. The revalued amount is the fair value at the date of the revaluation.

Revaluations should be made with sufficient regularity to ensure that the revalued amount does not differ materially from the fair value at the reporting date. The frequency of revaluation depends on the changes in the fair value of the assets being revalued. When the fair value of a revalued asset differs materially from its carrying amount, a further revaluation is necessary. For an asset that shows insignificant changes in fair value, it may be necessary to revalue the asset only every 3 to 5 years. Assets that experience significant and volatile changes in fair value require annual revaluation.

When one item in a class is revalued, then the entire class should be revalued. Also note that the movement in the revalued amount is recognised in net assets - under the revaluation surplus (with certain exceptions), and not in surplus and deficit.

Example: All assets in a class should be revalued

Entity B owns six buildings. Building 1 is situated in an area which is fast developing and the value of the property has increased dramatically. Entity B decides that it wants to revalue Building 1 to its current market value.

If Entity B revalues Building 1, then it will have to revalue the other 5 buildings as well, as they fall within the same class of assets, namely Buildings. It will be treated as a change in accounting policy. Furthermore, all the buildings will have to be revalued regularly to ensure that the carrying amount does not differ materially from the fair value at reporting date.

Under the revaluation model, an entity cannot revalue intangible assets that have not previously been recognised as assets or that have been recognised initially at amounts other than cost (i.e. where recognised at fair value because it was received/acquired for no cost or nominal consideration).

Where only a part of the cost of an intangible asset is recognised, because the asset did not meet the criteria for recognition until part of the way through the development process, the revaluation model may be applied to the whole asset.



For the purpose of revaluations of intangible assets, fair value should be determined by reference to an active market.

It will therefore be very difficult and possibly not prudent to measure intangible assets under the revaluation model, as an active market for intangible assets is rare and consequently a price paid for one asset may not be sufficient evidence of the fair value of another and furthermore, prices are often not accessible to the public. An active market can also not exist for brands, newspaper mastheads, music and film publishing rights, patents or trademarks, because each such asset is unique.

Given the history of rapid changes in technology, intangible assets, such as computer software, are susceptible to technological obsolescence and therefore are likely to have a relatively short useful life and no resale value.

Management should therefore assess the reasonableness and appropriateness of choosing the revaluation model for a class (or classes) of intangible assets.

Determining the fair value

Refer to discussion → ***Determining the fair value***

Treatment of accumulated depreciation (or amortisation)

One of the following two options can be followed for the treatment of accumulated depreciation (or amortisation):

- **Restatement:** Restate both the gross carrying amount and the accumulated depreciation (or amortisation), so that the new carrying amount equals the revalued amount. This method is often used when an asset (mostly plant or equipment) is revalued by means of applying an index to its depreciated replacement cost; or
- **Elimination:** The accumulated depreciation (or amortisation) is eliminated against the gross carrying amount of the asset and the net amount is restated to the revalued amount. This method is often used for property (buildings).

The amount of the adjustment on the accumulated depreciation (amortisation) is part of the increase or decrease in the carrying amount as discussed below.

Accounting treatment of increases and decreases in the carrying amount as a result of a revaluation

Under the revaluation model, the difference between the revalued amount and the carrying amount is recognised in the revaluation surplus. In the case of a reversal of an increase in excess of the increase previously recognised in the revaluation surplus, or a reversal of a decrease previously recognised in surplus or deficit, it will be recognised in surplus or deficit. An amount recognised in surplus or deficit is shown as an impairment loss.

To summarise:

Annual financial statements	First revaluation	Subsequent revaluation results in an increase in carrying amount	Subsequent revaluation results in a decrease in the carrying amount
In the statement of changes in net assets	Increase in carrying amount of asset is credited against revaluation surplus	Secondly, where no impairment loss available, the increase (or any excess in the case where impairment loss was previously recognised in surplus or deficit) is recognised in revaluation surplus	Firstly, reverse revaluation surplus previously recognised, if any
In the statement of financial performance	Decrease in carrying amount of asset is recognised as impairment loss in surplus or deficit	Firstly, reverse the impairment loss previously recognised in surplus or deficit, if any	Secondly, where no revaluation surplus available, the decrease (or any excess in the case where revaluation surplus was available) is recognised in surplus or deficit

The difference between the two options on the treatment of accumulated depreciation (or amortisation) and the accounting treatment of revaluation increases and decreases are illustrated in the examples referred to below.

Also refer to the following illustrative examples:

- **Example 8: Treatment of accumulated depreciation at revaluation date (first revaluation)**
- **Example 9: Subsequent decrease in carrying amount as a result of a revaluation**
- **Example 10: Transfers from the revaluation reserve to the accumulated surplus/deficit when depreciating a revalued asset**

4.2.3 Fair Value Model

When an entity chooses the fair value model it should measure all of its assets at fair value, unless it is unable to determine the fair value of a specific property on a continuous basis. Assets carried under the fair value model is not subsequent to depreciation.

Using the fair value model differs from using the revaluation model in the following ways:

Fair value model – used for Investment Property and Biological Assets	Revaluation model – used for Property, Plant and Equipment and Intangible Assets
Fair value must be determined annually	Revaluation is performed as indicated by entity's accounting policy, which is normally every 3 to 5 years
Fair value adjustment is recognised in surplus or deficit (statement of financial performance)	Revaluation increase or decrease is recognised in revaluation reserve in net assets
Investment property is not depreciated. The same applies to biological assets and/or agricultural produce measured at fair value.	Property, plant and equipment continues to be depreciated. The same applies to intangible assets, such assets are amortised.

Determining the fair value



Fair value under the fair value model, is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.

This fair value specifically excludes an estimated price inflated or deflated by special terms or circumstances such as:

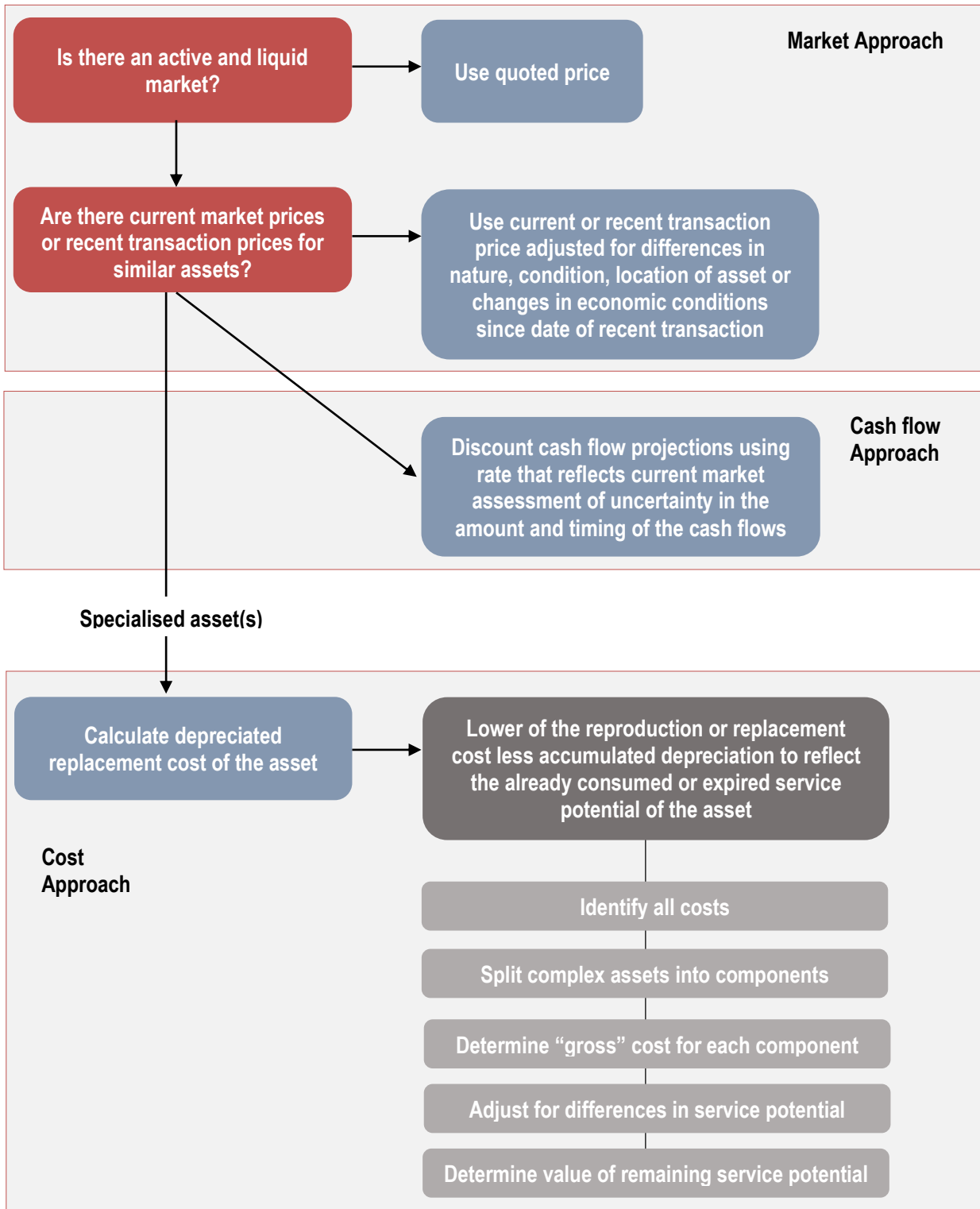
- a typical financing;
- sale and lease back arrangements;
- special considerations or concessions granted by anyone associated with the sale; or
- liquidation and sequestration auctions.

The fair value determination according GRAP, can be done by a valuer or another expert, including an employee, if the:

- valuer is a member of a valuation profession and holds a recognised and relevant qualification; or
- the other expert, has the requisite competence to undertake such an appraisal in accordance with the requirements of the Standards of GRAP.

Under the fair value model, the fair value should be determined at each reporting date. As mentioned above, these valuations do not have to be done by a qualified valuer. The entity can perform the valuations for the periods when a qualified valuer is not used; however it is recommended that a qualified valuer is used when the market conditions change significantly.

The following decision tree has been included explain the approach to be taken in determining the fair value of an asset.



Where different valuation approaches are used the entity applies judgement and uses the value that is most representative of the fair value of the asset at that point in time.

In determining the fair value, the entity should further consider the following:

- The time when the fair value was obtained, as market conditions may have changed from the date the fair value was obtained until reporting date. Hence the amount reported as fair value may be incorrect or inappropriate if it was estimated at another time;
- That the parties to the transactions should be “knowledgeable”. The term “knowledgeable” implies that both the willing buyer and willing seller are reasonably informed about the property, thus they are informed about the nature and characteristics, its actual and potential uses and market conditions at reporting date;
- The buyer should be a willing buyer. A willing buyer is someone who is motivated to buy and not compelled to buy, thus he is not overeager nor determined to buy at any price;
- The seller should be a willing seller. A willing seller is not someone who is over-eager or someone who is forced to sell, thus he will not sell at any price and he is not prepared to hold out for a price not considered reasonable; and
- An arm’s length transaction is one between parties that do not have a particular or special relationship, thus it is a transaction presumed to be between unrelated parties.

Entities should not double-count assets or liabilities that are already recognised as separate assets or liabilities, when determining fair value of the asset.

Example: Double-counting

Scenario 1: Equipment such as lifts and air-conditioning is often an integral part of a building and is generally included in the fair value of the investment property. Thus an entity should not also separately recognise the lifts and air-conditioning. However, if the lifts and air-conditioning were recognised separately in the statement of financial position (as property, plant and equipment) then these assets must be excluded from the fair value of the building.

Scenario 2: Where Entity GFD (lessor) leases an office (investment property) on a furnished basis, the fair value already takes into account the furniture in the office (rental income for a furnished office) and thus Entity GFD should not separately recognise the furniture. However if the furniture was recognised separately in the statement of financial position (as property, plant and equipment) then these assets would be excluded from the fair value of the office.

The fair value reflects the value at the reporting date, therefore it does not include any future capital expenditure that will improve or enhance the asset nor any related benefits from this future expenditure.

Treatment of changes in fair value

The gain arising from the change in fair value is recognised in surplus or deficit for the period in which it arises as a fair value adjustment. The loss arising from the changes in fair value is also recognised in surplus or deficit as a fair value adjustment and not as an impairment loss.

Example: Fair value adjustment

An entity acquires an investment property for R300,000 and incurs transaction costs of R5,000, therefore the initial cost of the property will amount to R305,000. At the reporting date an independent appraiser establishes the fair value of the property at R302,000. The loss of R3,000 (R305,000 - R302,000) is recognised in surplus or deficit. This is not impairment, but a fair value adjustment.

Initial recognition and measurement	Debit	Credit
	R	R
Investment property	305,000	
Bank		305,000
Recognising investment property at acquisition date		

Subsequent measurement	Debit	Credit
	R	R
Fair value adjustment	3,000	
Investment property		3,000
Recognising fair value adjustment on investment property		

It is normally assumed that, when an entity applies the fair value model, the fair value of an asset can be measured reliably on a continuing basis. However, if on first acquisition of a specific asset, an entity that has selected the fair value model for subsequent measurement concludes that it cannot reliably determine the fair value of that asset on a continuing basis, the entity can then use the cost model to measure the asset.

This only applies in exceptional circumstances where comparable market transactions are infrequent and alternative estimates of fair value for the asset cannot be made.

The residual value of this asset measured in accordance with the cost model should be assumed to be nil.

Only the asset that cannot be fair valued should be measured according to the cost model, while the entity should continue to measure all other assets using the fair value model.

4.3 Impairment of Assets

At each reporting date, an entity has to assess (in accordance with GRAP 26 on Impairment of Cash-generating Assets and GRAP 21 on Impairment of Non-cash-generating Assets) whether or not there is an indication that items may be impaired. If there is an indication of impairment, then the recoverable amount or recoverable service amount should be determined respectively.



An **impairment loss** is the amount by which the carrying amount of the asset exceeds its recoverable amount or recoverable service amount.

When assets are carried at cost under the cost model, any impairment loss or reversal of impairment loss is recognised in surplus or deficit.

When assets are carried at revalued amounts, an impairment loss is treated as a revaluation decrease – i.e. is recognised in the revaluation reserve to the extent of a revaluation surplus available. The reversal of an impairment loss previously recognised, should be treated as a revaluation increase – i.e. is recognised in the revaluation reserve (unless it is first recognised in surplus or deficit to reverse a previous impairment loss recognised in surplus or deficit, in which case, only any excess will be recognised in the revaluation reserve).

Refer to Chapter 2 for guidance on the calculation and accounting for impairment of non-cash-generating assets and impairment of cash-generating assets. This Chapter provides indicators of impairment that an entity should consider, as well as guidance on how to determine the recoverable amount and recoverable service amount of impaired assets.

4.3.1 Compensation received from third parties

When compensation is expected from third parties for items that were impaired, lost or given up, it is included in surplus or deficit when the compensation amount becomes receivable.

The loss or impairment of an asset and the compensation received from third parties (i.e. insurance payments) are separate economic events and hence the transactions have to be accounted for and disclosed separately. The transactions should not be netted off. The loss on disposal/impairment of asset will therefore be shown separately from the insurance payments received as compensation in the statement of financial position.

Example: Presentation of compensation received from third parties and related

Extract out of the statement of financial ; performance		20X1	20X0
Revenue			
Compensation received – insurance claim paid out	x	200,000	
Other revenue		XX	XX
Expenses			
Loss on disposal of assets	x		(50,000)
Impairment loss on assets	x	(60,000)	
Other expenses		(XX)	(XX)

5. Derecognition of Assets

An asset is derecognised:

- On disposal; or
- When no future economic benefits or service potential are expected from its use or disposal.



A disposal can be, for example, when an asset is:

- sold;
- donated;
- scrapped;
- transferred, etc.

If an entity recognises in the carrying amount of an asset, the cost of a replacement for part of the item in accordance with the section on Subsequent costs, then it derecognises the carrying amount of the replaced part regardless of whether the replaced part had been depreciated separately. If it is not practicable for an entity to determine the carrying amount of the replaced part, it may use the cost of the replacement as an indication of what the cost of the replaced part was at the time it was acquired.

The gain or loss on disposal of an asset is determined as follows:



The gain or loss is recognised in surplus or deficit when the asset is derecognised.

If the asset was carried at revalued amount then the revaluation surplus of the asset disposed is recognised in accumulated surplus or deficit.

The net proceeds received or receivable on disposal is initially recognised at fair value. Thus, when payment is deferred, the proceeds received are recognised as the cash price equivalent. The difference between the cash price equivalent and the nominal amount is recognised as interest revenue. Refer to accounting guideline on GRAP 9 for the recognition and measurement of revenue from the sale of assets and interest (when cash inflow is deferred).

Also refer to

- **Example 11: Cost of replacement of asset**
- **Example 12: Derecognition of intangible assets**
- **Example 13: Derecognition of heritage assets**

Example: Disposal of investment property

Entity QQ is selling a warehouse which is classified as investment property to Entity AA for R22,195,434. The purchase price is payable in 240 equal instalments of R92,481. Investment property is carried at fair value and the carrying amount at date of sale was R8,500,000. The cash purchase price for the property is R10,000,000.

The gain for Entity QQ is calculated as the difference between the carrying amount and the cash purchase price which is R1,500,000 (R10,000,000 – R8,500,000). As a result of the deferred payment, Entity QQ will recognise the difference between amount receivable and cash purchase price as interest revenue over the payment period.

The journals for recording of this transaction, at date of sale, will be as follows:

Disposal date	Debit	Credit
	R	R
Receivables	10,000,000	
Gain on sale of investment property		1,500,000
Investment property		8,500,000
Recognising a gain on the disposal of investment property		

6. Transfer of Assets

6.1 Criteria for transfers

Where an entity, over time, changes its use of an asset, the classification of the asset may need to change. This means that the asset may need to be transferred to or from for example investment property or property, plant and equipment.

Transfers to, or from, investment property should only be made when there is a change in use, such as:

- The start of owner-occupation (the property that was used to earn rentals is now used for administrative purposes of the entity). In this instance the property is transferred from investment property to property, plant and equipment on the date that owner-occupation started;
- The end of owner-occupation. Transfer the property from property, plant and equipment to investment property on the day that owner-occupation stopped;
- The property was previously held as inventory but the entity commenced with an operating lease to another party. Transfer the property from inventory to investment property on the day that the new operating lease starts; or
- The entity started to develop the property with the objective to sell it. In this instance the property is transferred from investment property to inventory on the day the development starts.



An entity is allowed to transfer a property from investment property to inventory only when the property is developed with the intention to sell. When an entity decides to dispose of investment property without development, it continues to treat the property as investment property unit it is disposed of.

Transfers from heritage assets can only be made when an asset no longer meets the definition of a heritage asset. For example, the entity has a building that was initially classified as a heritage asset, but now the entity uses a significant portion of it for offices, thus the entity should classify the building as property, plant and equipment.

Transfers to heritage assets can only be made when an asset subsequently meets the definition of a heritage asset. For example, a work of art was initially acquired for decorative purposes and recorded as property, plant and equipment, but now the entity decided to preserve the artwork due to its artistic significance after the death of the artist. Another example, an entity developed a formula for scientific purposes which is recorded as an intangible asset, and after one year, the formula became of scientific significance due to the fact that this was the only of its kind in Africa.

6.2 Measurement when property is transferred

If the entity uses the cost model to measure the asset (or class of assets), a transfer between investment property, property, plant and equipment, heritage assets and inventory does not change the carrying amount of the asset transferred and it does not change the cost of that asset for measurement or disclosure purposes.

Also refer to **Example 14: Transfer to property, plant and equipment carried under the cost model**

For transfers from investment property carried at fair value, to property, plant and equipment, heritage assets and inventory, the property's deemed cost for initial and subsequent measurement in terms of GRAP 17 on *Property, Plant and Equipment*, GRAP 103 on *Heritage Assets* and GRAP 12 on *Inventories*, is the fair value of the property on transaction date.

Also refer to

- **Example 15: Transfer from investment property carried at fair value**
- **Example 16: Transfer from heritage assets at revalued amount to property, plant and equipment when using the revaluation model**

The following steps need to be followed when owner-occupied property is transferred to investment property that will be measured at fair value:

- Recognise the owner-occupied property in terms of GRAP 17 on *Property, Plant and Equipment* until the transfer date;
- Determine the fair value of the property at transfer date;
- Recognise any difference between the carrying amount of the property and the fair value of the property in the same way you would recognise a revaluation in terms of GRAP 17 on *Property, Plant and Equipment*,
 - If the fair value is lower than the carrying amount and property was carried at cost in terms of GRAP 17 on *Property, Plant and Equipment*, then recognise the decrease in surplus or deficit. For example, if the carrying amount of the property was R100 and the fair value is R60, then recognise the R40 in the surplus or deficit.
 - If the fair value is lower than the carrying amount and property was carried at revalued amount in terms of GRAP 17 on *Property, Plant and Equipment*, then recognise the decrease against the revaluation reserve and the excess in surplus or deficit. For example if the carrying amount of the property is R100, the fair value is R60 and the revaluation reserve for this property is R10, then recognise the R40 difference by first clearing the R10 in the revaluation reserve and then recognising the remaining R30 in surplus or deficit.
 - If the fair value is higher than the carrying amount, then the increase should be treated as follows:
 - It should first be recognised in surplus and deficit, to the extent that it reverses a previous impairment loss. The amount recognised in surplus or deficit should not

exceed the amount needed to restore the carrying amount to the carrying amount that the asset would have had, if an impairment loss had not been recognised.

- The remaining part of the increase is recognised directly in net assets as part of the revaluation reserve. For example, if the fair value of an asset exceeds its carrying amount by R128, and a previous impairment loss of R28 was recognised in surplus or deficit, the increase in the carrying amount should first be recognised as a reversal of the impairment loss in surplus and deficit to the extent of the impairment loss previously recognised. The remaining increase of R100 (R128 – R28) should be recognised directly in net assets as a revaluation reserve. When the investment property is subsequently disposed of, the revaluation surplus will be transferred to the accumulated surplus or deficit.

Also refer to *Example 17: Transfer to investment property carried at fair value*

When inventory is transferred to investment property (for example) the transaction date will be the commencement date of an operating lease. The fair value of the investment property at transaction date should be determined and any differences between the inventory carrying amount and the investment property fair value should be recognised in surplus or deficit.

Also refer to *Example 18: Transfer to investment property carried at fair value*

Chapter 2: Impairment of Assets

The Standards of GRAP defines an “impairment” as a loss in the future economic benefits or service potential of an asset, over and above the systematic recognition of the loss of the asset’s future economic benefits or service potential through depreciation or amortisation.

The Standards also guide how to recognise an impairment loss, when an entity should reverse this loss and what information related to impairment should be disclosed in the financial statements.

GRAP 21 on *Non-cash-generating Assets*

GRAP 26 on *Cash-generating Assets*

In scope:

- all assets accounted for in terms of GRAP 17 on *Property, Plant and Equipment*;
- investment property measured at cost in terms of GRAP 16 on *Investment Property*;
- biological assets related to an agricultural activity measured at cost in terms of GRAP 27 on *Agriculture*; and
- all intangible assets accounted for in terms of GRAP 31 on *Intangible Assets*;

Out of scope:

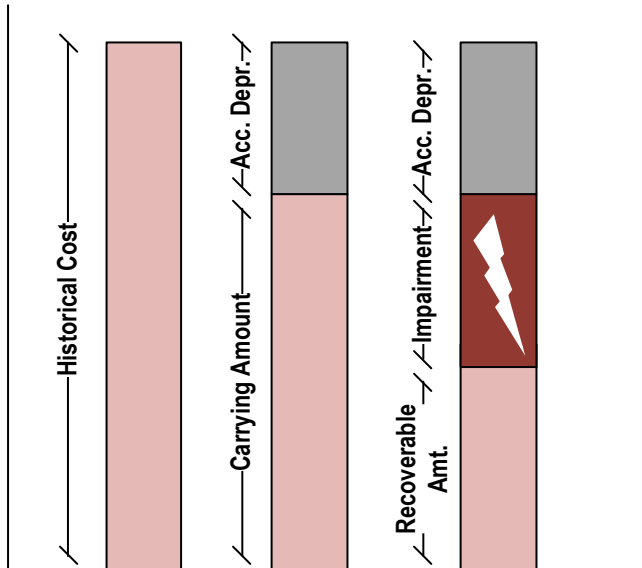
- investment property measured at fair value in terms of GRAP 16 on *Investment Property*;
- biological assets related to an agricultural activity measured at fair value in terms of GRAP 27 on *Agriculture*;
- all inventories accounted for in terms of GRAP 12 on *Inventories*; and
- assets arising from construction contracts accounted for in terms of GRAP 11 on *Construction Contracts*;

Fair value measurement is specific to an asset and accordingly takes into account specific characteristics that external parties would consider in making acquisition decisions. These include considerations on the location, condition and restrictions (if any) on the sale or use of the asset. The fair value of a damaged asset will for example be less than the fair value of a similar undamaged asset (or the value of the asset if it had not sustained the damage). Any loss of the asset’s future economic benefits or service potential is an inherent part in the workings and application of fair value.

Accordingly where an entity applies the fair value model in accordance with GRAP 16 and 27 in the subsequent measurement of its assets, it may disregard the impairment standards (GRAP 21 and 26).

Investments in controlled entities, associates and joint ventures are financial assets excluded from the scope of GRAP 104 on *Financial Instruments*. If such an asset is non-cash-generating it should be accounted for in accordance with GRAP 21.

Depreciation (Amortisation) and Impairment



Impairment of an asset refers to an abrupt decrease of the (present) value of economic benefits or service potential that it can generate due to damage, obsolescence etc. Impairment is recognized by reducing the carrying value of the asset.

While **depreciation** is the systematic allocation of an asset's cost to over its useful life.

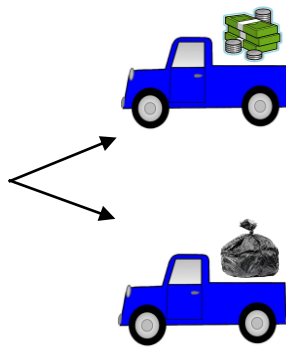
1. Designation of an asset as cash-generating or non-cash-generating



Cash-generating assets are assets used with the objective of generating a commercial return.

Non-cash-generating assets are assets other than cash-generating assets.

An asset is classified as cash-generating or non-cash-generating on initial recognition. This designation is based on how the entity intends on using the asset over its useful life.



Cash-generating → generate positive cash flows which are expected to be significantly higher than the cost of the asset(s)

Non-cash-generating → used to deliver services, or where positive cash flows are equal to or are marginally higher than the cost of the asset

Assets will generate a commercial return, and be cash-generating, when the entity intends to generate positive cash flows from the asset similar to a profit-orientated entity and therefore the cash flows generated should be significantly higher than the cost of the asset at acquisition.



When it is not clear what the overall objective of using the asset is, the asset is presumed to be used with the objective of delivering services (i.e. are non-cash-generating).

Subsequent to initial recognition and designation, an entity:

- need not annually demonstrate that the asset has achieved its original expectation; and
- redesignates an asset if there has been a change in the expected use of the asset.

2. Identifying an asset that may be impaired

An entity to assess, at each reporting date, whether there are any indications that an asset may be impaired. Only if an indication(s) exists is an entity required to estimate the recoverable amount or recoverable service amount of the asset and compare it to the asset's carrying amount.

To assess whether there is any indication that an asset may be impaired, the following indications are considered as a minimum:

External Sources of Information		
Non-cash-generating Assets	The demand or the need for services provided by the asset has ceased or is about to cease.	For example, the need for a service (provided by an asset) has ceased because the parties to whom the service was provided for has obtained its own asset to perform the service. Another example may be where the demand for the service has decreased due to adverse economic conditions.
	Significant long-term changes with an adverse effect on the entity have taken place during the period, or will take place in the near future, in the technological, legal or government policy environment in which the entity operates.	For example, sanctions have been imposed on the importing of a significant component of the asset, or a vehicle that does not meet new emission standards.
	The demand or the need for services (not necessarily a near cessation or cessation as indicated in point above) provided by the asset has taken a significant long-term decline.	For example, a number of countries have made use of services provided by certain assets of an entity, but during the current period, other entities also provided similar services to certain of those countries. As a result, the entity will be experiencing a significant long-term decline in the demand for the services provided by its assets.
Cash-generating Assets/Units	Significant changes with an adverse effect on the entity have taken place during the period, or will take place in the near future, in the technological, legal or government policy environment in which the entity operates.	For example, sanctions have been imposed on the exporting of the asset.
	Market value of the asset has declined significantly during the period (not as a result of passage of time of use).	For example, an asset sold to the public has received a bad reputation for not being reliable, as a result the market value of the asset has decreased significantly.
	Interest rates (such as market interest rates) have increased and those increases will most likely affect the discount rate used in calculating the asset's value in use and decrease the asset's recoverable amount significantly.	

Internal Sources of Information		
Cash- and Non-cash-generating assets	Physical damage or obsolescence of the asset.	For example, flood damage to a bridge.
	Significant long-term changes in the manner or extent to which an asset is used, or expected to be used during the period or in the near future, that will have an adverse effect on the entity.	These changes may include the asset becoming idle, plans to discontinue or restructure the operation to which an asset belongs, or plans to dispose of an asset before the previously expected date and reassessing the useful life of an asset as finite rather than indefinite.
	Entity has decided to halt the construction of the asset before it is complete or in a usable condition.	
	Internal reporting indicated that the performance of an asset is, or will be, significantly worse than expected. This evidence relates to the ability of the asset to perform (i.e. internal source), rather than a decline in the demand or need for services provided by the asset (i.e. external source).	Examples can include a significant increase in the cost of maintaining or operating the asset and significantly lower service or output levels than those originally budgeted and expected respectively.

This above list is not exhaustive and other indications of impairment should be considered.



Irrespective of whether there is any indication of impairment, an entity should also annually test the following assets for impairment:

- Intangible assets with an indefinite useful life; or
- An intangible asset not yet available for use, e.g. intangible assets that are still in the stage of development.

The annual test of impairment of intangible assets with indefinite useful lives or that are not yet available for use can be performed at any time of the year, but it should be performed at the same time every year. Different intangible assets can also be tested for impairment at different times.

When an intangible asset is recognised during the current reporting period, the impairment test should be done before the end of the current reporting period.

The most recent calculation of the recoverable amount or recoverable service amount of an intangible asset made in a preceding period may be used if, if and only if, all of the following are met:

- the intangible asset forms part of a cash-generating unit and the assets and liabilities making up that unit have not changed significantly since the most recent recoverable amount calculation;
- the most recent recoverable amount or recoverable service amount calculation exceeded the asset's carrying amount by a substantial margin; and
- the latest events and circumstances indicated that the probability that the current recoverable amount or recoverable service amount will be less than the asset's carrying amount is remote.

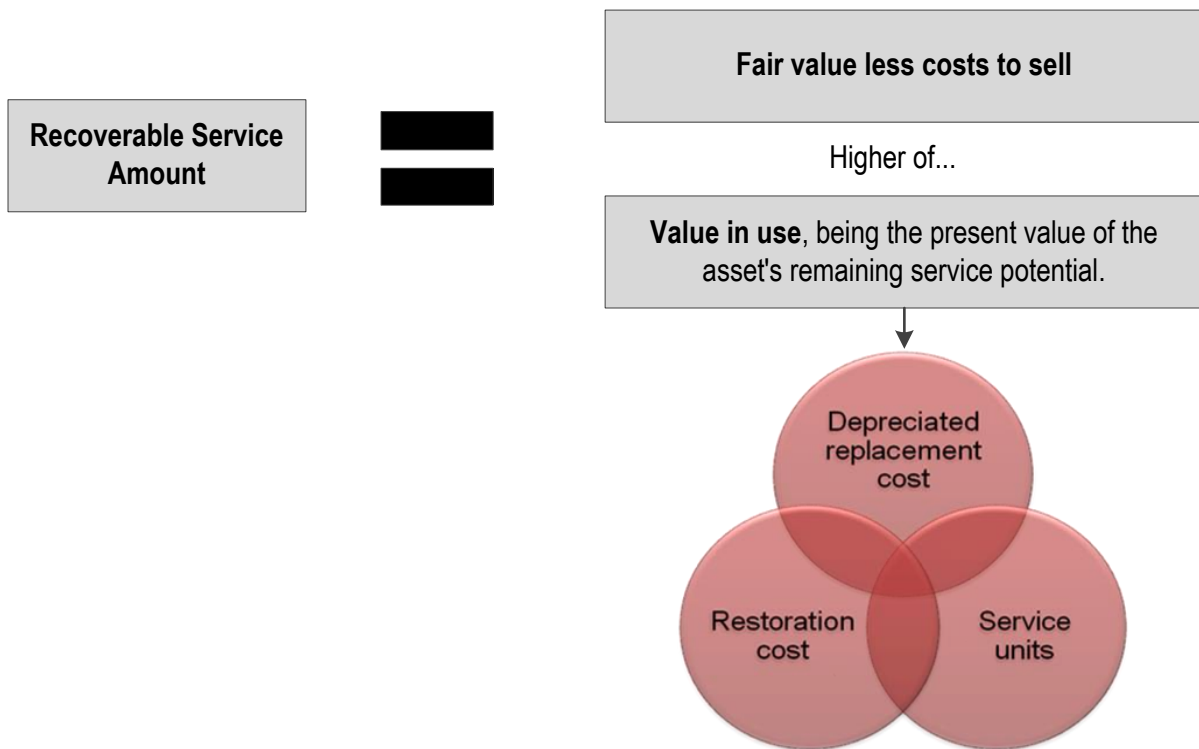
3. Measuring the recoverable amount or recoverable service amount



Recoverable service amount is the higher of a non-cash-generating asset's fair value less costs to sell and its value in use.

Recoverable amount of an asset or a cash-generating unit is the higher of its fair value less costs to sell and its value in use.

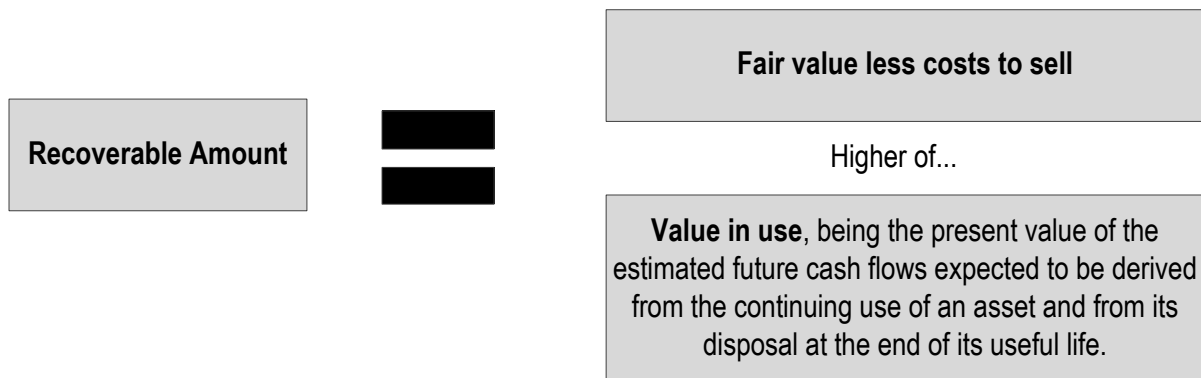
For non-cash generating assets....



The choice of the appropriate approach to measure the value in use of an asset depends on the availability of data and the nature of impairment.

For example, the restoration cost approach would be appropriate for physically damaged assets and the service units approach would be appropriate for assets that are impaired due to significant long-term changes in the technological, legal or government policy environment or in the extent or manner of use (including cessation or near cessation of demand).

The depreciated replacement cost approach would generally be appropriate for any of the above.

For cash-generating assets / units....

It is not necessary to determine both an asset's fair value less costs to sell and its value in use. If either of these amounts exceeds the asset's carrying amount, the asset is not impaired and it is not necessary to estimate the other amount.

Where it is not possible to determine the fair value less costs to sell, the entity uses the asset's value in use as its recoverable amount or recoverable service amount.

Similarly, if there is no reason to believe that an asset's value in use materially exceeds its fair value less costs to sell, the fair value less costs to sell may be used as the recoverable amount or recoverable service amount.

3.1 Fair value less costs to sell



Fair value less costs to sell is the amount obtainable from the sale of an asset in an arm's length transaction between knowledgeable, willing parties, less the costs of disposal.

Fair value less costs to sell is determined with reference to the best evidence available at the time of estimation such as:

- a price in a binding sale agreement;
- a bid price in an active market;
- a price the entity can obtain from an ordinary sale of the asset;

Example: Fair value less costs to sell

At 31 March 20X1 Entity A owns a building, with a carrying amount of R600, 000 for which there is an active market. The building can at this stage be disposed of to a knowledgeable and willing buyer for R660,000.

This building was purchased three years ago for R1,500,000 and is depreciated on a straight-line basis over fifty years. A building inspector has to inspect the building and issue a certificate of compliance with safety and building standards before the entity is allowed to advertise for the sale of the building.

The inspection and certificate costs R25,000 in total. The building will also have to be cleaned and minor damages to the building will have to be repaired to ensure that it is in good condition. A service provider charges R15,000 to clean and repair the building.

After the disposal of the building, the entity will incur costs to reallocate its operation and transfer some of its employees to another building, which will amount to R130,000.

The **fair value less costs to sell** is determined as follows:

Selling price in an active market	R660,000
Building inspector's fees	(R25,000)
Cleaning and repairing costs	(R15,000)
Costs of relocating its operation	nil
	R620,000

Note that termination benefits and costs associated with the reorganisation or reduction of an operation, after an asset has been disposed of, are not direct incremental costs to dispose of the asset and can therefore not be included.

3.2 Value in use



Value in use of a **non-cash-generating** asset is the present value of the asset's remaining service potential.

Value in use of a **cash-generating asset** is the present value of the estimated future cash flows expected to be derived from the continuing use of an asset and from its disposal at the end of its useful life

Value in use of a non-cash generating asset	Value in use of a cash-generating-asset
Refer to Example 19: Depreciated replacement cost approach	Refer to Example 22: Value in use of a cash-generating asset
Refer to Example 20: Restoration cost approach	
Refer to Example 21: Service units approach	

When determining the discount rate and future cash flows in relation to a cash-generating-asset the estimates of future cash flows should reflect assumptions that are consistent with the way the discount rate is determined. If this is not done, it could result in double-counting or ignoring the effect of some assumptions.

The cash inflow or outflow from financing activities (such as repayments of a loan to finance an asset) is excluded from estimates of future cash flows. Because the time value of money is considered by discounting the estimated future cash flows, these cash flows should exclude cash inflows or outflows from financing activities.

Income tax payments and receipts, where applicable, should be excluded from estimates of future cash flows. Because an entity is required to use a pre-tax discount rate, the future cash flows should also be determined on a pre-tax basis.

Estimates of future cash flows and the discount rate reflect consistent assumptions about price increases attributable to general inflation. Therefore, if the discount rate includes the effect of price increases attributable to general inflation, future cash flows also include the effect - estimated in nominal terms (i.e. nominal value). If the discount rate excludes the effect of price increases attributable to general inflation, future cash flows also excludes the effect - estimated in real terms (i.e. nominal value less effect of inflation) (but include future specific price increases or decreases).

The following are **included** in the estimated future cash outflows:

- Projections for the day-to-day servicing of the asset; and
- Future overheads that can be attributed directly, or allocated on a reasonable and consistent basis, to the use of the asset.

The following are **not included** in the estimates of future cash flows:

- Cash inflows from assets generating cash inflows that are largely independent of the cash inflows from the asset subject to impairment testing (for example, receivables); and
- Cash outflows that relate to obligations that have been recognised as liabilities (for example, payables, provisions or pensions).

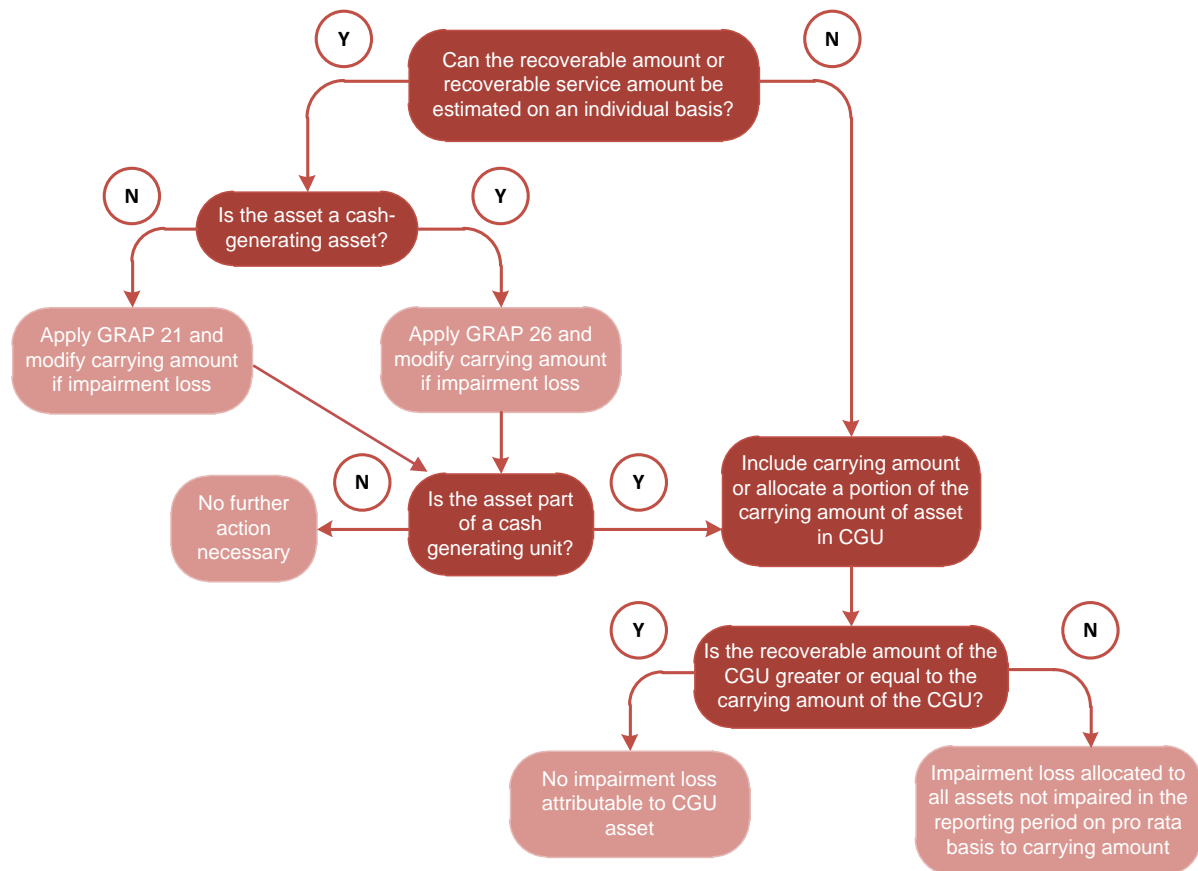
3.3 Cash-generating units



A **cash-generating unit** is the smallest identifiable group of assets used with the objective of generating a commercial return that generates cash inflows from continuing use that are largely independent of the cash inflows from other assets or groups of assets. Commercial return means that positive cash flows are expected to be significantly higher than the cost of the asset.

Where possible, the recoverable or recoverable service amount should be estimated for an individual asset, if it is not possible, an entity should determine the recoverable amount of the cash-generating unit to which the cash-generating asset belongs.

The following flowchart illustrates how and when to identify cash-generating units (CGUs).



4. Recognising an impairment



An **impairment** is a loss in the future economic benefits or service potential of an asset, over and above the systematic recognition of the loss of the asset's future economic benefits or service potential through depreciation

4.1 Impairment of individual assets

An impairment loss is only recognised when the recoverable amount or recoverable service amount of an asset is less than its carrying amount and is measured as the amount by which the carrying amount of an asset exceeds its recoverable or recoverable service amount.

Example: Recognising an impairment

Entity E owns a water purification system that has a carrying amount of R250,000. The estimated fair value less costs to sell is R220,000 and the estimated value in use is R230,000. The recoverable amount is therefore R230,000 as it is the higher of the two. The asset is impaired as the carrying amount exceeds the recoverable amount and consequently an impairment loss of R20,000 should be recognised.

The journal entry is as follows:

	Debit	Credit
	R	R
Impairment loss	20,000	
Accumulated depreciation		20,000
Recognising impairment on water purification system		

Subsequent to the recognition of an impairment loss on an asset, the related depreciation or amortisation charge should be adjusted for future periods. This is to ensure that the asset's remaining carrying amount (less any residual value) is correctly allocated over its remaining useful life – ensuring that the depreciation / amortisation charge is still reflective of the manner in which the remaining service potential of the asset is used over its useful life.

An impairment loss is recognised immediately in surplus or deficit, except where an asset is carried at a revalued amount in accordance with another Standard of GRAP (for example GRAP 17 on Property, Plant and Equipment, GRAP 31 on Intangible Assets or GRAP 103 on Heritage Assets). Such an impairment loss is treated as a revaluation decrease – i.e. is recognised in the revaluation reserve to the extent of a revaluation surplus available (except in the case of a reversal of a previous impairment loss recognised in surplus or deficit, in which case only the excess will be recognised in the revaluation reserve).

Where required by another Standard of GRAP, a liability can be recognised when the estimated impairment loss of an asset exceeds its carrying amount. This liability would typically be recognised as a provision and will only arise in circumstances where the entity is obligated by legislation or a contractual agreement to incur the costs that resulted in the impairment loss exceeding the carrying amount of the asset.

Example: Impairment loss on asset carried at cost

At the beginning of year 1, Entity E acquires an electricity main with an estimated useful life of 10 years at a cost of R200,000. Assume that the residual value of the electricity main is nil. At the end of year 3, there was an indication that the electricity main is impaired due to poor performance of the asset and the entity subsequently determined the recoverable amount of the asset.

The calculations and relevant information are as follows:

Recoverable amount	R120,000
Carrying amount at end of year 3	R140,000 (R200,000 x 7/10)
Impairment loss recognised	R20,000 (R140,000 – R120,000)
New depreciation based on new carrying amount will therefore be	R17,143 (R120,000 / 7)

The journal entry to recognise the impairment loss will be follows:

Year 3	Debit	Credit
	R	R
Impairment loss	20,000	
Accumulated depreciation		20,000
Recognising impairment loss on electricity main		

Example: Impairment loss on asset carried at revalued amount

Entity E acquired a machine with an estimated useful life of 10 years, at the beginning of year 1 at a cost of R250,000. It is the entity's policy to revalue their assets every second year. The entity uses the machine to produce goods that are exported to countries in Africa. The entity chooses the restatement method where both the gross carrying amount of the asset and the accumulated depreciation is restated upon revaluation of an asset.

The calculations and relevant information are as follows:

Carrying amount at beginning of year 3	R200,000 (R250,000 x 8/10)
Revalued amount at beginning of year 3	R220,000
Revaluation surplus at beginning of year 3	R20,000 (R220,000 – R200,000)
New depreciation based on revalued carrying amount will therefore be	R27,500 (R220,000 / 8)

The journal entry to recognise the increase in the carrying amount due to revaluation will be as follows:

Year 3	Debit	Credit
	R	R
Machinery (20,000 x 10/8)	25,000	
Accumulated depreciation (R25,000 – R20,000)		5,000
Revaluation surplus		20,000
Recognising revaluation surplus on machinery		

At the end of year 4, some of the governments in African countries imposed sanctions on the importing of goods from South Africa that are produced by these machines, and therefore there is an indication that the machine is impaired as future net cash flows may decrease significantly. Consequently the recoverable amount of the asset was estimated in order to test for impairment. The calculations and relevant information are as follows:

Recoverable amount	R120,000
Revalued carrying amount at end of year 4	R165,000 (R220,000 x 6/8)
Impairment loss recognised	R45,000 (R165,000 – R120,000)
Impairment loss to be recognised in net assets limited to revaluation surplus (i.e. R20,000) available, remaining (i.e. R25,000) to be recognised in surplus or deficit.	
New depreciation based on new carrying amount will therefore be	R20,000 (R120,000 / 6)

The journal entry to recognise the impairment loss will be as follows:

Year 4	Debit	Credit
	R	R
Revaluation surplus (net assets)	20,000	
Impairment loss (surplus or deficit)	25,000	
Accumulated depreciation	30,000	
Machinery (45,000 x 10/6)		75,000
Recognising impairment loss on machinery		

4.2 Impairment of a cash-generating unit

An impairment loss of a cash-generating unit is allocated to decrease the carrying amount of the assets of the unit on a pro rata basis, based on the carrying amount of each asset in the unit.

When allocating the impairment loss, the carrying amount should be the highest of:

- its fair value less cost to sell; or
- value in use; or
- zero.

Certain cash-generating units may contain non-cash-generating assets. Where such an asset is impaired, a proportion of the carrying amount of that non-cash-generating asset should be allocated to the carrying amount of the cash-generating unit prior to estimation of recoverable amount of the cash-generating unit.

Example: Recognising an impairment loss for a cash-generating unit

Entity CGU has a power station which consists of 3 generators. Each generator is separately identifiable and works independently from the other assets of the entity. However, the generators do not generate cash inflows independently.

The smallest identifiable group of assets that includes the assets and that generates cash inflows that are largely independent of the cash inflows from other assets is the power station. Therefore the power station will be the cash-generating unit.

Generator 1 and 2 were constructed by Entity CGU and generator 3 was imported from Germany. All three generators were acquired two years ago.

Impairment indicators were identified in respect of the power station and consequently it was determined that the carrying value of the power station as a whole exceeds the recoverable amount by R100,000. The R100,000 impairment loss has to be allocated to the individual assets in the power station pro-rata based on their respective carrying values.

The total carrying amounts of the generators (before impairment) are as follows:

Generator 1	R450,000
Generator 2	R450,000
Generator 3	R600,000

The total carrying amount of the power station (before impairment) is therefore R1,500,000.

The impairment loss of R100,000 will be allocated on the following basis (pro rata based on the carrying amounts of the related assets):

Generator 1 (R100,000 impairment x R450,000 / R1,500,000)	R 30,000
Generator 2 (R100,000 impairment x R450,000 / R1,500,000)	R30,000
Generator 3 (R100,000 impairment x R600,000 / R1,500,000)	R40,000
Total impairment loss	R100,000

5. Reversal of an Impairment Loss

At each reporting period an entity should assess whether the circumstances (or indications), which required an asset to be impaired in prior periods, still exists. If it is found, when the assessment is performed, that the circumstances which resulted in the initial impairment of the asset no longer exists, then the entity is required to recalculate the recoverable amount or recoverable service amount of the previously impaired asset, to determine the extent to which the previously recognised impairment loss can be reversed.

The assessment of the circumstances should also consider the same factors that were initially considered for the impairment of the asset in the first place, but with an opposite effect on the asset. Accordingly, only when there is a positive change in the estimates used to determine the asset's recoverable amount or recoverable service amount since the last impairment loss was recognised, is an entity allowed to reverse the impairment loss previously recognised.

For non-cash-generating assets.....	For cash-generating assets....
<p>There must have been a change in either the fair value less costs to sell of the asset or the components of its value in use that resulted in an increase in the recoverable service amount. Such as:</p> <ul style="list-style-type: none"> • When the basis on which recoverable service amount was calculated has changed. For example, the change in recoverable service amount could be due to the fact that at the time of determining the recoverable service amount, fair value less costs to sell could not be determined and value in use was used to determine the recoverable service amount by using management's estimates. Subsequently, fair value can be determined since a market exists and it is more prudent to use it; or • Where the recoverable service amount was based on value in use: estimate of the components of value in use changed. For example, the entity chooses to use the depreciated replacement cost approach to determine an asset's value in use. In a specific period the asset was physically damaged and consequently the restoration cost approach was used to determine the asset's value in use for that period; or • Where the recoverable service amount was based on fair value less costs to sell: estimate of the components of fair value less costs to sell changed. For example, the asset's market value increased significantly during the period. Thus the fair value used in determining the fair value less costs to sell changed. 	<p>There must have been a change in either the fair value less costs to sell of the asset, its expected future cash flows or the discount rate that resulted in an increase in the recoverable amount. An impairment loss cannot be reversed simply because the present value of future cash flows increases over time. As such:</p> <ul style="list-style-type: none"> • The basis on which recoverable amount calculated changed. For example, the change in recoverable amount could be due to the fact that at the time of determining the recoverable amount, fair value less costs to sell could not be determined and value in use was used to determine the recoverable amount by using management's estimates. Subsequently, fair value can be determined since a market exists and it is more prudent to use it; or • Where the recoverable amount was based on value in use: a change in any of the elements used in determining the value in use. For example, management estimated that the future cash flows expected from the asset will increase due to an increase in the demand for the service which the asset provides. Thus the cash flows used in determining the value in use changed; or • Where the recoverable amount was based on fair value less costs to sell: the estimate of the fair value less costs to sell changed. For example, the asset's market value increased significantly during the period. Thus the fair value used in determining the fair value less costs to sell changed.

To assess whether there is any indication that an asset may no longer be impaired, the following indicators are considered as a minimum:

External Sources of Information		
Non-cash-generating Assets	<p>The demand or the need for services provided by the asset has resurged (rose again).</p>	<p>For example, the need for a service (provided by an asset) has increased, because after the parties discontinued the service, they were not very pleased with the service provided by another party and therefore decided to regain the services from the entity. Another example may be, the demand for the service has increased due to the reversal of adverse economic conditions in the country</p>
	<p>Significant long-term changes with a favourable effect on the entity have taken place during the period, or will take place in the near future, in the technological, legal or government policy environment in which the entity operates.</p>	<p>For example, sanctions previously imposed on the importing of a significant component of the asset have been lifted</p>
	<p>The demand or the need for services (not necessarily a near cessation or cessation as indicated in point above) provided by the asset has taken a significant long-term decline.</p>	<p>For example, a number of countries have made use of services provided by certain assets of an entity, but during the current period, other entities also provided similar services to certain of those countries.</p> <p>As a result, the entity will be experiencing a significant long-term decline in the demand for the services provided by its assets.</p>
Cash-generating Assets/Units	<p>Significant changes with a favourable effect on the entity have taken place during the period, or will take place in the near future, in the technological, legal or government policy environment in which the entity operates or in the market to which the asset is dedicated.</p>	<p>For example, sanctions previously imposed on the exporting of the asset have been lifted.</p>
	<p>Market value of the asset has increased significantly during the period</p>	<p>For example, an asset sold to the public has received a bad reputation in the previous year for not being reliable, but management has rectified the problems in the current period and to date no evidence was found of any client dissatisfaction</p>
	<p>Interest rates (such as market interest rates) have decreased and those decreases will most likely affect the discount rate used in calculating the asset's value in use and increase the asset's recoverable amount significantly</p>	

Internal Sources of Information	
Cash- and Non-cash-generating assets	Evidence is available that indicate that the economic performance / service potential of asset has been restored following physical damage to the asset.
	Significant long-term changes in the extent to which, or manner in which, an asset is used or expected to be used that have a favourable effect on the entity, have taken place during the period or are expected to take place in the near future.
	Entity has decided to resume the construction of the asset that was previously halted before it was completed or in a usable condition.
	Internal reporting indicated that the economic performance / service potential of an asset is, or will be, significantly better than expected.

5.1 Reversal of an impairment on individual assets

If there are indications that an individual asset previously impaired is no longer impaired, the reversal of the impairment loss is recognised in surplus or deficit, unless the asset is carried at revalued amount in accordance with another standard of GRAP (for example GRAP 17 on Property, Plant and Equipment, GRAP 31 on Intangible Assets or GRAP 103 on Heritage Assets).

Such a reversal of an impairment loss should be treated as a revaluation increase – i.e. is recognised in the revaluation reserve (unless it is first recognised in surplus or deficit to reverse a previous impairment loss recognised in surplus or deficit, in which case, only any excess will be recognised in the revaluation reserve).

Where the carrying amount of an asset increased due to the reversal of an impairment loss, the increased carrying amount should not exceed what the carrying amount of the asset would have been if no impairment loss had been recognised in prior periods.



When the asset is carried at revalued amount, any increase above the limit (carrying amount after reversal is limited to what the carrying amount would have been), is seen as a revaluation. Therefore in the case of a reversal of an impairment loss previously recognised for assets carried under the revaluation model, the revaluation increase above the amount previously recognised as an impairment loss is recognised in the revaluation reserve.

Subsequent to the reversal of an impairment loss, the future depreciation or amortisation charge for the assets should be adjusted to allocate the asset's revised carrying amount, less its residual value on a systematic basis over its remaining useful life.

Example: Impairment loss on asset carried at cost

Assume the same information as in the example an impairment loss on asset carried at cost.

At the end of year 5, major repairs were incurred to improve the asset's performance. Thus, there was indication that the impairment loss might be reversed, and consequently the entity re-estimated the recoverable amount.

The calculations and relevant information are as follows:

Recoverable amount	R110,000
Carrying amount at end of year 5	R85,714 (R120,000 x 5/7)
What the carrying amount would have been if no impairment loss was recognised	R100,000 (R200,000 x 5/10)
Impairment loss reversal limited to what the carrying amount would have been had no impairment loss been previously recognised	R14,286 (R100,000 - R85,714)
New depreciation based on new carrying amount will therefore be	R20,000(R100,000 / 5)

As the recoverable amount is more than the carrying amount, the impairment loss will be reversed to increase the carrying amount of the asset, but the increase will be limited to what the carrying amount of the machine would have been if no impairment loss was recognised.

The journal entry to recognise the reversal of impairment loss will be as follows:

Year 5	Debit	Credit
	R	R
Accumulated depreciation	14,286	
Reversal of impairment loss (surplus or deficit)		14,286
Reversal of impairment loss on electricity main		

Example: Reversal of impairment loss on asset carried at revalued amount

Assume the same information as in example on the impairment loss on asset carried at revalued amount. At the end of year 5, due to negotiations with some of the governments in the African countries, the sanctions imposed by these countries on the importing goods of from South Africa were lifted. This resulted in an increase in the demand for the goods produces by the machine of Entity E. Thus, there was an indication that the impairment loss previously recognised might be reversed, and consequently the entity re-estimated the recoverable amount.

The calculations and relevant information are as follows:

Recoverable amount	R150,000
Revalued carrying amount at end of year 5	R100,000 (R120,000 x 5/6)
Revaluation increase	R50,000
Portion of revaluation decrease previously recognised in surplus or deficit	R25,000
New depreciation based on new carrying amount will therefore be	R30,000 (R150,000 / 5)

There is no need to apply the limit, because in the case of assets subject to a revaluation any increase over the limit is treated as a revaluation, and will therefore be recognised in the revaluation surplus. Note however that the revaluation increase should firstly be recognised in surplus or deficit to the extent that it reverses a previous impairment loss that was recognised in surplus or deficit. Any excess should then be recognised in the revaluation surplus.

The journal entry to recognise the reversal of impairment loss will be as follows:

Year 5	Debit	Credit
	R	R
Machinery (50,000 x 10/5)	100,000	
Accumulated depreciation		50,000
Reversal of impairment loss (surplus or deficit)		25,000
Revaluation surplus (net assets)		25,000
Recognising the reversal of impairment loss on machinery		

Previously, the impairment loss of R45,000, R20,000 was recognised in net assets (in the revaluation surplus) and the difference of R25,000 was recognised in surplus or deficit. Therefore the reversal of the previous impairment loss should firstly be used to reverse the revaluation decrease (the impairment loss) recognised in surplus or deficit and the remaining amount, R25,000 will be recognised in net assets.

Example: Reversal of an impairment loss for cash-generating unit

Assume the same information as in the example on impairment loss for cash-generating unit.

At end of the current period, there was indication that the impairment loss previously recognised might be reversed, and consequently Entity CGU re-estimated the recoverable amount of the power station.

Based on the re-estimation, the recoverable amount of the power station exceeds the carrying amount of the cash-generating unit by R120,000. Therefore the impairment losses previously recognised will have to be reversed.

The reversal of impairment loss should also be allocated pro rata to the assets of the cash-generating unit based on the carrying amounts of those assets. The carrying amounts of the assets are as follows at reporting date:

Generator 1	R252,000
Generator 2	R252,000
Generator 3	R396,000
Total	R900,000

The reversal of the impairment loss of R120,000 should therefore be allocated in the following manner:

Generator 1	$(R252,000 / R900,000 \times R120,000)$	R33,600
Generator 2	$(R252,000 / R900,000 \times R120,000)$	R33,600
Generator 3	$(R396,000 / R900,000 \times R120,000)$	R52,800
Total		R120,000

This will increase the carrying amounts to:

Generator 1	$(R252,000 + R33,600)$	R285,600
Generator 2	$(R252,000 + R33,600)$	R285,600
Generator 3	$(R396,000 + R52,800)$	R444,800
Total		R1,000,000

Assume that if no impairment loss had been recognised previously, the carrying amounts would have been as follows:

Generator 1	R300,000
Generator 2	R300,000
Generator 3	R400,000
Total	R1,000,000

Therefore the increased carrying amount of generator 3 will be limited to R400,000 which means that the excess, i.e. R44,800 (R444,800 – R400,000) should be allocated to the other assets in the cash-generating unit on a pro rata basis as follows:

Generator 1	(R285,600 + R22,400)	R308,000
Generator 2	(R285,600 + R22,400)	R308,000

The respective allocation of R22,400 to generator 1 and 2 results in the carrying amounts of both being more than the limit of R300,000 by R8,000. As a result, the remainder of R16,000 in total (R8,000 for each generator) will not be recognised as a reversal.

The journal entry to account for the reversal of the previous impairment loss for the cash generating unit will be as follows:

	Debit	Credit
	R	R
Accumulated depreciation – generator 1	14,400	
Accumulated depreciation – generator 2	14,400	
Accumulated depreciation – generator 3 (R400,000 – R396,000)	4,000	
Impairment loss reversed (surplus or deficit)		32,800
Reversal of impairment loss on assets in cash generating unit		

Chapter 3: Property, Plant and Equipment

1. Definition and Identification of Property, Plant and Equipment



Property, plant and equipment are tangible items that:

- are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes; and
- are expected to be used during more than one reporting period.

1.1 Land and buildings

Entities often encounter difficulties when deciding which standard of GRAP should be applied to land and buildings owned by an entity.

Examples of property that meet the definition of property, plant and equipment and which should be accounted for in accordance with GRAP 17:

- Property that is owner-occupied, for example, a building that is occupied by the entity for administrative purposes or to supply goods and services;
- Property, i.e. housing, rented to employees, regardless of whether the rent is market related or not; and
- Property held to provide a social service and which also generates cash inflows, for example, an entity rents out one of its properties (buildings) to other parties on an ad-hoc basis. The rental revenue received is incidental to the purpose for which the property is held; therefore it is treated as property, plant and equipment and not investment property.

1.2 Software

Computer software can be classified as either a tangible asset, i.e. property, plant and equipment or an intangible asset, depending on materiality and/or the level of integration with the related hardware.



Where software is an integral part of the related hardware, i.e. the hardware cannot operate without the software, the software will be treated as property, plant and equipment together with the related hardware already recognised, which will normally be computer equipment.

Where the software is not an integral part of the related hardware, i.e. the hardware can operate without the software, an entity determines whether the cost meets the definition and recognition criteria of an intangible asset and if met, capitalise the cost as an intangible asset.

For example, the operating system of a computer (e.g. Microsoft Windows, Linux), without which the computer cannot operate, is an integral part of the related hardware and is therefore treated as property, plant and equipment. When the software is not an integral part of the related hardware, computer software is treated as an intangible asset.

Examples of software that may be capitalised as intangible assets are Microsoft Office, Excel or Word or various accounting software packages, such as E-Venus, Pastel or SAP. In these cases the computer can operate without the software.

Example: Capitalising software as property, plant and equipment

A public entity in the health sector purchased a computer-operated machine that will automate the sample testing performed in the entity's laboratory. After a verification process has been followed, the results obtained from the machine will be more reliable and will be available in a fraction of the time than with hand-testing.

The invoice obtained from the supplier split the cost as follows:

Laboratory equipment	R21,000,000
Software	R2,500,000
Total payable	R23,500,000

The entity subsequently has to decide whether to capitalise the software cost as a separate intangible asset, or along with the cost of the machine.

To make this decision the entity should consider the level of integration with the machinery. The machinery cannot operate without that specific software and without that software the machine will be rendered completely useless.

The software is therefore an integral part of the machine and should consequently be treated as property, plant and equipment.






1.3 Spare parts, stand-by and servicing equipment

Item such as spare parts, stand-by equipment and servicing equipment are recognised in accordance with GRAP 17, when they meet the definition of property, plant and equipment. Otherwise such items are classified as inventory in accordance with GRAP 12 on *Inventories*.

1.4 Safety and environmental equipment

Assets that were acquired for safety and environmental purpose which may not necessarily embody economic benefits or service potential directly, but may be necessary for the entity to derive economic benefits or service potential from other assets and will therefore qualify for recognition in terms of GRAP 17.

2. Accounting for Property, Plant and Equipment

<p>Initial recognition</p>	<p>As discussed in Chapter 1 on Recognition of Assets, an item of Property, Plant and Equipment can only be recognised if all of the following are met:</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>A past event has occurred, resulting in the entity having control over the asset</p> </div> <div style="text-align: center;">  <p>It is probable that the related economic benefit or service potential of the asset will flow to the entity</p> </div> <div style="text-align: center;">  <p>Cost or fair value can be measured reliably</p> </div> </div>
<p>Initial measurement</p>	<p>Refer to Chapter 1 on Measurement on initial recognition</p>
<p>Subsequent measurement</p>	<p>An entity should choose either the cost model or the revaluation model for subsequent measurement of property, plant and equipment.</p> <p>Under the cost model, assets are carried at cost less any accumulated depreciation³ and any accumulated impairment losses subsequent to recognition.</p> <div style="text-align: center;">  </div> <p>Those assets whose fair value can be measured reliably are carried at revalued amount less any accumulated depreciation² and any accumulated impairment losses (the revaluation model). The revalued amount is the fair value at the date of the revaluation.</p> <div style="text-align: center;">  </div> <p>Refer to Chapter 1 on Subsequent Measurement for guidance on the application of the cost and revaluation model.</p> <p>Refer to Chapter 2: Impairment of Assets for guidance on the recognition and measurement and reversal of impairment losses.</p>
<p>Derecognition</p>	<p>Refer to Chapter 1 and the sections Derecognition of Assets and Transfer of Assets</p>

³ With the exception of Land which is not depreciated.

Chapter 4: Investment Property

1. Definition and Identification of Investment Property



Investment property is:

- land or a building (or part of a building);
- held by the owner or by the lessee under a finance lease;
- to earn rentals or for capital appreciation or both, rather than for:
 - use in the production or supply of goods or services or for administrative purposes; or
 - sale in the ordinary course of operations.

1.1 Land and buildings

What distinguishes investment property from other land and buildings is that investment property generates cash flows largely independent from other assets held by an entity. When a property is used in the production or delivering of goods or services or for administrative purposes then it is called owner-occupied property. Owner-occupied property is recognised in accordance with GRAP 17 on Property, Plant and Equipment.

Example: Owner-occupied property

An entity has three buildings which are used as follows:

- the first building is a warehouse which is used to store the entity's inventory;
- the second building is used as the offices of the entity; and
- the third building is rented out to another entity for a monthly rental income. It is not within the entity's mandate to hold and lease property.

First building → The first building is held to help the entity deliver goods and the cash flows generated by the entity is largely due to the sale of inventory rather than from the building itself. The first building should be recognised as property, plant and equipment in accordance with GRAP 17 on Property, Plant and Equipment.

Second building → The second building is held by the entity for administrative purposes and is specifically excluded from the definition of investment property. The second building should be recognised as property, plant and equipment in accordance with GRAP 17 on Property, Plant and Equipment.

Third building → The third building is held exclusively to earn rentals and this property is specifically included in the definition of investment property. The third building should be recognised and measured in terms of GRAP 16.

There are instances where a portion of a property is held to earn rentals and another portion is used by the entity itself for administrative purposes or for delivering goods and services. In determining whether or not to recognise this property as investment property or property, plant and equipment, the entity needs to determine if the portions can be sold separately. This is done in order to obtain the fair value of each portion of the property to be classified as property, plant and equipment and investment property.

If they can be sold separately, then the portion used to earn rentals is recognised as investment property and the portion used by the entity in its normal course of business is recognised as property, plant and equipment.

If the portions cannot be sold separately and therefore the fair value of each portion cannot be determined reliably, then the entity recognises the property as investment property, if an insignificant portion of the property is used by the entity itself. The opposite is also true, if an insignificant portion of the property is used to earn rentals, the property is recognised as property, plant and equipment.

Example: One property used as owner-occupied property and to earn rentals

An Entity owns a building of 750 square meters. The building consists of four floors of which the bottom floor of 210 square meters are offices used by the entity and the top three floors consists of 9 apartments which are being rented out to unrelated tenants.

In this example the entity has one property with a portion being owner-occupied and a portion being used to earn rentals. The building consists of 10 sectional title units, which implies that the entity can separately sell each unit. Because the entity can separately sell each sectional title unit the entity would recognise the portion of the building used to earn rentals as investment property and the portion used by the entity will be recognised as property, plant and equipment.



Rent earned does not have to be market related for a property to be classified as investment property.

Accordingly, it is possible for an entity to classify an investment property as a non-cash-generating asset (refer to **Chapter 2: Impairment of Assets**)

Example: One property is used as owner-occupied property and to earn rentals

An entity owns a property which consists of two adjoining warehouses. The entity uses the smaller warehouse of 100 square meters to store inventory and the larger warehouse of 700 square meters is being rented out.

In this example the entity has one property with a portion being owner-occupied and a portion being used to earn rentals. It is not possible for the entity to separately sell these warehouses.

Before the entity can recognise the property as investment property it first needs to determine if the owner-occupied portion of the warehouse is insignificant.

Total size of the warehouses = 800 square meters

Owner-occupied portion of total size = 12.5% (100 sqm /800sqm)

Assume that based on the asset management policy of the entity, 18.75% is considered insignificant; therefore the entity will recognise the total property as an investment property.



Determining whether or not the owner-occupied portion is insignificant is a judgement that should be made by management.

To ensure consistent application, it is recommended that management include the criteria for determining whether an owner-occupied portion is considered significant in their asset management policy. These criteria should be applied consistently when evaluating all properties.

The following are examples of investment property and could assist in identifying whether an entity's property should be classified as investment property:

- Land or buildings held for long-term capital appreciation (long-term increases in value) rather than for short-term profit making, for example a vacant stand held by the entity to benefit from future increases in its value;
- A building owned by the entity and leased out to third parties under one or more operating leases;
- Vacant land owned by the entity which will be leased out to third parties under one or more operating leases, for example vacant farm land which will be leased out as soon as the entity has found a lessee;
- Land held for a current undeterminable future use, e.g. the entity still has to decide if it will be sold in the future or occupied by the entity at a later stage; and
- Property being constructed or developed for future use as investment property.

The following examples of property fall outside the scope of GRAP 16 and are not investment property:

- Property being constructed on behalf of third parties (see GRAP 11 on Construction Contracts);

- Property leased to another entity under a finance lease (see GRAP 13 on Leases);
- Property held for sale in ordinary course of operations (see GRAP 12 on Inventories);
- Property being constructed or developed for future sale in the ordinary course of operations (see GRAP 12 on Inventories);
- Owner-occupied property (see GRAP 17 on Property, Plant and Equipment); and
- Property held to provide goods and services as part of their mandate which also generate cash inflows. For example, an entity may hold large quantities of housing stock to provide housing to low income families. In this situation, the property is held for the purpose of providing housing services rather than for rental or capital appreciation.

1.2 Investment property in the consolidated financial statements

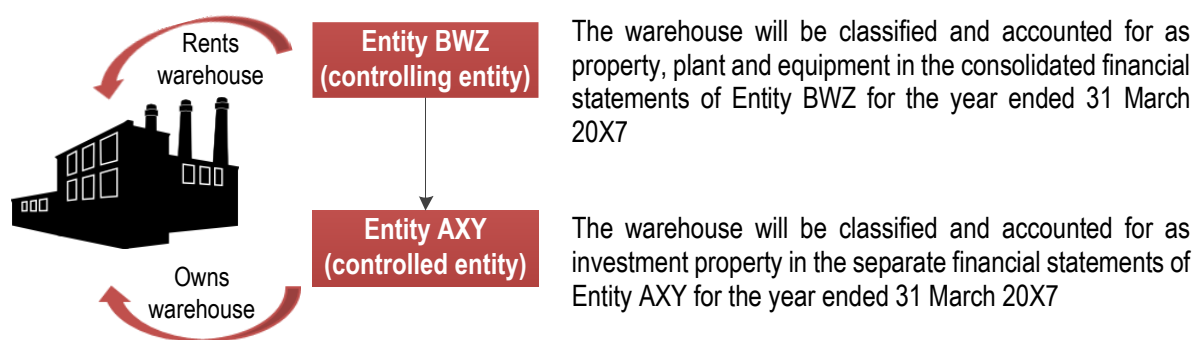
In some instances an entity owns a property that is leased to, and occupied by, its controlling entity. In the separate accounting records of the entity, this property is recognised as investment property if it is held to earn rentals or for capital appreciation, however, this property will not qualify as investment property in the consolidated financial statements, because the property is owner-occupied from the perspective of the group as a whole.

Example: Classification of property

Entity AXY built a warehouse at a cost of R8 million on land acquired at a cost of R2 million and it was available for use on 31 March 20X6.

During the period ending on 31 March 20X7, rental income of R2 million was earned from an agricultural research entity BWZ for rental of the warehouse. Entity AXY is a controlled entity of Entity BWZ.

The classification of the warehouse is as follows:

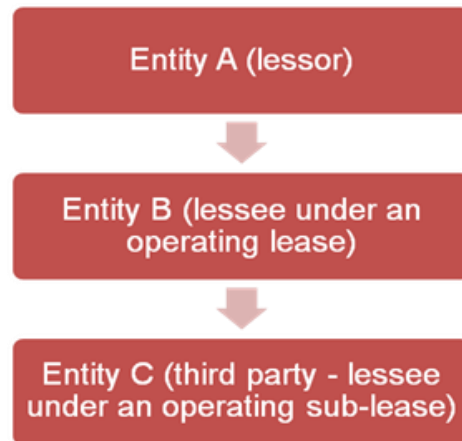


1.3 Properties held under operating leases

A property interest that is held by a lessee under an operating lease may be classified and accounted for as investment property, but only if:

- The property would otherwise meet the definition of investment property; and
- The lessee uses the fair value model to account for the interest (and not the underlying property).

Consider the following as an example:







Entity B has a property interest as the property it is leasing is leased to another party from which it receives rental income. Entity B has an option to recognise the interest as an investment property if the property meets the definition of an investment property and the entity uses the fair value model. Assume these two criteria are met.

Consequently, Entity B will recognise the property interest at its fair value and the credit entry will be to recognise a finance lease obligation. Thus, the property interest is accounted for as a finance lease and not an operating lease. Refer to the accounting guideline on GRAP 13 for more detail on accounting for leases.

This classification alternative is available on a property-by-property basis. However, once this classification alternative is selected for one such property interest held under an operating lease, all property classified as investment property should be accounted for using the fair value model.

2. Accounting For Investment Property

Initial recognition	<p>As discussed in Chapter 1 on Recognition of Assets, an Investment Property can only be recognised if all of the following are met:</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <div style="border: 1px solid black; background-color: #800000; color: white; padding: 5px; width: 150px;"> A past event has occurred, resulting in the entity having control over the asset </div> </div> <div style="text-align: center;">  <div style="border: 1px solid black; background-color: #800000; color: white; padding: 5px; width: 150px;"> It is probable that the related economic benefit or service potential of the asset will flow to the entity </div> </div> <div style="text-align: center;">  <div style="border: 1px solid black; background-color: #800000; color: white; padding: 5px; width: 150px;"> Cost or fair value can be measured reliably </div> </div> </div>
Initial measurement	Refer to Chapter 1 on Measurement on initial recognition
Subsequent measurement	<p>Subsequent to the initial recognition of the investment property, the entity can choose to value its investment property according to either the fair value model or the cost model. This is an accounting policy choice and the model chosen should be applied to all investment properties.</p> <p>Under the cost model, assets are carried at cost less any accumulated depreciation⁴ and any accumulated impairment losses subsequent to recognition.</p> <div style="text-align: center; margin: 10px 0;">  </div> <p>When an entity chooses the fair value model it should measure all of its investment property at fair value (including investment property under construction), unless it is unable to determine the fair value of a specific property on a continuous basis. The valued amount is the fair value at the date of the valuation.</p> <p>Refer to Chapter 1 on Subsequent Measurement for guidance on the application of the cost and fair value model.</p> <p>Refer to Chapter 2: Impairment of Assets for guidance on the recognition and measurement and reversal of impairment losses.</p>
Derecognition	Refer to Chapter 1 and the sections Derecognition of Assets and Transfer of Assets

⁴ With the exception of Land which is not depreciated.

Example: Cost model

Entity IOU acquires a building from Entity TBVC at no charge as it was previously used for the service now provided by the entity. The entity rents out the property in its entirety at a rate that is lower than market related rent. Entity IOU accounts for all its investment property using the cost model.

The entity determines that the building is an investment property and on initial recognition values it at fair value (by an independent sworn appraiser) as there is no cost available for the building. This does not necessarily mean that the entity has chosen the fair value method of accounting, as in this case, fair value represents cost. Subsequent to initial recognition, the building is measured in accordance with the GRAP 17 on Property, Plant and Equipment using the cost model.

Chapter 5: Agriculture

1. Definition and Identification of Agricultural Activity



Agricultural activity is the management by an entity of the biological transformation of biological assets: for sale, into agricultural produce, or into additional biological assets.

A **biological asset** is a living animal or plant.

Agricultural produce is the harvested product of the entity's biological assets.

Biological transformation is the process of growth, degeneration, production or procreation that causes qualitative and quantitative changes in a biological asset

Agricultural activities are distinguished by the fact that management facilitates and manages biological transformation and is capable of measuring the change in the quality and quantity of biological assets. Management of biological transformation normally takes the form of activity to enhance, or at least stabilise, the conditions necessary for the process of growth, degeneration, production and procreation that cause qualitative or quantitative changes in a biological asset to take place.

Biological transformation is a natural change in a biological asset. It includes growth of living animals or plants, reduction in output due to age or disease and the production of new biological assets through a managed reproductive programme.

The harvested produce is transferred to inventory at fair value less costs to sell; it is thereafter accounted for in accordance with GRAP 12 on *Inventories*. While the produce is still growing or still attached to the biological asset, its value forms part of the value of the biological asset.




Example: Cattle farm

Entity A raises cattle, slaughters them at its abattoirs and distributes the carcasses to local communities. The cattle are biological assets while they are living. When they are slaughtered, biological transformation ceases and the carcasses meet the definition of agricultural produce. Hence, entity A should account for the live cattle in accordance with GRAP 27 and the carcasses as inventory in accordance with GRAP 12.

Example: Vineyard

Entity B grows vines, harvests the grapes and produces wine. The grapevines are biological assets that continually generate crops of grapes. When the entity harvests the grapes, their biological transformation ceases and they become agricultural produce. The grapevines continue to be living plants and should be recognised as biological assets. Assets such as wine that are subject to a lengthy maturation period are not biological assets. These processes are analogous to the conversion of raw materials to a finished product rather than biological transformation. Therefore, the entity should account for the grapevines in accordance with GRAP 27 and the harvested grapes and the production of wine, as inventory in accordance with GRAP 12.

2. Accounting for Agricultural Activity

Initial recognition	<p>As discussed in Chapter 1 on Recognition of Assets, a biological asset and/or agricultural produce can only be recognised if all of the following are met:</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <div style="background-color: #800000; color: white; padding: 5px; width: 150px; margin: 5px auto;">A past event has occurred, resulting in the entity having control over the asset</div> </div> <div style="text-align: center;">  <div style="background-color: #800000; color: white; padding: 5px; width: 150px; margin: 5px auto;">It is probable that the related economic benefit or service potential of the asset will flow to the entity</div> </div> <div style="text-align: center;">  <div style="background-color: #800000; color: white; padding: 5px; width: 150px; margin: 5px auto;">Cost or fair value can be measured reliably</div> </div> </div>
Initial and subsequent measurement	<p>Biological assets are measured on initial recognition and at each subsequent reporting date at fair value less estimated point-of-sale costs. Agricultural produce is measured at fair value less cost to sell on initial recognition.</p> <p>Refer to Chapter 1 on Subsequent Measurement for guidance on the application of the fair value model.</p> <p>In the unlikely situation where the fair value cannot be reliably measured, biological assets should be measured at cost less any accumulated depreciation and any accumulated impairment losses, i.e. will need to apply the cost model.</p> <p>As soon as the fair value can be reliably measured, the biological asset should be measured at fair value less estimated point-of-sale costs.</p>
Derecognition	<p>Refer to Chapter 1 and the sections Derecognition of Assets and Transfer of Assets</p>

2.1 Specific guidance on the fair value of biological assets / agricultural produce

As mentioned above, biological assets are measured at fair value less estimated point-of-sale costs on initial recognition and at each reporting date. An entity departs from this requirement when:

- the initial cost approximates fair value particularly when little biological transformation has taken place since initial cost incurrence or when the impact of the biological transformation on price is not expected to be material; or
- the fair value cannot be reliably measured on initial recognition.

The fair value of biological assets / agricultural produce is based on its present location and condition. As a result, for example, the fair value of cattle at a farm is the price for the cattle in the relevant market less the transport and other costs of getting the cattle to either the market or to the location where it will be distributed at no charge or for a nominal charge.

Many biological assets have relevant market-determined prices or values available, as biological produce in general are basic commodities that are traded actively. For example, there are usually market prices for calves and piglets, as there is an active market for these assets. When market-determined prices or values are not available for a biological asset in its present condition, present value of expected net cash flows from the asset should be used.

Consistent with the objective of estimating fair value, the cash flows should be based as far as possible on market data. For example, while there is a market for fully grown salmon, there is no market for a partly grown salmon. The fair value of a partly grown salmon is measured by projecting the cash inflows from the sale of the salmon fully grown, less the cash outflows needed to grow the salmon to its marketable weight and discounting them to a present day value.

Example: Use of discounted cash flows to determine fair value

Entity B owns 1000 pots of orchid's shoots that will bloom at end of year three. No cost has been incurred to acquire these orchid shoots. Currently, no active market for these shoots exists. However, at end of the year three when the flowers bloom, the orchid pots will be sold.

Assume the fluctuation in demand and price of orchid plants are insignificant and the economic conditions will not change within the next three years. The expected cash flow per pot at end of year 3 is R80. No cost will be incurred to sell the plants.

Entity B has determined that a reasonable discount rate to be used is 10%.

The fair value of the orchids can be calculated as follows: $1000 \times R80 = R80,000$

Present value of net cash flows discounted at 10% = R60,105.

Entity B will recognise the orchids at the present value calculated of R60,105 in year 1. The value should be assessed each year.

The cash flow model should include all directly attributable cash inflows and outflows and only those cash flows. The inflows will be the price in the market of the harvested crop for each crop over the life of the asset; the outflows will be those incurred raising or growing the asset and getting it to market – for example, direct labour, feed, fertilizer and transport to market. The ‘market’ is where the asset will be sold. For some assets, this will be an actual market; for others, it may be the ‘factory gate’.

If significant other assets are used to support the biological asset, the cash flow model should reflect the economics of this, otherwise the fair value will be overstated. For example, if an entity owns its land, the cash flows should include a notional cash outflow for ‘rent’ of the land to be comparable with the asset of an entity that rents its land from a third party. The fair value of a biological asset is independent of the land on which it grows or lives.

Biological assets or agricultural produce may be grouped together according to significant characteristics when determining the fair value less costs to sell.



Sometimes a separate market is not available for a biological asset attached to land, but an active market may exist for the combined assets. To determine the fair value, an entity may use information for both biological asset and land together. For example, the fair value of land may be deducted from the fair value of the combined assets to arrive at the fair value of biological assets. Refer to the example below.

Example: Fair value of biological asset cannot be determined

Entity C owns a sugar plantation on approximately 220 hectares of land. Currently no active market exists for the plantation. The fair value for the land with the plantation together is R25 million. Empty lands in the neighbouring area are sold at a market price of R72,000 per hectare.

The fair value of the sugar plantation can be determined as follows:

Fair value of combined asset	R25,000,000
Fair value of land (R72,000 x 220)	(R15,840,000)
Fair value of plantation	R 9,160,000

The fair value of the plantation could change over a period of time as biological transformation takes place, therefore it will be necessary to determine the fair value of both the neighbouring land and combined asset on a regular basis.



Costs to sell are the incremental costs directly attributable to the disposal of an asset, excluding finance costs and income taxes. Disposal may occur through sale or through distribution at no charge for a nominal charge.

Costs to sell include commissions paid to brokers and dealers, transfer taxes and duties and fees paid to regulatory agencies or commodity exchanges. Costs to sell do not include the cost of transporting the asset to market (as this is included in its fair value) or income taxes and finance costs.

2.2 Gains / losses

Biological assets	Agricultural produce
A gain or loss arising on initial recognition of a biological asset at fair value less costs to sell and from a change in fair value less costs to sell of a biological asset is included in surplus / deficit for the period in which it arises.	A gain or loss arising on initial recognition of agricultural produce at fair value less costs to sell shall be included in surplus / deficit for the period in which it arises.
A loss may arise on initial recognition of a biological asset, because costs to sell are deducted in determining fair value less costs to sell of a biological asset. A gain may arise on initial recognition of a biological asset, such as when a calf is born.	A gain or loss may arise on initial recognition of agricultural produce as a result of harvesting.

2.3 Capitalisation of subsequent expenditure

Entities are permitted to capitalise costs such as feeding, veterinary services, planting, weeding, irrigation, fertilizer etc. where they relate to the development of immature plants or livestock. However, since difficulties may be encountered in identifying what should be capitalised and what should be expensed; entities are also permitted to adopt a policy of expensing all costs.

The measurement of the aggregate gain or loss arising during the current period on initial recognition of biological assets and agricultural produce and from the change in fair value less costs to sell of biological assets, which has to be disclosed in the notes to the financial statements, will however be directly affected by whether any part of these costs has been capitalised, so the accounting policy for the treatment of such costs should be disclosed.

Chapter 6: Intangible Assets

1. Definition and Identification of Intangible Assets



An **intangible asset** is an identifiable non-monetary asset without physical substance.

An asset is **identifiable** if it either:

- is separable, i.e. is capable of being separated or divided from the entity and sold, transferred, licenced, rented or exchanged, either individually or together with a related contract, identifiable asset or liability, regardless of whether the entity intends to do so; or
- arises from binding arrangements (including rights from contracts) regardless of whether those rights are transferable or separable from the entity or from other rights and obligations.



Take note of the following with regards to the 'identifiable' criterion:

- contractual rights include those rights arising from a binding arrangement; and
- other legal rights granted by statute are specifically excluded from the identifiable criterion.

Rights granted by statute to an entity allows it to execute regulatory rights over certain activities, for example, telecommunications and energy or a municipality's right to levy tax. These rights will not be recognised as intangible assets as the definition of an intangible asset is not met, i.e.:

- an entity will not be able to sell, transfer or use the rights at their own discretion; and
- legal rights granted by statute are specifically excluded from the 'identifiable' criterion.

However, rights to use natural resources administered by the government will be recognised as intangible assets when the definition and recognition criteria are met.

The following are examples of items that generally have a physical substance of some sort, but where the physical substance is secondary (incidental) to the intangible asset. Physical substance is deemed to be incidental when it is not the driver of the value of the asset.

Item	Physical substance	Why is it still seen as "without physical substance"?
Licences (software licences, etc.)	Licence document / agreement	The entity pays for the right of use of, e.g. software. Thus an entity does not pay for the tangible item being the piece of paper on which the licence agreement is printed, but rather for information contained on the document (you can't touch a right of use).

Item	Physical substance	Why is it still seen as “without physical substance”?
Application software	CD	The value of application software is not driven by the CD that it is loaded on, but rather by the knowledge that it embodies. Thus the physical substance is deemed to be incidental.
Patents	Patent registration document	The value of a patent is not driven by the piece of paper that it is printed on, but rather by the knowledge that it embodies. Thus the physical substance is deemed to be incidental.

Entities could frequently expend resources, or incur liabilities, on the acquisition, development, maintenance or enhancement of intangible resources such as scientific or technical knowledge, design and implementation of new processes or systems, licences, and intellectual property. Common examples of items encompassed by these broad headings are computer software, patents, fishing licences or import quotas. These costs should be assessed against the definition and recognition criteria to determine whether or not it should be recognised as intangible assets

1.1 Classification of software costs

Computer software can be classified as either a tangible asset, i.e. property, plant and equipment or an intangible asset, depending on the level of integration with the related hardware.



Where software is an integral part of the related hardware, i.e. the hardware cannot operate without the software, the software will be treated as property, plant and equipment together with the related hardware already recognised, which will normally be computer equipment.

Where the software is not an integral part of the related hardware, i.e. the hardware can operate without the software, an entity determines whether the cost meets the definition and recognition criteria of an intangible asset and if met, capitalise the cost as an intangible asset.

For example, the operating system of a computer (e.g. Microsoft Windows, Linux), without which the computer cannot operate, is an integral part of the related hardware and is therefore treated as property, plant and equipment. When the software is not an integral part of the related hardware, computer software is treated as an intangible asset. Examples of software that may be capitalised as intangible assets are Microsoft Office, Excel or Word or various accounting software packages, such as E-Venus, Pastel or SAP. In these cases the computer can operate without the software.

Example: Capitalising software as property, plant and equipment

A public entity in the health sector purchased a computer-operated machine that will automate the sample testing performed in the entity’s laboratory. After a verification process has been followed, the results obtained from the machine will be more reliable and will be available in a fraction of the time than with hand-testing.

The invoice obtained from the supplier split the cost as follows:

Laboratory equipment	R21,000,000
Software	R2,500,000
Total payable	R23,500,000

The entity subsequently has to decide whether to capitalise the software cost as a separate intangible asset, or along with the cost of the machine.

To make this decision the entity should consider the level of integration with the machinery. The machinery cannot operate without that specific software and without that software the machine will be rendered completely useless.

The software is therefore an integral part of the machine and should consequently be treated as property, plant and equipment.

1.2 Licence fees

Generally licence fees are intangible assets because they are:

- Identifiable as they arise from a contractual or legal right;
- Non-monetary assets because they are not money nor are they assets that are receivable in fixed or determinable amounts of money; and
- Not physical in substance. Although the entity might receive an invoice or certificate to indicate that it has the right to use something the actual right has no physical substance.

When licence fees comply with the recognition criteria of intangible assets then they should be recognised as intangible assets.








For practical purposes, at management’s discretion, licence fees can be expensed when the following conditions are met:

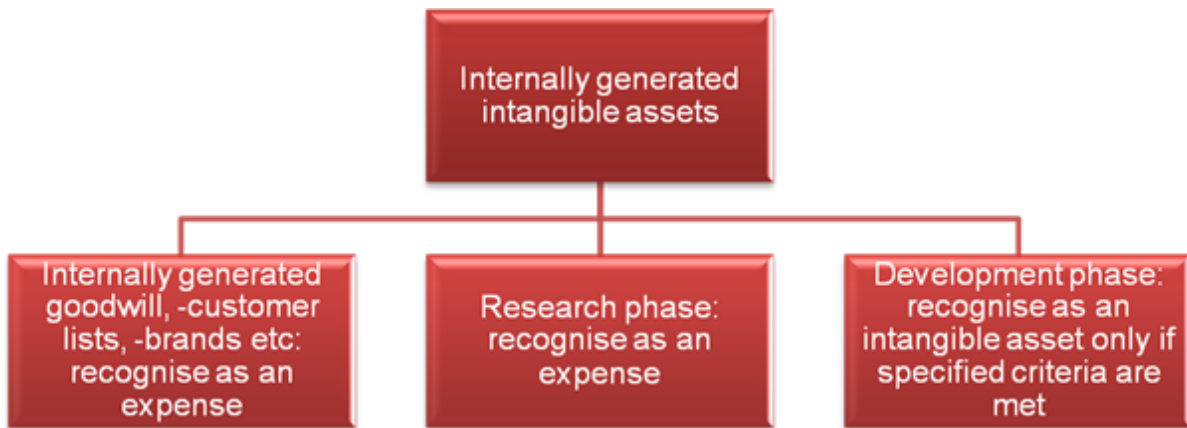
- the licence fee is for a period of one year or less; and
- the one year or less period falls exactly within the financial reporting period of the entity..

Also refer to **Example 23: Licence fees**

2. Accounting for Intangible Assets

<p>Initial recognition</p>	<p>As discussed in Chapter 1 on Recognition of Assets, an intangible asset can only be recognised if all of the following are met:</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <div style="border: 1px solid black; background-color: #c00000; color: white; padding: 5px; width: 150px;"> A past event has occurred, resulting in the entity having control over the asset </div> </div> <div style="text-align: center;">  <div style="border: 1px solid black; background-color: #c00000; color: white; padding: 5px; width: 150px;"> It is probable that the related economic benefit or service potential of the asset will flow to the entity </div> </div> <div style="text-align: center;">  <div style="border: 1px solid black; background-color: #c00000; color: white; padding: 5px; width: 150px;"> Cost or fair value can be measured reliably </div> </div> </div>
<p>Initial measurement</p>	<p>Refer to Chapter 1 on Measurement on initial recognition</p>
<p>Subsequent measurement</p>	<p>An entity should choose either the cost model or the revaluation model for subsequent measurement intangible assets.</p> <p>Under the cost model, assets are carried at cost less any accumulated amortisation and any accumulated impairment losses subsequent to recognition.</p> <div style="text-align: center; margin: 10px 0;">  </div> <p>Those assets whose fair value can be measured reliably are carried at revalued amount less any accumulated amortisation and any accumulated impairment losses (the revaluation model). The revalued amount is the fair value at the date of the revaluation.</p> <div style="text-align: center; margin: 10px 0;">  </div> <p>Refer to Chapter 1 on Subsequent Measurement for guidance on the application of the cost and revaluation model.</p> <p>Refer to Chapter 2: Impairment of Assets for guidance on the recognition and measurement and reversal of impairment losses.</p>
<p>Derecognition</p>	<p>Refer to Chapter 1 and the sections Derecognition of Assets and Transfer of Assets</p>

2.1 Internally generated intangible assets



Sometimes it is difficult to assess whether an internally generated intangible asset qualifies for recognition due to problems such as identifying whether and when there is an identifiable asset that will generate expected future economic benefits or service potential and determining the cost reliably.

An entity should classify the internal generation of assets into a research phase and a development phase. Where an entity cannot distinguish the research phase from the development phase, the expenditure incurred will be treated as if it was incurred in the research phase only.

The cost of an internally generated intangible asset will be recognised from the day it meets the specific recognition criteria. Any expenditure previously expensed cannot be capitalised subsequently.



Research is an original and planned investigation undertaken with the prospect of gaining new scientific or technical knowledge and understanding.

Expenditure on research will be recognised as an expense when it is incurred as an entity cannot demonstrate that an intangible asset exists that will generate probable future economic benefits or service potential.

Research activities include for example:

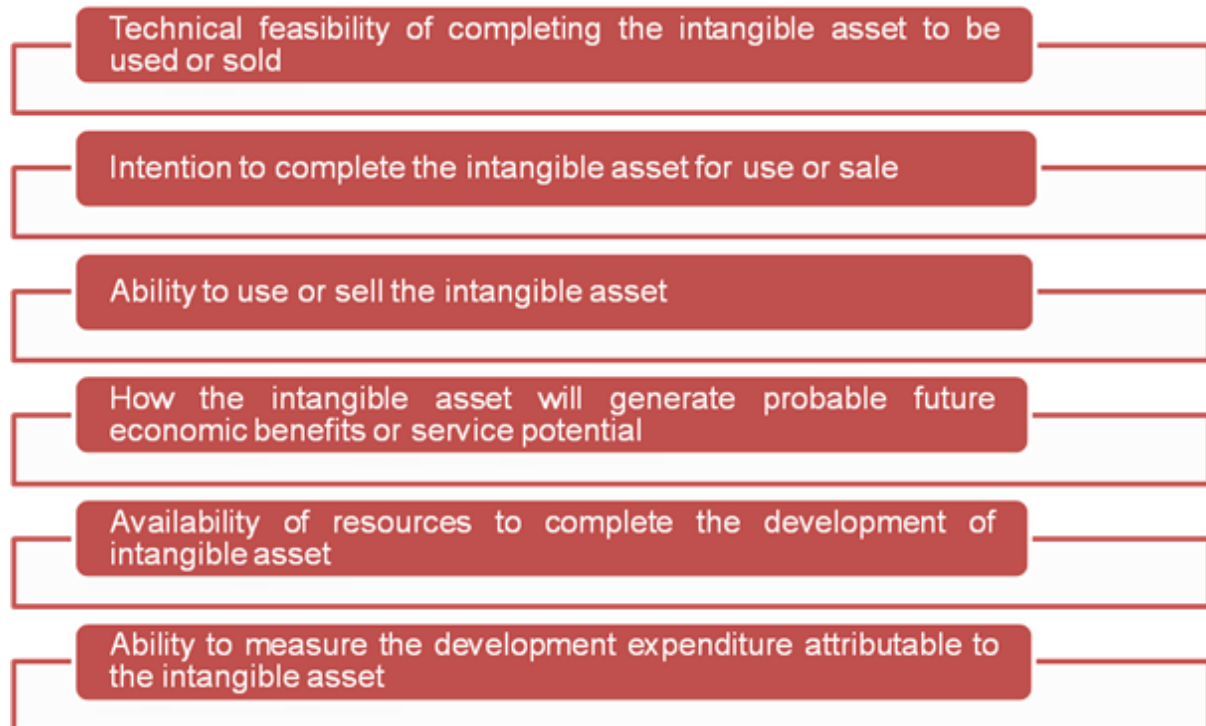
- Activities with the objective to obtain new knowledge;
- Search for applications, materials, devices, products, systems; and
- Evaluation and selection of applications, materials, devices, products, systems etc.



Development is the application of research findings or other knowledge to a plan or design for the production of new or substantially improved materials, devices, products, processes, systems or services before the start of production or use.

Within the development phase an entity can, under certain circumstances, identify an intangible asset and demonstrate that the asset will generate probable future economic benefits or service potential due to the development phase being further advanced than the research phase.

An entity needs to demonstrate all of the following criteria before an intangible asset arising from development phase can be recognised:



Development activities include for example:

- The design, construction and testing of pre-production or pre-use prototypes and models;
- The design of tools, jigs, moulds and dies involving new technology;
- The design, construction and operation of a pilot plant that is not of a scale economically feasible for commercial production; and
- The design, construction and testing of a chosen alternative for new or improved materials, devices, products, processes, systems or services.

An entity can use the principles in GRAP 21 on Impairment of Non-cash-generating Assets or GRAP 26 on Impairment of Cash-generating Assets to assess whether it is probable that an intangible asset will generate future economic benefits or service potential.



Internally generated brands, mastheads, publishing titles, customer lists and items of similar substance, as well as internally generated goodwill, are not recognised as intangible assets, as it cannot be distinguished from the cost of developing the operation as a whole.

2.2 Website costs

Website costs arising from the development phase can be recognised if they satisfy the recognition criteria and the requirements of the development phase as indicated above.



Determining whether a website can be capitalised as an intangible asset

It is important to note that an entity will need to demonstrate how the website will generate probable future economic benefits or service potential, in order to capitalise the website as an intangible asset. If the entity cannot demonstrate this, all expenditure on such a website should be recognised as an expense when it is incurred.

It is difficult to demonstrate that probable future economic benefits or service potential will be generated from a website developed solely or primarily to promote and advertise its own products or services; consequently all costs on developing such a website will be recognised as an expense.

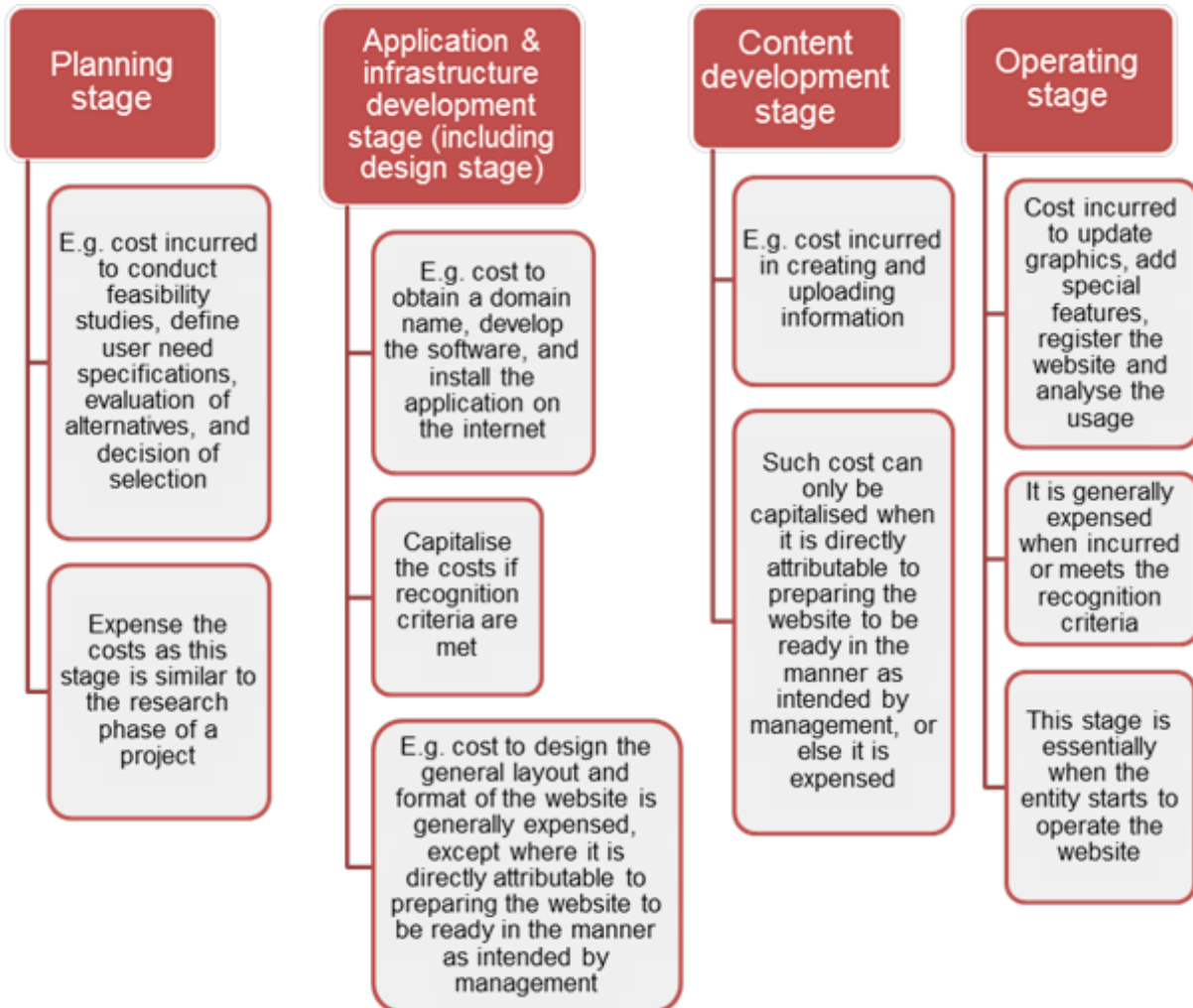
Some websites are developed to comply with a statute or to be used mainly to provide information to the public at large. The costs incurred for the development of these websites should be expensed.

Example: Capitalisation of intangible assets

An educational institution, providing distance learning courses to students, reproduces all the study material and relevant textbooks necessary for the completion of the course on a specific website. Participating students pay a fee which grants them access to the website contents necessary for their studies. This website qualifies for recognition as an intangible asset as the future economic benefits can be demonstrated by the fees generated.

The same institution has another website providing information to prospective students regarding the study programme and fees. It is difficult to demonstrate that future economic benefits or service potential are probable, as the website is solely intended to promote the products and services of the institution. The costs related to this website should therefore be expensed.

An entity should evaluate the nature of expenditure incurred at each stage, to determine the accounting treatment thereof until the website is complete. The following are examples of the stages and types of cost incurred:



Chapter 7: Heritage Assets

1. Definition and Identification of Heritage Assets



Heritage asset are assets that have cultural, environmental historical, natural, scientific, technological or artistic significance and are held indefinitely for the benefit of present and future generations.

One of the most frequently asked questions are: How does an entity distinguish heritage assets from “old assets”?

Answer: Entities frequently use own items of property, plant and equipment, intangible assets, inventories and other types of assets that are old but are still being used functionally. For example, an entity may own old furniture such as desks and chairs that are being used for administrative purposes and meet the definition of property, plant and equipment.

“Old assets” are not the same as “heritage assets” as heritage assets should meet the definition criteria (see above).

One of the key features of heritage assets is that they are held indefinitely for the purposes of preserving such assets for the benefit of present and future generations. This means that entities often incur expenditure to preserve and extend the life of an asset so that it can be enjoyed by future generations. As a result of the preservation of heritage assets, their value often increases over time, making the effect of depreciation negligible.

The purpose of holding items of Property, Plant and Equipment and other assets is for them to be used in executing an entity’s activities. As a result, these assets are “consumed” over time or as they are used.

Entities should therefore ascertain what the purpose is of holding various assets in determining whether they should be treated as “heritage assets” or as other assets in accordance with the relevant Standards of GRAP.

Some characteristics often displayed by heritage assets that an entity can consider (note: that not all heritage assets necessarily display these characteristics):

- Their value in cultural, environmental, educational and historical terms is unlikely to be fully reflected in monetary terms;
- The value of these assets tend to increase over time even if their physical condition deteriorates;
- They are often irreplaceable;
- They have indefinite useful lives and their value appreciates over time due to their cultural, environmental, historical, natural, scientific, technological or artistic significance (refer to example below);
- Ethical, legal and/or statutory obligations may impose prohibitions or severe stipulations on disposal by sale;
- They are protected, kept unencumbered, cared for and preserved.



Example: Identification heritage assets

Examples of assets that could be regarded as classes of heritage assets:

- Sites declared national heritage sites by government;
- Collections of insects, butterflies and fossils;
- Historical monuments, including graves and burial grounds;
- Archaeological and paleontological sites;
- Conservation areas such as national parks;
- Objects of scientific or technological interest such as rare species;
- Historical buildings that have significant historical associations e.g., churches, museums, courthouses, prisons, hospitals;
- Moveable objects such as medals, coins, stamps or objects of decorative or fine art;
- Works of art, antiquities and exhibits, such as biological and mineral specimens or technological artefacts;
- Collections of rare books, manuscripts, records, photos and other materials held by libraries to be preserved for their historical and cultural value;
- Intangible heritage assets such as recordings of significant historical events and rights to use the likeness of a significant public person on, for example, postage stamps or collectible coins;
- A notable figure, organisation, event or period with a historical significance;
- Industrial, scientific, and technical innovations; and
- A particular building type, style, period or architect of architectural significance

In summary, some key features of heritage assets that can be used in identifying an asset as a heritage asset:

- The asset is held indefinitely;
- The government has declared the asset as of historical significance;
- The asset is protected, cared for and preserved for present and future generations;
- The asset's value increases over time;
- No monetary value can sometimes be placed on the asset; and
- Other relevant factors.

If an entity still cannot determine whether the asset is a heritage asset or property, plant and equipment, intangible asset or biological asset, it should ascertain the purpose of holding the asset, i.e. is it used to execute the entity's activities or for another purpose.

If it is used to execute an entity's activities, it is most likely an asset other than a heritage asset.

There are instances where heritage assets can have a dual purpose, for example where an historical building meets the definition of a heritage asset, but it is also used for offices. These assets that are used for more than one purpose can only be classified as a heritage asset when a significant portion of the asset meets the definition of a heritage asset. The entity cannot split an asset into two or more classifications. For example: a portion of a property cannot be classified as property, plant and equipment and another portion classified as heritage assets. The full asset is either a heritage asset or it is not a heritage asset.



Determining whether or not the heritage portion is significant or not is a judgement that should be made by management. This judgement should be applied consistently between all the assets.

To ensure consistent application of the criteria, it is recommended that management include the judgement criteria as part of their asset management policy.

1.1 Treatment of research and development costs

Refer to the section on **Internally generated intangible assets** (in the guidance on GRAP 31 on *Intangible Assets*) for guidance on the treatment of research and development costs, i.e. exploration costs, incurred in searching for new heritage assets. As the entity will not be able to demonstrate at the research phase that a heritage asset that meets the recognition and measurement criteria will be located, the entity should recognise the expenditure as expenses when it is incurred, in terms of GRAP 31. Only costs incurred that meet the criteria for recognition as development costs, as indicated in GRAP 31, can be capitalised in the carrying amount of the heritage asset.

Example: Research and development costs

Entity R&D received information of the existence of voice recordings of private conversations between Jan Smuts and Winston Churchill during the Second World War that may be of historical significance and subsequently underwent exploration costs to search for the recordings. At the reporting date, 31 March 20X7, nothing was found as yet.

The exploration cost for the period amounted to R500,000.

On 1 April 20X7, entity R&D discovered the voice recordings and preliminarily verified the authenticity. No costs were further costs were incurred.

However, the recordings were badly damaged and had to be restored and digitally re-mastered, after which an extensive verification process was followed to guarantee the authenticity. The costs of the verification, restoration and re-mastering amounted to R300,000.






31 March 20X7	Debit	Credit
	R	R
Research costs (in statement of financial performance as an expense)	500,000	
Bank/creditor		500,000
Recognising exploration costs		

31 March 20X7	Debit	Credit
	R	R
Heritage assets	300,000	
Bank/creditor		300,000
Recognising development costs incurred		

As mentioned earlier, an example of a heritage asset is an object of scientific or technological interest. If an entity incurs cost, for example research and development costs, to develop an object for scientific or technological purposes, the costs should be accounted for in accordance with GRAP 31, i.e. research costs should be expensed and development costs should be capitalised (only if it meets the specific recognition criteria).

During the research and/or development phase, an entity might not yet know whether the asset will be a heritage asset, and therefore, when capitalising the development costs, the asset recognised will be an intangible asset at that stage. However, when an entity subsequently determines (even after a few years) that the asset has become a heritage asset and that it meets the definition and recognition criteria of a heritage asset, it can then transfer the carrying amount of the intangible asset to heritage assets and account for the asset under GRAP 103 from that point forward.

2. Accounting for Heritage Assets

<p>Initial recognition</p>	<p>As discussed in Chapter 1 on Recognition of Assets, a heritage asset can only be recognised if all of the following are met:</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <div style="border: 1px solid black; background-color: #800000; color: white; padding: 5px; width: 150px;"> A past event has occurred, resulting in the entity having control over the asset </div> </div> <div style="text-align: center;">  <div style="border: 1px solid black; background-color: #800000; color: white; padding: 5px; width: 150px;"> It is probable that the related economic benefit or service potential of the asset will flow to the entity </div> </div> <div style="text-align: center;">  <div style="border: 1px solid black; background-color: #800000; color: white; padding: 5px; width: 150px;"> Cost or fair value can be measured reliably </div> </div> </div>
<p>Initial measurement</p>	<p>Refer to Chapter 1 on Measurement on initial recognition</p>
<p>Subsequent measurement</p>	<p>An entity should choose either the cost model or the revaluation model for subsequent measurement of heritage assets. Due to their inherent nature, heritage assets are not depreciated. An entity that applies either the cost or revaluation model to heritage assets ignores the requirements with regard to depreciation/amortisation.</p> <p>Under the cost model, heritage assets are carried at cost less any accumulated impairment losses subsequent to recognition.</p> <div style="text-align: center; margin: 10px 0;">  </div> <p>Those heritage assets whose fair value can be measured reliably are carried at revalued amount less any accumulated impairment losses (the revaluation model). The revalued amount is the fair value at the date of the revaluation.</p> <div style="text-align: center; margin: 10px 0;">  </div> <p>Refer to Chapter 1 on Subsequent Measurement for guidance on the application of the cost and revaluation model.</p> <p>Refer to Chapter 2: Impairment of Assets for guidance on the recognition and measurement and reversal of impairment losses.</p>
<p>Derecognition</p>	<p>Refer to Chapter 1 and the sections Derecognition of Assets and Transfer of Assets</p>

2.1 Specific guidance on the initial recognition of heritage assets

In some instances, a heritage asset is not recognised because its cost or fair value cannot be measured reliably. This is a matter of professional judgment.

2.2 Specific guidance on the fair value of heritage assets

When heritage assets are used for more than one purpose, then the fair value should reflect both the heritage value and the value obtained from its use in the production or supply of goods or services.

When the fair value of a collection is determined, then the entity should consider reassessing the collection's fair value if the fair value of the individual items is less than the collection's fair value.

A restriction on the disposal of a heritage asset from a stipulation imposed by the seller or transferor does not prevent or make it impossible for an entity to determine the fair value.

Inability to determine the fair value reliably

When the entity selected and applied the revaluation model and the entity is subsequently unable to reliably determine the fair value, then the specific asset for which no fair value can be determined, should be measured using the cost model. This only applies in exceptional circumstances where no market-determined prices or values are available and alternative estimates of the fair value are clearly unreliable.

Only the asset that cannot be fair valued should be measured according to the cost model, while the entity should continue to measure all other heritage assets in the class using the revaluation model.

If the fair value of the heritage asset can be determined by reference to an active market at a subsequent date, the revaluation model should again be applied from that date. Specific disclosures to this effect are required by GRAP 103.

Example: Inability to determine fair value reliably

Entity TT uses the revaluation model to measure its insect collection as there has always been an active market for these insects. The collection consists of three insect types that were bequeathed to the entity in April 1998. The reporting date of the entity is 31 March. The fair values at 31 March 20X7 were as follows: Insects A: R200,000, Insects B: R250,000 and Insects C: R180,000.

There was a turn in the market and Insects A is no longer traded in an active market and after applying different valuation techniques, Entity TT determined that they cannot reliably determine the fair value of Insects A. There were no significant changes in the market for the other insects and therefore at 31 March 20X8 the revaluation amounts would remain the same as the prior year.

Accounting treatment:

As the fair value of Insects A cannot be determined reliably, it will be measured using the cost model as from 31 March 20X8. At reporting date Entity TT also has to assess whether or not Insects A might be impaired, because there is no active market. The impairment was assessed and the recoverable service amount was determined as R80,000 at reporting date.

The journal entry is as follows:

31 March 20X8	Debit	Credit
	R	R
Impairment loss (surplus/deficit)	120,000	
Accumulated impairment losses		120,000
Insects A are now measured under the cost model, therefore the line-item "accumulated impairment losses" is credited. The deemed cost of the heritage asset will be its revalued amount.		

Note that Entity TT does not have to change the subsequent measurement model for the other insects.

Assume the following additional information:

Should Entity TT be able to reliably determine the fair value of Insects A in a subsequent period, then it should again apply the revaluation model from that date. For example, assume that in the reporting period ended 31 March 20Y2, the market for Insects A picked up again and the fair value was determined to be R205,000.

Accounting treatment:

Entity TT now needs to recognise the increase in the carrying amount to the revaluation reserve, but only to the extent that it exceeds the impairment loss previously recognised.

The journal entry would be as follows:

31 March 20Y2	Debit	Credit
	R	R
Accumulated impairment losses	120,000	
Heritage asset	5,000	
Reversal of impairment loss (surplus/deficit) – current year		120,000
Revaluation surplus (net assets)		
Accounting for the revaluation increase		

Chapter 8: Illustrative Examples

Example 1: Provision for rehabilitation of landfill site

Entity G has an obligation to rehabilitate a landfill site at the end of the usage period which is 20 years. It is expected that the cost to rehabilitate the landfill site will amount to R5 million at the end of year 20.

The present value of the estimated future cost to rehabilitate the site at end of year 20 should be recognised in the statement of financial position once the landfill site is being used.

Assume that the landfill site is used from 1 July 20X7. The reporting date is 30 June 20X8. Entity G has estimated a discount rate of 8% per annum to be appropriate. The present value of the estimated rehabilitation cost is calculated as follows:

$$FV = -R5,000,000$$

$$PMT = \text{nil}$$

$$i = 8\%$$

$$N = 20 \text{ years}$$

i.e. $PV = R1,072,741$. This can be calculated by using MS Excel or a financial calculator.

1 July 20X7	Debit	Credit
	R	R
Landfill site (asset)	1,072,741	
Provision for rehabilitation of landfill site		1,072,741
Recognising present value of provision for rehabilitation cost		

30 June 20X8	Debit	Credit
	R	R
Finance cost (surplus or deficit)	85,819	
Provision for rehabilitation of landfill site ($R1,072,741 \times 8\%$)		85,819
Recognising the increase in provision due to unwinding of discount		

30 June 20X8	Debit	Credit
	R	R
Depreciation ($R1,072,741 / 20$)	53,637	
Accumulated depreciation		53,637
Recognising depreciation for the year		

In year 2 the following journal entries will be made:

30 June 20X9	Debit	Credit
	R	R
Finance cost (surplus or deficit)	R92,685	
Provision for rehabilitation of landfill sites ((R1,072,741 + R85,819) x 8%)		R92,685
Recognising the increase in provision due to unwinding of discount		

30 June 20X9	Debit	Credit
	R	R
Depreciation (R1,072,741 / 20)	53,637	
Accumulated depreciation		53,637
Recognising depreciation for the year		

Example 2: Deferred settlement terms

An entity purchases a machine for R5 million. On acquisition date the machine was ready for its intended use. The machine will be accounted for in accordance with GRAP 17.

The supplier allows the entity to settle payment for the machine after 6 months, but charges interest on the outstanding amount at 15% per annum, payable at the end of the settlement period. The normal credit terms of the entity are 30 days.

Based on the above, the difference between the capital amount (purchase price) of R5,000,000 and the total payments (capital plus interest) of R5,386,916, will be recognised as finance cost over the period of 6 months. The total payments (including interest) were calculated as follows:

$$PV = R5,000,000$$

$$I = 15\%/12$$

$$N = 6$$

Comp FV = R5,386,916. This can be calculated by using MS Excel or a financial calculator.

Therefore the finance cost to be expensed over 6 months is R386,916 (R5,386,916 - R5,000,000).

Acquisition date	Debit	Credit
	R	R
Machine	5,000,000	
Creditor		5,000,000
Recognise machine purchased on acquisition date		

At the end of 6 months	Debit	Credit
	R	R
Finance cost	386,916	
Creditor		386,916
Expense interest accrued to surplus or deficit		

Note that the interest over the six months has been aggregated for the purposes of this example. The actual monthly calculation of the interest will be as follows:

Period	Interest	Total
Month 1 (R5,000,000 x 15% / 12)	R 62,500	5,062,500
Month 2 (R5,062,500 x 15% / 12)	R 63,281	5,125,781
Month 3 (R5,125,781 x 15% / 12)	R 64,073	5,189,854
Month 4 (R5,189,853 x 15% / 12)	R 64,873	5,254,727
Month 5 (R5,254,726 x 15% / 12)	R 65,684	5,320,411
Month 6 (R5,320,410 x 15% / 12)	R 66,505	5,386,916
Total interest is therefore	R386,916	

At the end of 6 months	Debit	Credit
	R	R
Creditor	5,386,916	
Bank		5,386,916
The creditor paid		

Example 3: Assets under construction contracts - Client

The Property Management Trading Entity (PMTE) is contracted by the Department of Transport (DoT) to build a bridge.

In this example:

- PMTE is the contractor as they are constructing the bridge;
- DoT is the client.
- PMTE applies GRAP 11 in accounting for the relevant costs and, if relevant revenue; and
- DoT will make the required payments to PMTE over the contract period and at the end will 'receive' the bridge, thereafter the department will apply GRAP 17 on *Property, Plant and Equipment* to account for the bridge in its accounting records.

Information pertaining to the contract between the two parties

- The construction begins on 1 October 20X8 and will be finished on 31 March 20Y0 (i.e. 1.5 years). After which, the bridge will be complete and be available for use by DoT.
- The parties agreed on a fixed price contract of R40 million.
- Contract revenue and contract costs are determined based on surveys of work performed (work certified to date / contract price).
- PMTE invoices DoT upon the issue of certificates.
- The DoT will retain 5% of the contract value, of which 50% will be paid to PMTE at handover and 50% will be retained for a further period of 3 months after delivery of the project (the defects liability period). Any defects discovered during this period must be corrected by PMTE.
- The contract revenue as determined over the contract period, is as follows:

Date	Amount	% complete
31/11/20X8	R2.5 million	6.25%
31/12/20X8	R3.2 million	14.25%
28/02/20X9	R1.5 million	18%
30/04/20X9	R5.6 million	32%
31/05/20X9	R4.9 million	44.25%
31/07/20X9	R2.6 million	50.75%
31/10/20X9	R3.6 million	59.75%
30/11/20X9	R8.1 million	80%
31/01/20Y0	R4.2 million	90.5%
31/03/20Y0	R3.8 million	100%
Total contract price	R40 million	

The journals entries in the accounting records of the client (DoT) will be as follows (note that for example purposes the total effect on each period is shown in one journal):

Period ending 31 March 20X9	Debit	Credit
	R	R
Property, plant and equipment (WIP asset)	7,200,000	
Payable to PMTE		7,200,000
Recognise WIP asset under construction (R2.5mil + R3.2mil+ R1.5mil)		

Period ending 31 March 20Y0	Debit	Credit
	R	R
Property, plant and equipment (WIP asset)	32,800,000	
Payable to PMTE		32,800,000
Recognise WIP asset under construction (R40 mil - R7.2 mil)		

Assuming that the entire amount will be settled on completion of construction, the journal entries will be as follows: (Remember that an amount of R2,000,000 (5% of R40,000,000) will be withheld as retention money until all defective work has been corrected. This amount will remain in payables.)

Period ending 31 March 20Y0	Debit	Credit
	R	R
Payable to PMTE	40,000,000	
Retention creditor – PMTE		2,000,000
Bank		38,000,000
Payment to PMTE (R40mil – R2mil retention money)		

DoT inspected the bridge and identified outstanding items to be completed by PMTE prior to the handover of the bridge and issued a list of outstanding items (a so-called ‘snag list’ to PMTE).

Upon completion of the outstanding items by PMTE, the DoT carries out a final inspection and issues a practical completion certificate and the bridge is handed over to DoT. In terms of the contract 50% of the retention money is payable to the contractor on handover. The transaction is as follows:

Period ending 31 March 20Y0	Debit	Credit
	R	R
Retention creditor – PMTE	1,000,000	
Bank		1,000,000
Payment of 50% of retention money to PMTE (R2mil – R1mil retention money)		

The bridge is now available for use by DoT and it should therefore be classified to the class of property, plant and equipment under which it will fall. In this case it will be infrastructure assets. Furthermore, the asset will be depreciated over its useful life from this date.

At 31 March 20Y0	Debit	Credit
	R	R
Property, plant and equipment (infrastructure assets)	40,000,000	
Property, plant and equipment (WIP asset)		40,000,000
Transfer WIP asset to infrastructure assets upon completion of construction		

When the defects liability period lapses, DoT pays the rest of the retention money over to PMTE. The transactions is as follows:

30 June 20Y0	Debit	Credit
	R	R
Retention creditor – PMTE	1,000,000	
Bank		1,000,000
Payment of the remaining 50% of retention money to PMTE		

Example 4: Exchange of non-monetary assets

Entity A acquired an office building which it will use to generate rental income. Entity A acquired this property in exchange for equipment. At transaction date the fair value of the office building was R1,000,000, the fair value of the equipment was R980,000 and the carrying amount of the equipment in the records of Entity A was R800, 000.

Entity A should initially recognise the office building acquired at its fair value of R1,000,000.

Transaction date	Debit	Credit
	R	R
Investment property	1,000,000	
Equipment		800,000
Gain on sale of assets		200,000

Had Entity A not been able to reliably measure the fair value of the office building then the office building would be initially recognised at the fair value of the equipment exchanged.

The journal entries would be as follows:

Transaction date	Debit	Credit
	R	R
Investment property	980,000	
Equipment		800,000
Gain on sale of assets		180,000

Had Entity A not been able to reliably measure the fair value of either of the office building or the equipment then the office building would have been initially recognised at the carrying amount of the equipment exchanged.

The journal entries would be as follows:

Transaction date	Debit	Credit
	R	R
Investment property	800,000	
Equipment		800,000

Example 5: Significant parts – assets consisting of different parts

An entity acquires an aeroplane at a cost of R10,000,000. At the acquisition date, the replacement values of the different parts of the aeroplane are as follows:

Engine: R4,000,000

Airframe: R4,000,000

Seats: R2,000,000

The entity estimates that the airframe and seats will have a residual value of zero at the end of its useful life and also estimates that the engine will have a residual value of R500,000. The entity assesses the useful lives as follows:

Engine: 5 years

Airframe: 20 years

Seats: 10 years

Each of the different parts are significant in relation to the total cost of the aeroplane and the residual values and useful lives also differ significantly and therefore the different parts will have to be depreciated separately in accordance with GRAP 17.

Note that each part that will be depreciated separately will need to be shown separately in the fixed asset register and add up to the total cost of the asset.

For example, extract out of an entity's fixed asset register:

Asset description	Cost	Useful life	Residual value	Depreciation
Aeroplane	10,000,000			
Engine	4,000,000	5 years	500,000	xxx
Airframe	4,000,000	20 years	-	xxx
Seats	2,000,000	10 years	-	xxx

Example 6: Inspection costs

Entity I acquired a machine on 1 April 20X7 that needs a major inspection every 2 years. The cost price of the machine is R4,000,000 and the cost of the inspection is R400,000. The useful life of the machine is 8 years and has no residual value. Assume that the inspection cost meet the recognition criteria.

Details of the carrying amounts of the machine on 31 March 20X8 and 20X9:

Balances	Machine	Inspection	Total
	R	R	R
Cost	3,600,000	400,000	4,000,000
Depreciation 20x7/20X8:			
Machine (R3,600,000 / 8)	(450,000)		(450,000)
Inspection (R400,000 / 2)		(200,000)	(200,000)
Carrying amount 31 March 20X8	3,150,000	200,000	3,350,000
Depreciation 20X8/20X9	(450,000)	(200,000)	(650,000)
Carrying amount 31 March 20X9	2,700,000	-	2,700,000

Note that the inspection component is not a separate asset, but forms part of the machine (but is depreciated separately as it has a different useful life than the machine).

Example 7: Cost of replacement of assets**Scenario 1**

Entity A operates and maintains a road which cost R10,000,000. The useful life of the road is 10 years, however, the road has to be resurfaced every 5 years (over and above routine maintenance) to ensure that it will last for its estimated useful life. The cost of resurfacing the road is R2,000,000. The cost of the road, excluding the cost of resurfacing therefore amounts to R8,000,000. At 30 June 20X6 (after 5 years), the road was resurfaced at a cost of R3,000,000.

On 30 June 20X7 the details of the carrying amount (**excluding resurfacing**) of the road is as follows:

Cost	R10,000,000
Cost of resurfacing	(R2,000,000)
[The cost of resurfacing is recognised as a separate asset]	
Road excluding resurfacing	R8,000,000
Accumulated depreciation up to 30 June 20X6 (5 years)	(R4,000,000)
Depreciation for 20X6/20X7	(R800,000)
Carrying amount as at 30 June 20X7	R3,200,000

Details of the carrying amount of the resurfacing on 30 June 20x6 and 20x7:

Cost	R2,000,000
Accumulated depreciation up to 30 June 20X6 (5 years)	(R2,000,000)
Carrying amount as at 30 June 20X6	R0
New cost of resurfacing capitalised	R3,000,000
Depreciation for 20X6/20X7 (5 years)	(R600,000)
Carrying amount as at 30 June 20X7	R2,400,000
Total carrying amount of road as at 30 June 20X7	R5,600,000

Scenario 2

Based on the information provided above, if we assume that at initial recognition of the road, the cost of resurfacing was not identified as a separate component, but the R3,000,000 incurred to resurface the road now qualifies for recognition as an asset (significant part), then it would be necessary to derecognise the remaining carrying amount of the resurfacing that was replaced.

GRAP 17 states that, if it is not practical to determine the carrying amount of the replaced part, the cost of the replacement part may be used as an indication of what the cost of the replaced part was at the time it was acquired.

Assume for this example that the carrying amount of the replaced part, i.e. cost of resurfacing, cannot be reasonably determined.

Details of the carrying amount (**old cost of resurfacing**) on 30 June 20X6:

Deemed cost	R3,000,000
[The carrying amount will be based on the new cost of resurfacing]	
Deemed accumulated depreciation up to 30 June 20X6 (5 years)	(R1,500,000)
The old cost of resurfacing was included in the total cost of the road; therefore the useful life of 10 years is used.	
Deemed carrying amount of old cost of resurfacing	R1,500,000

Details of the carrying amount of the road directly after resurfacing it on 30 June 20X6:

Cost	R10,000,000
Accumulated depreciation up to 30 June 20X6 (5 years)	(R5,000,000)
Derecognition of the deemed carrying amount of the old cost of resurfacing	(R1,500,000)
Capitalisation of new cost of resurfacing	R3,000,000
Carrying amount of road as at 30 June 20X6	R6,500,000

The same depreciation calculation for 20X6/20X7 will now apply as indicated in the first scenario.

Note that the cost of resealing or maintaining a road is considered to be repairs and maintenance and will not be capitalised, but will be expensed when incurred.

As can be seen from the example above, it is important to show each component separately in the asset register, because when it is replaced, one needs to take out only the replaced part and not the whole asset. Furthermore, in order to comply with GRAP 17, items with a cost that is significant in relation to the total cost of the asset, and whose useful lives differs from that of the asset, have to be depreciated separately.

Example 8: Treatment of accumulated depreciation at revaluation date (first revaluation)

The following information is available about an entity's machinery at the end of year 2:

Cost of machinery purchased (year 1)	R150,000 (cost)
Accumulated depreciation (end of year 2)	R30,000 (OAD)
Carrying amount (end of year 2)	R120,000 (CA)
Useful life (straight-line method) 10 years	
Depreciated replacement cost end of year 2 when the machinery was revalued	R160,000 (DRC)
Entity's policy is to revalue assets every second year	

The entity has two options to treat the accumulated depreciation upon revaluation, these are shown below.

Restatement option

If the entity chooses to apply the 'restatement' option, both the cost and the accumulated depreciation need to be restated. Calculations based on the restatement option:

New gross carrying amount (GCA) (is the depreciated replacement cost adjusted for accumulated depreciation already accounted for)	R200,000 $150,000 \text{ (cost)} \times \text{R}160,000 \text{ (DRC)} / \text{R}120,000 \text{ (CA)}$
New accumulated depreciation (NAD)	R40,000 $30,000 \text{ (OAD)} \times \text{R}160,000 \text{ (DRC)} / \text{R}120,000 \text{ (CA)}$
The restatement is calculated as follows:	
Gross carrying amount	R50,000 $(\text{R}200,000 \text{ (GCA)} - \text{R}150,000 \text{ (cost)})$
Accumulated depreciation	R10,000 $(\text{R}40,000 \text{ (NAD)} - \text{R}30,000 \text{ (OAD)})$

Year 2	Debit	Credit
	R	R
Machinery	50,000	
Accumulated depreciation		10,000
Revaluation surplus (R160,000 (DRC) – R120,000 (CA))		40,000
Recognise increase in carrying amount in revaluation surplus		

Elimination option

If the entity chooses to apply the 'elimination' option, the accumulated depreciation should be eliminated against gross carrying amount of the asset.

Year 2	Debit	Credit
	R	R
Accumulated depreciation (OAD)	30,000	
Machinery		30,000
Write accumulated depreciation back to cost of asset		
Machinery	40,000	
Revaluation surplus (R160,000 (DRC) – R120,000 (CA))		40,000
Adjust balance of carrying amount to depreciated replacement cost		

Alternatively, the journal entry can be as follows:

Year 2	Debit	Credit
	R	R
Accumulated depreciation (OAD)	30,000	
Machinery at revaluation (DRC)	160,000	
Machinery at cost (cost)		150,000
Revaluation surplus (R160,000 (DRC) – R120,000 (CA))		40,000
Eliminate carrying amount and recognise at depreciated replacement cost		

In conclusion:

Under the first option, the asset's value is adjusted to its gross carrying amount, i.e. the depreciated replacement cost adjusted for accumulated depreciation up to the date of revaluation.

Under the second option, the carrying amount, i.e. cost less accumulated depreciation on the date of revaluation, is eliminated and the asset is recognised at its depreciated replacement cost.

As can be seen above, no matter which option is applied, the amount recognised in revaluation surplus is the same, i.e. will always be the difference between the carrying amount and the revalued amount.

Example 9: Subsequent decrease in carrying amount as a result of a revaluation

Assume the same information as the previous example. At end of year 4, the following information is available:

Carrying amount (end of year 6) - under 'restatement' option calculated as $R125,000 / 10 \times 4$ (because cost = gross amount)	R50,000 (CA)
Accumulated depreciation (end of year 6) - under "restatement" option calculated as $R125,000 / 10 \times 6$	R75,000 (OAD)
Carrying amount (end of year 6) - under 'elimination' option calculated as $R75,000 / 6 \times 4$ (because cost = net amount)	R50,000 (CA)
Accumulated depreciation (end of year 6) - under 'elimination' option calculated as $R75,000 / 6 \times 2$	R25,000
Depreciated replacement cost end of year 6 when the machinery was revalued	R90,000 (DRC)

As can be seen above, no matter which option is applied, the carrying amount will be the same; it is only the calculation that is different.

The change as a result of the revaluation is R45, 000 ($R120,000$ (CA) – $R75,000$ (DRC)).

The decrease in the carrying amount is recognised in surplus or deficit, but it should first be recognised against revaluation surplus to the extent that a surplus in respect of a previous revaluation is available. R40,000 is available against which the decrease should be offset first. The remaining R5,000 will be recognised as an impairment loss in surplus or deficit.

The entity has two options to treat the accumulated depreciation upon revaluation, these are shown below.

Restatement option

If the entity chooses to apply the 'restatement' option, both the cost and the accumulated depreciation need to be restated.

Calculations based on the restatement option:

New gross carrying amount (GCA)	R225,000 ($R125,000 \times R90,000$ (DRC) / $R50,000$ (CA))
New accumulated depreciation (NAD)	R135,000 ($R75,000$ (OAD) \times $R90,000$ (DRC) / $R50,000$ (CA))
The restatement is calculated as follows:	
Gross carrying amount	R100,000 ($R225,000$ (GCA) – $R125,000$)
Accumulated depreciation	R60,000 ($R135,000$ (NAD) – $R75,000$ (OAD))

Year 6	Debit	Credit
	R	R
Accumulated depreciation		60,000
Machinery	100,000	
Impairment loss reversed		5,000
Revaluation surplus (R90,000 (DRC) – R50,000 (CA) limited to excess over impairment loss reversed)		35,000
Recognise increase in carrying amount		

Elimination option

If the entity had chosen to apply the 'elimination' option, the accumulated depreciation should be eliminated against gross carrying amount of the asset.

Year 6	Debit	Credit
	R	R
Accumulated depreciation	25,000	
Machinery		25,000
Write accumulated depreciation back to revalued amount of asset		
Machinery	40,000	
Revaluation surplus		35,000
Impairment loss reversed		5,000
Adjust balance of carrying amount to depreciated replacement cost		

Alternatively, the journal entry can be as follows:

Year 6	Debit	Credit
	R	R
Machinery at revaluation (DRC)	90,000	
Accumulated depreciation	25,000	
Machinery at previous valuation		75,000
Revaluation surplus		35,000
Impairment loss reversed		5,000
Eliminate carrying amount and recognise at depreciated replacement cost		

The revaluation surplus relating to an asset will be realised over time by transferring some or the whole of the surplus to accumulated surplus or deficit by way of, either:

- Through the use of the asset: transferring the portion as the asset to which the surplus relates to is depreciated; or
- When the asset is derecognised: transferring the portion when the asset to which the surplus relates to is disposed.

The transfer of the revaluation surplus may never go through surplus or deficit.

Note that the option on how to treat the realisation of the revaluation surplus is an accounting policy choice, which should be applied consistently.

When an entity chooses to transfer the revaluation surplus as the asset is used, the amount to be transferred will be the difference between the depreciation based on the revalued carrying amount and the depreciation based on the asset's original cost, i.e. if the asset was never revalued.

Example 10: Transfers from the revaluation reserve to the accumulated surplus/deficit when depreciating a revalued asset

Assume the same information as in the previous example. The depreciation charge for year 7 will be calculated as follows (note that the depreciation charge is the same for both options):

Carrying amount (end of year 6)	R90,000
Remaining useful life 4 years	
Depreciation for year 7 (R90,000 / 4)	R15,000
Revaluation surplus	R35,000
Portion of the current year's depreciation relating to the revaluation of the assets (R35,000 / 4)	R8,750

A transfer will be made from the revaluation surplus to the accumulated surplus or deficit account (via the statement of changes in net assets) to offset the additional depreciation charged as a result of the revaluation on a yearly basis.

The accounting entry to account for the transfer will be as follows:

Year 7	Debit	Credit
	R	R
Revaluation surplus (R35,000 / 4)	8,750	
Accumulated surplus		8,750
Transferring the portion of the revaluation surplus relating to the current year's depreciation to the accumulated surplus or deficit.		

Example 11: Cost of replacement of asset

Entity REM has a printing press which is classified as property, plant and equipment in its financial records. After careful consideration Entity REM made a decision to sell this printing press. A potential buyer was found on the 25th of November 20X0 and after several meetings a sale agreement was signed on the 28th of January 20X1 but takes effect on the 15 February 20X1.

The following information pertains to the example:

Carrying amount on 25 November 20X0	R650,000
Carrying amount on 28 January 20X1	R625,000
Carrying amount on 15 February 20X1	R620,000
Selling price	R1,500,000
The entity's reporting date is 31 March.	

The agreed selling price is a cash price of R1,500,000, however the buyer does not have the full amount in cash and it was therefore agreed that the buyer pay Entity REM R500,000 cash, which was paid on 15 February 20X1 and the remaining balance will be paid over 12 months in equal instalments of R88,615, with first payment due on 31 March 20X1. The agreement stipulates that the buyer will take control of the printing press once the cash amount of R500,000 is paid.

Based on above:

The transaction date for disposal of the printing press is the 15th of February 20X1, as this is the date that the significant risks and rewards of ownership were transferred to the buyer. The payment is deferred and therefore the proceeds should be recognised as the cash price, which is R1,500,000.

For the deferred portion, the difference between the cash equivalent (R1, 000,000) and the nominal amount (R1,063,380 = 12 months x R88,615) should be recognised as interest revenue over the period of the credit.

The effective interest rate is calculated as 11, 5% (using the formula - PV = R1,000,000, n = 12, PMT = -R88,615 on a financial calculator).

15 February 20X1	Debit	Credit
	R	R
Bank	500,000	
Receivables	1,000,000	
Property, plant and equipment		620,000
Gain on disposal of property, plant and equipment		880,000

31 March 20X1	Debit	Credit
	R	R
Bank	88,615	
Receivables		88,615
Recognise the first instalment received		

31 March 20X1	Debit	Credit
	R	R
Receivables	9,583	
Interest revenue (R1,000,000 x 11.5% / 12 months)		9,583
Recognise the interest earned for the month of March 20X1		

Example 12: Derecognition of intangible assets

Entity PAT has a patent which is classified as an intangible asset in its financial records. After careful consideration Entity PAT made a decision to sell this patent. A potential buyer was found on the 25th of November 20X0 and after several meetings a sale agreement was signed on the 28th of January 20X1.

The following information pertains to the example:

Carrying amount on 25 November 20X0	R650,000
Carrying amount on 28 January 20X1	R625,000
Carrying amount on 15 February 20X1	R620,000
Selling price	R1,500,000
The entity's reporting date is 31 March.	

The agreed selling price is a cash price of R1,500,000, however the buyer does not have the full amount in cash and it was therefore agreed that the buyer pay Entity PAT R500,000 cash, which was paid on 15 February 20X1 and the remaining balance will be paid over 12 months in equal instalments of R88,615, with first payment due on 31 March 20X1. The agreement stipulates that the buyer will take control of the patent once the cash amount of R500,000 is paid.

Based on above:

The transaction date for disposal of the patent is the 15th of February 20X1, as this is the date that the significant risks and rewards of ownership were transferred to the buyer. The payment is deferred and therefore the proceeds recognised should be the cash price, which is R1,500,000.

The effective interest rate is calculated as 11,5% (using the formula - $PV = R1,000,000$, $n = 12$, $PMT = -R88,615$ on a financial calculator).

For the deferred portion, the difference between the cash equivalent (R1,000,000) and the nominal amount ($R1,063,380 = 12 \text{ months} \times R88,615$) should be recognised as interest revenue over the period of the credit.

The journal entries for the disposal will be as follows:

15 February 20X1	Debit	Credit
	R	R
Bank	500,000	
Receivables	1,000,000	
Intangible assets		620,000
Gain on disposal of intangible asset		880,000

31 March 20X1	Debit	Credit
	R	R
Bank	88,615	
Receivables		88,615
Recognise the first instalment received		

31 March 20X1	Debit	Credit
	R	R
Receivables	9,583	
Interest revenue (R1,000,000 x 11.5% / 12 months)		9,583
Recognise the interest earned for the month of March 20X1		

Example 13: Derecognition of heritage assets

Entity REST has a collection of rare books which is classified as heritage assets in its financial records. After careful consideration Entity REST made a decision to sell this rare collection. A potential buyer was found on the 25th of November 20X0 and after several meetings a sale agreement was signed on the 28th of January 20X1.

The following information pertains to the example:

Carrying amount on 25 November 20X0	R650,000
Carrying amount on 28 January 20X1	R625,000
Carrying amount on 15 February 20X1	R620,000
Selling price	R1,500,000

The entity's reporting date is 31 March.

The agreed selling price is a cash price of R1,500,000, however the buyer does not have the full amount in cash and it was therefore agreed that the buyer pay Entity REST R500,000 cash, which was paid on 15 February 20X1 and the remaining balance will be paid over 12 months in equal instalments of R88,615, with first payment due on 31 March 20X1.

The agreement stipulates that the buyer will take control of the books once the cash amount of R500,000 is paid.

Based on above:

The transaction date for disposal of the rare books is the 15th of February 20X1, as this is the date that the significant risks and rewards of ownership were transferred to the buyer. The payment is deferred and therefore the proceeds should be recognised as the cash price, which is R1,500,000.

For the deferred portion, the difference between the cash equivalent (R1,000,000) and the nominal amount (R1,063,380 = 12 months x R88,615) should be recognised as interest revenue over the period of the credit.

The effective interest rate is calculated as 11,5% (using the formula - PV = R1,000,000, n = 12, PMT = -R88,615 on a financial calculator).

Journal entries:

15 February 20X1	Debit	Credit
	R	R
Bank	500,000	
Receivables	1,000,000	
Heritage asset		620,000
Gain on disposal of heritage asset		880,000
Derecognition of heritage asset		

31 March 20X1	Debit	Credit
	R	R
Bank	88,615	
Receivables		88,615
Recording the first instalment received		

31 March 20X1	Debit	Credit
	R	R
Receivables	9,583	
Interest revenue (R1,000,000 x 15.5% / 12 months)		9,583
Recognising interest earned for the month of March		

Example 14: Transfer to property, plant and equipment carried under the cost model

Entity KLM moved into an office block on 4 January 2010 that was previously held to earn rentals. Entity KLM measured investment property by using the cost model. The reporting date is 31 March 2010. The original cost price of the office building was R11,220,000, the useful life was expected to be 55 years with no residual value and the acquisition date was 1 April 2000.

The property is transferred from investment property to property, plant and equipment on 4 January 2010. As the entity accounted for investment property under the cost model, the cost and carrying amount of the transferred property will not change.

Information and calculations based on above are as follows:

Depreciation per month on the office block	R17,000 (R11,220,000 / 660 months)
Months lapsed from 1 April 2000 to 31 December 2009	117 months
Accumulated depreciation of investment property on 4 January 2010	R1,989,000 (R17, 000 x 117 months).
Carrying amount of office block on 4 January 2010	R9,231,000 (R11,220,000 – R1,989,000)

The journals to correctly transfer the property from investment property to property, plant and equipment will be as follows:

4 January 2010	Debit	Credit
	R	R
Property, plant and equipment @ cost	11,220,000	
Accumulated depreciation on property, plant and equipment		1,989,999
Investment property @cost		11,220,000
Accumulated depreciation on investment property	1,989,999	
Transfer the carrying amount of investment property to property, plant and equipment		

Subsequently after transfer was made:

At year end, 31 March 2010, Entity KLM will continue to account for this office block in terms of GRAP 17 on Property, Plant and Equipment and the office block will still have a cost price of R11, 220,000.

Depreciation from January to March 2010 will be as follows:

Cost price (carrying amount of investment property) / remaining useful life:	R51,000 R9,231,000 / 543 (660-117) x 3
Depreciation for the remaining 45 years will be:	R204,000 per annum [R9,180,000 (R9,231,000 – R51,000) / [540 (660-120) x12] OR [R9,180,000 (R9,231,000 – R51,000) / 45]

Example 15: Transfer from investment property carried at fair value

Entity MNM started to restructure its business in September 20X7. Previously Entity MNM acquired property which was held for capital appreciation and to earn rentals.

On 1 November 20X7 Entity MNM moved its offices into one of the office buildings that were held as investment property at fair value. The carrying amount of the property on transfer date was R760,000 and the fair value R780,000. The remainder of the property was developed to build 16 houses with the objective to sell (therefore it becomes inventory).

On 15 January 20X8 development started on the first 10 houses and was therefore transferred from investment property to inventory. The carrying amount of the houses on transfer date was R321,000 each and the fair value R320,000 each.

On the 15 February 20X8 development started on the remaining 6 houses. The carrying amount was R321,000 each and the fair value was R322,000 each.

The journals required to recognise the transfers will be as follows:

One of the properties is transferred to property, plant and equipment as it has become owner-occupied.

1 November 20X7	Debit	Credit
	R	R
Property, plant and equipment @ cost	780,000	
Investment property		760,000
Fair value adjustment		20,000
<i>Transfer the fair value of investment property to property, plant and equipment</i>		

From the transaction date (1 November 20X7) the property, plant and equipment should be recognised in terms of GRAP 17 and the deemed cost will be R780,000.

The 10 houses developed are transferred to inventory.

15 January 20X8	Debit	Credit
	R	R
Inventory (R320,000 x 10 houses)	3,200,000	
Investment property (R321,000 x 10 houses)		3,210,000
Fair value adjustment	10,000	
<i>Transfer the fair value of investment property to inventory</i>		

From the transaction date (15 January 20X8) the investment property transferred should be recognised in terms of GRAP 12 on Inventories and the deemed cost per house will be R320,000.

The remaining 6 houses developed are transferred to inventory.

15 February 20x8	Debit	Credit
	R	R
Inventory (R322,000 x 6 houses)	1,932,000	
Investment property (R321,000 x 6 houses)		1,932,000
Fair value adjustment		10,000
Transfer the fair value of investment property to inventory		

From the transaction date (15 February 20X8) the investment property transferred should be recognised in terms of GRAP 12 on Inventories and the deemed cost per house will be R322,000.

Example 16: Transfer from heritage assets at revalued amount to property, plant and equipment when using the revaluation model

Entity MNM started to restructure its business in September 20X7. Previously Entity MNM acquired a property which was classified as a heritage asset. On 1 November 20X7 Entity MNM moved its offices into the heritage asset building, which resulted in a significant portion of the building being used for administrative purposes. The carrying amount of the property on the date of transfer was R760,000 and the fair value R780,000.

Entity MM needs to apply GRAP 103 until transfer date and therefore the carrying amount should be adjusted to R780,000, before the asset is transferred to property, plant and equipment.

Journal entries:

1 November 20X7	Debit	Credit
	R	R
Heritage asset	20,000	
Revaluation surplus (net assets)		20,000
Adjust carrying amount of heritage asset		

1 November 20X7	Debit	Credit
	R	R
Property, plant and equipment	780,000	
Heritage asset		780,000
Transfer asset to property, plant and equipment		

Example 17: Transfer to investment property carried at fair value

Entity acquired a property on 1 July 20X4 for R1,000 and the useful life was deemed to be 20 years with no residual value, resulting in depreciation of R50 per year.

At the end of year 3 the property was impaired by R30 and the new depreciation amount was calculated as R48 per year.

At the end of year 4 the entity transferred the property from owner-occupied to investment property. The fair value at transfer date was R900. The reporting date is 30 June.

The calculations are as follows:

Year	Carrying amount	Carrying amount had no impairment been done
1 July 20X5	1,000	1,000
Depreciation (R1,000 / 20years)	(50)	(50)
30 June 20X5	950	950
Depreciation (R950 / 19years)	(50)	(50)
30 June 20X6	900	900
Depreciation (R900 / 18years)	(50)	(50)
Impairment	(30)	-
30 June 20X7	820	850
Depreciation (R820 / 17years)	(48)	(50)
30 June 20X8	772	800

Difference between fair value and carrying amount	R128 (R900 – R772)
Difference between carrying amount and what carrying amount would have been had no impairment been provided for	R28 (R800 – R772)
Impairment recognised	R30

The entity will recognise the investment property at R900 and the difference between the investment property and the carrying amount should be recognised as follows:

- Firstly recognise, in surplus and deficit, the reversal of the impairment of R30. This reversal is however limited to R28 which is the difference between what the carrying amount is and what the carrying amount would have been had no impairment been recognised; and
- Secondly the remaining balance, being R100 (R128 - R28) of the increase, should be recognised in net assets as a revaluation reserve.

The journal entries will be as follows:

	Debit	Credit
	R	R
Investment property	900	
Property, plant and equipment		772
Reversal of impairment		28
Revaluation reserve		100
Transfer the fair value (i.e. carrying amount adjusted to its fair value) of property, plant and equipment to investment property		

Example 18: Transfer to investment property carried at fair value

Entity CDE was restructured during March 20x8 resulting in a change in business. Previously Entity CDE traded in properties, but during the restructuring it was decided to rather keep the properties for capital appreciation and to earn rental income.

Lease agreements were signed and the commencement dates for all leases were 1 May 20X8.

The carrying amount of the inventory on 1 May 20X8 was R10,500,000 and the fair value was R10,100,000. The entity will subsequently measure investment property at fair value. The reporting date is 30 June 20X8.

The transfer from inventory to investment property (on transaction date) occurs on the date when the new operating leases commence, thus 1 May 20X8.

The difference between the carrying amount and the fair value of the properties, of R400,000, should be recognised in surplus or deficit as a fair value adjustment.

The transaction will be recorded as follows:

1 May 20X8	Debit	Credit
	R	R
Investment property	10,100,000	
Inventory		10,500,000
Fair value adjustment	400,000	
Transfer the fair value (i.e. carrying amount adjusted to its fair value) of inventory to investment property		

Example 19: Depreciated replacement cost approach

Entity B purchased a new mainframe computer at a cost of R100,000. At acquisition date, Entity B estimated that the useful life of the computer would be 5 years and that on average 75% of the central processing unit capacity will be used by the finance division.

In year three, Microsoft introduced a new central processing unit (CPU) that operates three times faster than the current CPU's owned by Entity B and consequently the entity decided to upgrade its computers to the new CPU. However, the mainframe computer is not compatible with the new CPU and can therefore not be upgraded.

A mainframe computer similar to the one currently in use is available on the market at a price of R60,000.

The calculations and relevant information are as follows:

Carrying amount at end of year 3	R40,000 (R100,000 x 2/5)
Replacement cost	R60,000
Accumulated depreciation	(R36,000) (R60,000 x 3/5)
Recoverable service amount – Present value of remaining service potential of the asset using the depreciated replacement cost approach	R24,000
Impairment loss	R16,000 (R40,000 – R24,000)

Example 20: Restoration cost approach

Under the restoration cost approach, the recoverable service amount of the asset is the depreciated replacement cost, less the cost required to repair the damaged asset:



Entity B owns fire trucks which were purchased in 20X6 at a cost of R750,000 each. The trucks were initially expected to be used for 10 years, after which they were expected to be replaced.

In 20X9, after 3 years of use, a fire broke out late at night in the neighbouring plant to where the fire trucks are kept and significant parts of two of the fire trucks were damaged in the fire.

The cost of repairing the two fire trucks to a useable condition will amount to R350,000 in total. The estimated cost of a similar new fire truck is R900,000.

The calculations and relevant information are as follows:

Carrying amount at end of year 3	R1,050,000 (R750,000 x 2 x 7/10)
Replacement cost	R1,800,000 (R900,000 x 2)
Accumulated depreciation	(R540,000) (R1,800,000 x 3/10)
Depreciated replacement cost (undamaged)	R1,260,000
Less: restoration cost	(R350,000)
Recoverable service amount – Present value of remaining service potential of the asset using the restoration cost approach	R910,000
Impairment loss	R140,000 (R1,050,000 – R910,000)

Example 21: Service units approach

The service units approach is used when there is a decline in the output level, or a reduction in the extent of use of an asset. Under the service units approach, the present value of the remaining service potential of the asset is determined by reducing the current cost to take into account the decline in the service potential of the asset.

The current cost of replacing the remaining service potential of the asset before impairment is usually determined as the depreciated restoration or replacement cost of the asset before impairment, whichever is lower.

Entity E acquired a specialised printer for R200,000 to print certificates. On acquisition date it was expected that the printer will print 5 million certificates over its useful life of 5 years. 2 years after acquiring the printer, one of the parts broke accidentally.

The supplier has indicated that the specific part is no longer produced, but a similar part can be used in its place, however it will result in a 1 million reduction in the number of certificates that the printer is expected to produce over its useful life.

The part is replaced at no cost to the entity. 2 million copies have been printed to date. The current replacement cost of the printer is R250,000.

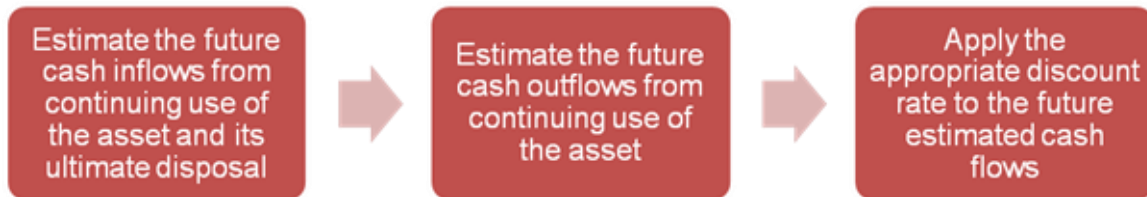
The calculations and relevant information are as follows:

Carrying amount at end of year 2	R120,000 (R200,000 x 3m/5m)
Current replacement cost	R250,000
Accumulated depreciation	(R100,000)
Depreciated replacement cost	R150,000
Recoverable service amount – Present value of remaining service potential of the asset using the service units approach	R100,000 (R150,000 x 2m/3m)
Impairment loss	R20,000 (R120,000 – R100,000)

Originally it was estimated that the printer will be able to print 5 million certificates. At the end of year 2, after printing 2 million certificates, it would have been able to still print another 3 million certificates over the remaining useful life of 3 years.

The replacement of the specific part resulted in a 1 million reduction in the number of certificates that the printer will be able to print over the remaining useful life of 3 years. Therefore the remaining copies that can be printed are 2 million.

Remember that the depreciated replacement cost represents an expected 3 million of copies that can still be made over 3 years. Therefore to calculate the value in use (i.e. value of asset based on remaining service potential) one needs to 'decrease' the depreciated replacement cost based on the new expected number of copies that can still be made.

Example 22: Value in use of a cash-generating asset

An appropriate discount rate to be used should be a pre-tax rate that reflects current market assessments of:

- the time value of money, represented by the current risk-free rate of interest; and
- the risks specific to the asset for which the future cash flow estimates have not been adjusted.

The discount rates used to measure the value in use should not be adjusted for risks which were taken into account when the future cash flow estimates were estimated, as this will result in the double-counting of the effect of some assumptions.

Factors to be taken into account, which can cause adjustments to the discount rate or expected cash flows, include the following:

- Expectations about possible variations in the amount or timing of the cash flows;
- The price for bearing the uncertainty inherent in the asset; and
- Other, sometimes unidentifiable, factors (such as illiquidity) that market participants would reflect in pricing the future cash flows the entity expects to derive from the asset.

If one or more of these factors are embedded in the discount rate to be used, the entity cannot also use those factors to adjust the estimated future cash flows.

An entity should make use of an asset-specific rate as the discount rate which should be obtained from the market. When an asset-specific rate is not directly available from the market, an entity should use substitutes to estimate the discount rate. An entity should estimate as far as possible a market assessment of:

- The time value of money for the period until the end of the asset's useful life; and
- The factors, as indicated above, to the extent that those factors have not caused adjustments in arriving at estimated cash flows.

The following rates can be taken into account as a starting point:

- The entity's weighted average cost of capital (WACC) determined using techniques such as the capital asset pricing model;
- The entity's incremental borrowing rate; and
- Other market borrowing rates.

It is important to note that these rates must be adjusted to reflect the way the market would assess the specific risks associated with the asset's estimated cash flows. These rates should also exclude risks that are not relevant to the asset's estimated cash flows or for which the estimated cash flows have been adjusted, examples include risks such as country risks, currency risk and price risk.

Determining the discount rate

An entity has to determine the appropriate rate to discount the pre-tax cash flows of an asset used in a manufacturing process and whose products are exported to African countries.

This discount rate should be an estimate of the rate that the market would expect on an investment with the same risks as the asset under consideration. Therefore, this rate should ideally be an asset-specific rate which is obtained from the market or by using the rate implicit in current transactions in the market in respect of similar assets. The entity was unable to obtain a rate from the market and consequently the entity must estimate the discount rate.

The entity decided to estimate the discount rate in the following manner:

The entity has to determine the rate to be used as a starting point and decides to use its weighted average cost of capital (WACC). The entity's WACC is 14%.

The rate is then adjusted to reflect the current market assessment of the specific risks associated with the asset's estimated cash flows, but only to the extent that the risks are not reflected in the cash flows. The entity estimates that the risks related specifically to the asset or the estimated cash flows of the asset will result in a premium of 2% on the WACC. This is due to currency risk, as the cash flows from the asset are mainly generated in a foreign currency, and the risk that the market value of the asset will decline, as the asset is used in a fast-developing technological market.

This rate is also adjusted to exclude risks that are irrelevant to the estimated cash flows, or for which the estimated cash flows have been adjusted, which results in a downward adjustment of 0.5%.

The discount rate is therefore estimated at 15.5%.

Effect of price increase attributable to general inflation

Entity B owns an asset with a remaining useful life of 2 years which generates net cash inflows of R25,000 per annum. Assume that if these cash flows are adjusted for the effect of inflation, it will amount to R26,500 in year 1 and R28,090 in year 2.

Assume a discount rate that excludes the effect of general inflation of 6.5% (12.5% if it includes the effect of inflation). The value in use can be calculated either by discounting the cash flows of R25,000 (real value) over a period of 2 years at a rate of 6.5%, or by discounting the cash flows of R26,500 in year 1 and R28,090 in year 2 (nominal value) using a rate of 12.5%. Both methods will result in the same value in use. In summary:

	Nominal rate and term	Inflation rate and amount	Real rate and term
Rate	12.5%	6%	6.5%
Cash flows	R26,500 in year 1 R28,090 in year 2	R1,500 in year 1 R3,090 in year 2	R25,000

Future cash flows

Future cash should be estimated for the asset in its current condition. Thus any future cash flow expected to arise from a future restructuring to which the entity is not yet committed; or cash flow that will improve or enhance the asset's performance should be ignored.

Entity B owns an asset with a remaining useful life of 5 years. It is not possible to determine the fair value less costs to sell of the asset and therefore the recoverability can only be determined through the calculation of value in use. Entity B uses the most recent financial budget approved by management to prepare cash flow forecasts that indicates that the asset will generate the following expected cash flows during the next five years:

Year	Cash inflow	Cash outflow	Net cash flow
Year 1	R500,000	R100,000	R400,000
Year 2	R500,000	R100,000	R400,000
Year 3	R600,000	R120,000	R480,000
Year 4	R700,000	R150,000	R550,000
Year 5	R600,000	-	R600,000

A pre-tax discount rate of 10% is selected, which represents a rate that reflects current market assessments of the time value of money and the risks specific to the asset, but without taking into account the effect of price increases attributable to general inflation.

The discount rate drives what the estimated future cash flows should include or exclude. As the discount rate excludes the effect of price increases attributable to general inflation, the cash flows are estimated in real terms (but would include the expected specific future price increases/decreases).

The value in use calculated by determining the present value of the future cash flows over five years at a rate of 10% is R1,803,056. This can be calculated by using MS Excel or a financial calculator.

Improvement of an asset

Entity B owns investment property (carried at cost) with a remaining useful life of 5 years. It is expected that the investment property will generate cash inflows of R70,000 per annum over the remainder of its useful life. The cash outflows are estimated at R12,000 per annum. Entity B intends to add improvements to the investment property at the end of year 3 at a cost of R20,000. Entity B expects that this will increase the annual cash inflows to R95,000 per annum.

The estimated cash flows to be used in estimating the value in use is the net cash flow of R58,000 (R70,000-R12,000) per annum. The cost of improvement and the increase in expected cash flows is not taken into account, as the asset is assessed in its current condition.

An entity estimates the net cash flows to be received (or paid) for the disposal of the asset at the end of its useful life in a similar way to an asset's fair value less costs to sell, except that,:

- An entity should use prices prevailing at the date of the estimate for similar assets that have reached the end of their useful life and have operated under conditions similar to those in which the asset will be used; and
- An entity should adjust those prices for the effect of both future price increases due to general inflation and specific future price increases or decreases. However, if estimates of future cash flows from the asset's continuing use and the discount rate exclude the effect of general inflation, the entity should also exclude this effect from the estimate of net cash flows on disposal.

Foreign currency future cash flows

Where future expected cash flows are denominated in a foreign currency, value in use is determined by estimating future cash flows generated in that currency and then discounting the cash flows using a rate appropriate for that currency. The present value in a foreign currency is then translated to the functional currency using the spot exchange rate at the date on which the value in use is calculated.

Example 23: Licence fees

Entity A uses two accounting systems for which they have to pay annual licence fees. Licence One amounts to R20, 000 and it covers the period of use from 1 April to 31 March 20X8 (the entity paid this fee in April 20X8).

Licence Two is for an amount of R500,000 and it covers the period of use from 1 April 20X8 to 31 March 20Y0 (i.e. two year period). The entity paid this fee in April 20X8. The reporting period ends 31 March.

A third specialised system was acquired in April 20X9, at a cost of R1,000,000. The fee charged is once off. The entity further pays an annual licence cost of R18,000. The entity expects to use this licence for a period of 10 years.

The journal entries are as follows:

1 April 20X8	Debit	Credit
	R	R
Intangible asset (expense in the statement of financial performance)	20,000	
Bank		20,000
Expensing the license fee cost as it relates to only on financial year (Licence One)		

1 April 20X8	Debit	Credit
	R	R
Prepaid expense (500,000 / 2)	250,000	
Intangible asset (expense in the statement of financial performance)	250,000	
Bank		500,000
Licence Two is also an annual licence with one year paid in advance. The prepayment for the following year is recognised whilst the licence cost for the first year is expensed.		

1 April 20X9	Debit	Credit
	R	R
Intangible asset (expense in the statement of financial performance)	250,000	
Prepaid expense		250,000
Recording the licence fee for Licence Two in the second year of use.		

1 April 20X9	Debit	Credit
	R	R
Intangible asset (capitalised in the statement of financial position)	1,000,000	
Bank		1,000,000
Recording the intangible asset acquired (Licence Three)		

1 April 20X9	Debit	Credit
	R	R
Software maintenance costs (expense)	18,000	
Bank		18,000
Recording the annual maintenance cost paid to the software provider		

31 March 20Y0	Debit	Credit
	R	R
Amortisation of software (1,000,000 / 10 years)	100,000	
Accumulated amortisation		100,000
Amortisation of Licence Three over expected useful life (being 10 years)		

Chapter 9: Useful Links and References

Reference	Location of reference
Frequently Asked Questions (FAQs) on the Standards of GRAP	ASB website: http://www.asb.co.za/frequently-asked-questions/
IGRAP 2 on <i>Changes in Existing Decommissioning, Restoration and Similar Liabilities</i>	ASB website: http://www.asb.co.za/interpretations-approved-and-effective/
IGRAP 3 on <i>Determining Whether an Arrangement Contains a Lease</i>	
IGRAP 10 on <i>Assets Received from Customers</i>	
IGRAP 11 on <i>Consolidation – Special Purpose Entities</i>	
IGRAP 12 on <i>Jointly Controlled Entities -Non-Monetary Contributions</i>	
IGRAP 16 on <i>Intangible Assets – Website Costs</i>	
IGRAP 18 on <i>Recognition and Derecognition of Land</i>	
IGRAP 19 on <i>Liabilities to Pay Levies</i>	
Guideline on The Application of Materiality to Financial Statements	ASB website: http://www.asb.co.za/guidelines/
Standard Chart of Accounts for Local Government (mSCOA)	National Treasury website: http://mfma.treasury.gov.za (mSCOA – Municipal Standard Chart of Accounts)
Illustrative Financial Statements for local government	National Treasury website: http://mfma.treasury.gov.za (mSCOA – Municipal Standard Chart of Accounts)