IFRS ACCOUNTING STANDARDS IN PRACTICE

IAS 36 Impairment of Assets

2024/2025

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Introduction

IAS 36 *Impairment of Assets sets* out requirements for impairment which cover a range of assets (and groups of assets, termed 'cash generating units' or CGUs). A number of assets are excluded from its scope (e.g. financial instruments and inventories) and IAS 36 is therefore predominately applicable to property, plant and equipment, intangible assets and goodwill. It should be noted however that all the excluded items effectively have their own equivalent impairment tests within the relevant standards.

For certain assets, impairment tests are required to be carried out on an annual basis irrespective of whether any indicators of impairment have been identified. These assets include:

- Goodwill
- Intangible assets with an indefinite life
- Intangible assets not yet available for use (i.e. 'work in progress').

For other assets or cash generating units, in circumstances in which indicators of impairment are identified, a formal impairment test is required to be carried out. The impairment test compares the asset's or (CGU's) carrying amount with its recoverable amount. The recoverable amount is the higher of the amounts calculated under the fair value less cost of disposal and value in use approaches.

The accuracy of an impairment test will be affected by the extent and subjectivity of estimates, and judgements in respect of the inputs and parameters that are used to determine the recoverable amount. Therefore, the application of the (sometimes complex) requirements of IAS 36 need careful consideration.

While the requirements of IAS 36 have not changed significantly in a number of years, significant events such as the 2019 Novel Coronavirus infection ('coronavirus') or 'COVID-19' outbreak, geo-political uncertainties such as Russia's invasion of Ukraine and general financial uncertainty experienced around the world have had a significant effect on many entities, emphasising the importance of the proper application of IAS 36. This edition includes guidance and examples intended to address current financial reporting needs, including Section 9.8 – Special considerations - Significant events. This guidance would be relevant for financial reporting when significant uncertainty over future cash flows exists.

The edition also includes Section 9.9 – Special considerations – climate change, which discusses the requirements of IAS 36 in the context of the financial reporting effects of climate change.

1. Scope

1.1. Assets and CGUs within the scope of IAS 36 Impairment of Assets

Assets and cash generating units (CGUs) within the scope of IAS 36 are:

- Property, plant and equipment (IAS 16 *Property, Plant and Equipment*)
- Intangible assets (IAS 38 *Intangible Asset*)
- Cash generating units (CGUs), including those to which goodwill arising from a business combination has been allocated (IFRS 3 *Business Combinations*)
- Investment property measured at cost (IAS 40 *Investment Property*)
- Right-of-use assets accounted for using the cost model (IFRS 16 *Leases*)
- An investor's interest in the following entities for which the entity accounts for its interest in accordance with the equity method under IAS 28 *Investments in Associates and Joint Ventures*:
  - Associates (IAS 28)
  - Joint ventures (IFRS 11 *Joint Arrangements*).
- Costs to obtain or fulfil a contract (IFRS 15 *Revenue from Contracts with Customers*), after the impairment requirements of IFRS 15.101-103 have been applied
- Biological assets at cost less amortisation and impairment (IAS 41 *Agriculture*, paragraphs 30-33)
- An investor's interest in the following entities in its separate financial statements (unless the entity has opted to measure these in accordance with IFRS 9 *Financial Instruments*:
  - Subsidiaries (IFRS 10)
  - Associates (IAS 28)
  - Joint ventures (IFRS 11).

1.2. Scope exclusions

Assets that are excluded from the scope of IAS 36 *Impairment of Assets* are (IAS 36.2):

- Inventories (IAS 2 *Inventories*)
- Contract assets (IFRS 15)
- Deferred and current tax assets (IAS 12 *Income Taxes*)
- Assets arising from employee benefits (IAS 19 *Employee Benefits*)
- Financial assets (IFRS 9)
- Investment property measured at fair value (IAS 40)
- Biological assets at fair value less costs to sell (IAS 41)
- Insurance contracts (IFRS 4 *Insurance Contracts* or IFRS 17 *Insurance Contracts*)
- Non-current assets or disposal groups classified as held for sale (IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*).

BDO comment

All of the items excluded from the scope of IAS 36 are covered by other IFRS® Accounting Standards which contain requirements that are equivalent to impairment assessments in some form.

For example, IAS 2 requires inventories to be measured after initial recognition 'at the lower of cost and net realisable value'. It is therefore unnecessary to test inventories for further impairment in accordance with IAS 36 as the recoverability of these assets has already been determined through the subsequent measurement requirements of IAS 2.

2. Goodwill and cash generating units – an introduction

2.1. Goodwill - introduction

Many of the complexities regarding impairment testing in practice relate to goodwill. Key aspects of goodwill are:

- Goodwill is only recognised from a business combination (accounted for in accordance with IFRS 3)
- When a business combination is effected through the acquisition of a controlling interest in another entity (typically the purchase of the acquiree's share capital), goodwill is only recognised and presented in the acquirer's consolidated financial statements
- When a business combination is not effected through the acquisition of a controlling interest in another entity, instead being through the purchase of some or all of the acquiree's trading activities and net assets, goodwill is recognised and presented in both the acquirer's separate and consolidated financial statements (if the acquirer has subsidiaries and, in addition, is required to (or chooses to) prepare separate financial statements)
- At the date of a business combination, goodwill is required to be allocated to the appropriate cash generating units (CGUs) (the CGUs associated with the acquiree, and also the acquirer's existing CGUs that are expected to benefit from the synergies of the business combination)
- Subsequent to initial recognition:
  - Goodwill may be reallocated between CGUs only in very limited circumstances
  - Goodwill is tested for impairment on an annual basis
  - If impairment is identified in a CGU to which goodwill has been allocated, the impairment is always first attributed to the carrying value of the goodwill before the carrying amounts of any other assets are reduced.
- Goodwill impairment can **never** be reversed
- Once the carrying value of goodwill has been reduced to nil, any further impairment of the CGU is allocated to the other assets of the CGU (within the scope of IAS 36) on a pro rata on the basis of the carrying amount of each asset in the CGU or group of CGUs.

The diagram below illustrates the 'goodwill life-cycle':

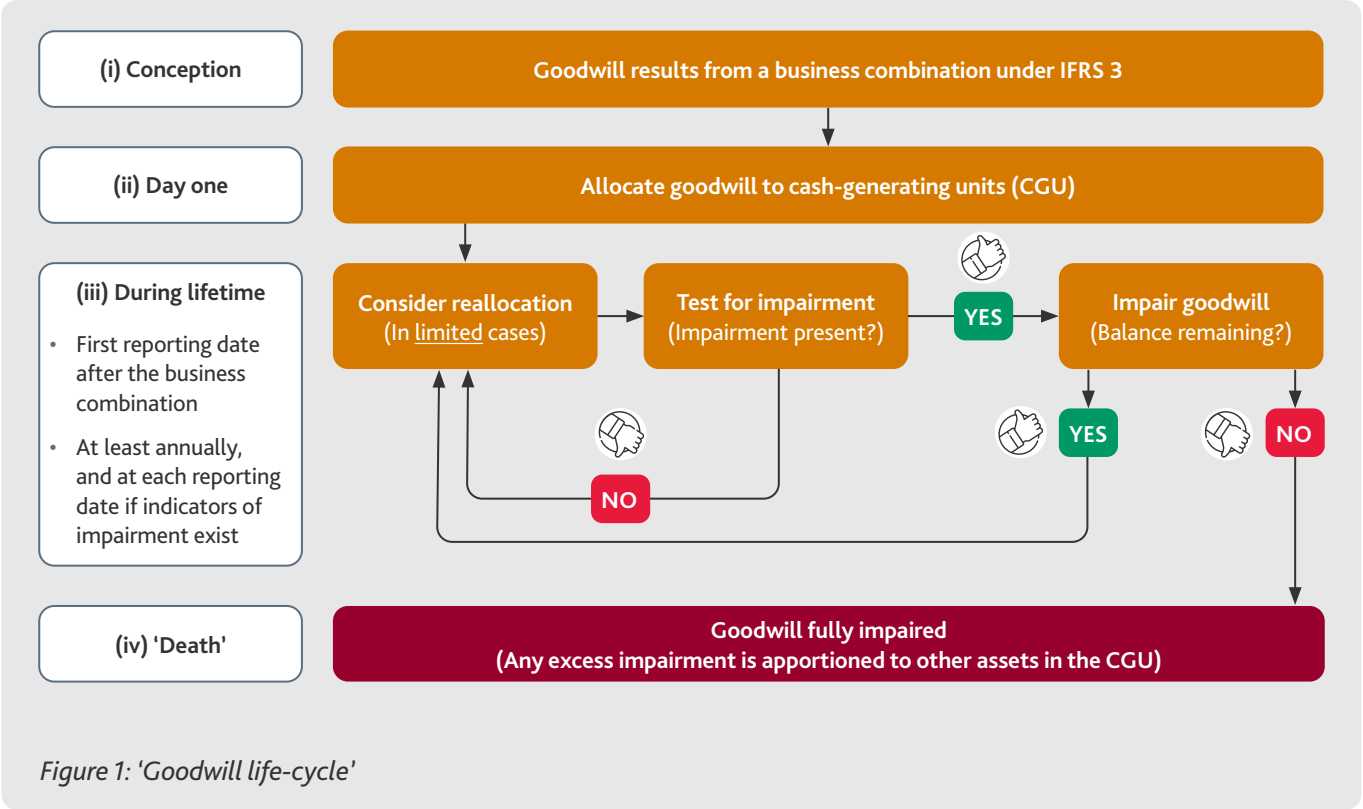


Figure 1: 'Goodwill life-cycle'

BDO comment

In practice, even at this initial stage, errors can arise which have a direct effect on the amount of goodwill which is recognised and on subsequent impairment tests. Some of these are summarised in the following table:

Common errors in practice

1. Goodwill is recognised from a transaction that is not a business combination.
2. Goodwill is recognised in an entity's separate/individual financial statements when the business combination is effected through the acquisition of a controlling interest in another entity.
3. Business combination accounting (IFRS 3) is not applied correctly, causing the amount of goodwill calculated to be over or understated, including:
   - not all assets and liabilities being identified (e.g. not considering the lower recognition threshold for intangibles, and failing to recognise amounts for contingent liabilities)
   - values of net identifiable assets not being measured as required by IFRS 3 (at fair value – with certain limited exceptions), which may result in the initial carrying value of goodwill being misstated, since goodwill is a residual amount
   - the consequent effect of the above (identifiable assets arising from a business combination) in respect of the calculation of deferred tax assets/liabilities. This applies in particular to intangible assets such as customer relationships which are recognised in accordance with IFRS 3 which are typically not tax deductible and therefore have a tax base of zero
   - calculating goodwill before determining the above deferred tax balances (goodwill represents the absolute residual in a business combination)
   - failure to revalue previously held interests(in the case of a step acquisition) and incorrect calculation of non-controlling interests
   - incorrect subsequent accounting for contingent consideration (taking changes in the carrying amount of contingent consideration to goodwill instead of profit or loss).
4. Allocation of goodwill to CGUs with no synergies arising from the business combination.
5. No allocation of goodwill to those CGUs that have synergies arising from the business combination.

2.2. Cash generating units - introduction

A cash generating unit is defined by IAS 36.6 as:

'*…the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets.*'

The composition and nature of CGUs varies from entity to entity, and is determined largely by entity specific factors.

In practice, CGUs could represent:

- An entire entity (parent or subsidiary entities within a group)
- Departments or business units within an entity
- Production lines within a department, or within an entity
- Groups of items of property, plant and equipment within a production line, within a department, or within an entity.

Goodwill that is allocable to individual CGUs

For the purposes of the allocation of goodwill, CGUs to which goodwill is to be allocated must (IAS 36.80):

a) Represent the lowest level within the entity at which the goodwill is monitored for internal management purposes, and

b) Not be larger than an operating segment, as defined by paragraph 5 of IFRS 8 *Operating Segments* before aggregation.

This means that goodwill is allocated separately to CGUs that are no larger than individual operating segments before any operating segments are considered for aggregation for the purposes of the segmental disclosures (such aggregation is permitted by IFRS 8.12).

It is important to note that even though an entity may be outside of the scope of IFRS 8 (e.g. because it is not listed on a public market), the references to operating segments as defined in IFRS 8.5 still apply for the purposes of the application of IAS 36.

Goodwill that is not allocable to individual CGUs

Goodwill may also relate to multiple CGUs, but not be allocable on a non-arbitrary basis to individual CGUs, but only to groups of CGUs. Therefore, while goodwill relates to certain CGUs, the carrying value of goodwill is not allocated (i.e. divided up) to those CGUs in determining their carrying value (IAS 36.81). The practical effect of this is that the carrying value of CGUs (which exclude goodwill in this instance) will be tested for impairment first, and recognise any impairment loss for that unit or units (IAS 36.98). Subsequent to this, the group of CGUs are tested and the carrying value of goodwill is included in that group of CGUs. Therefore, in instances where goodwill is not allocated to individual CGUs, the carrying value of the CGUs excluding goodwill will be impaired first before goodwill, which is the opposite order compared to CGUs to which goodwill has been allocated.

BDO comment

The identification of an entity or group's CGUs is not linked to the legal structure, and will frequently be different. Although it is possible that CGUs that are required to be identified for accounting purposes will be similar to an entity or group's legal structure (for example, a group with four subsidiaries, each of which is determined to represent a CGU), this will often not be the case.

For the purposes of identifying whether CGUs have been identified at a level at which none are larger than an operating segment, IFRS 8.5 defines an operating segment as being a component of an entity:

- that engages in business activities that generate revenues and incur expenses (including business activities with other components within the same entity)
- whose operating results are regularly reviewed by the entity's chief operating decision maker (CODM) to make decisions about resources to be allocated to the segment and assess its performance
- for which discrete financial information is available.'

Note: the CODM does not have to be a single person. The CODM could represent a group of people (such as the Board of Directors of a company, or the Trustees of a charitable organisation).

In most cases, provided the CGU represents the lowest level within the entity at which the goodwill is monitored for internal management purposes (IAS 36.80(a)), the three requirements set out above should be met.

In practice, over aggregation (grouping) of CGUs to the extent that the groups are larger than an entity's operating segments is a common error made by entities.

Example 2.2-1:

A parent entity considers that a particular subsidiary represents a single CGU. However, the parent entity has not taken into account that the subsidiary has three separate and distinct departments/business units for which disaggregated financial information is presented in the internal management reports that are provided to and reviewed by the CODM.

Therefore the parent entity is incorrect in its analysis that the subsidiary represents a single CGU, and in fact its subsidiary has (at least) three CGUs, being the three separate and distinct departments/business units.

In practice, when a parent entity initially determines that a subsidiary represents a single CGU, the parent entity needs to ensure that this conclusion is consistent with the internal management reports that are presented to the CODM.

2.3. Reallocation of goodwill between CGUs – limited circumstances

IAS 36 permits the reallocation of goodwill between CGUs after its initial recognition and allocation to CGUs in only three limited circumstances, as set out below.

(i) The goodwill allocation has not been finalised at the reporting date

IAS 36 anticipates circumstances in which an entity completes a business combination shortly before its reporting date and is unable to finalise the accounting and goodwill allocations (due to practical constraints) before its financial statements are required to be authorised.

To address this, IAS 36.84 permits an entity to finalise its allocation of goodwill no later than the end of the annual period beginning after the acquisition date, with the unallocated amount of provisionally calculated goodwill in the current period being disclosed.

(ii) An operation with attributable goodwill within a CGU is disposed of

IAS 36.86 requires an entity to include a portion of a CGU's goodwill in the carrying amount of an operation that has been disposed of when calculating the gain/loss on sale.

Such an allocation is done the basis of the relative values of the operation disposed of and the portion of the CGU retained, unless some other method better reflects the goodwill associated with the operation disposed of.

Example 2.3-1

Assume an operation within a CGU is disposed of for its recoverable amount of CU10m, and the recoverable amount of the CGU that remains after the disposal is assessed as CU30m.

Therefore, the entity has disposed of 25% (CU10m / (CU10m + CU30m)) of the recoverable amount of the CGU.

Therefore, 25% of the goodwill within the CGU would be required to be allocated to the carrying amount of the disposed operation (assuming the some other method does not better reflect the goodwill associated with the operation disposed of). This proportion of goodwill would be derecognised and included in the determination of the gain or loss on disposal of the operation.

(iii) The entity reorganises its structure

There may be instances where an entity reorganises its structure in such a way that the composition of the CGUs to which goodwill has been previously allocated is altered.

IAS 36.87 requires that an entity undertaking such a restructuring apportions the goodwill based on relative values (unless it can be demonstrated that another method better reflects the goodwill associated with the reorganised units).

BDO Comment

IAS 36 does not define or expand on relative values. In practice this is taken to mean that a valuation technique should be applied consistently across the CGUs, and therefore fair value or a measure of the recoverable amount is often used.

The example below uses the recoverable amount of the old and new CGUs as a proxy for their relative values.

Example 2.3-2

Assume an entity is structured as follows:

Old CGUs	Goodwill Allocated	Relative Value (Recoverable Amount)
CGU_A	CU2.0m	CU5.0m
CGU_B	CU1.0m	CU3.0m
CGU_C	CU3.0m	CU8.0m
Total	**CU6.0m**	**CU16.0m**

Each CGU represents an operation that produces and sells a specific product. Assume the entity then reorganises its three existing CGUs (A, B and C) into three new CGUs (D, E and F). The new CGUs represent components of a new, vertically integrated, structure (for example, CGU D carries out all manufacturing activities for the products), which the entity considers will be more efficient and profitable.

The table below sets out the effect on the entity's recoverable amount allocation per CGU. That is, it shows how the recoverable amounts of each of the old CGUs has been allocated based on the assets and liabilities that have been restructured into the new CGUs.

	New CGUs			
Old CGUs	CGU_D	CGU_E	CGU_F	**Total Recoverable Amount**
CGU_A	CU1.5m	CU2.5m	CU1.0m	**CU5.0m**
CGU_B	CU0.5m	CU1.0m	CU1.5m	**CU3.0m**
CGU_C	CU2.0m	CU1.0m	CU5.0m	**CU8.0m**
Total Recoverable Amount	**CU4.0m**	**CU4.5m**	**CU7.5m**	**CU16.0m**

The reallocation of the CU6.0m of goodwill would be calculated as follows (determined on an apportionment based on the relative values of the recoverable amounts of the new and old CGUs)

The formula to split the goodwill allocated to an old CGU between each of the three new CGUs is detailed below

$$GW_{CGU\ New} = GW_{CGU\ Old} \times [\ RA_{Allocated\ to\ CGU\ New} / RA_{CGU\ Old}\ ]$$

GW = Goodwill RA = Recoverable Amount

	New CGUs		
Old CGUs	CGU_D	CGU_E	CGU_F
CGU_A	CU0.60m CU2.0m x (CU1.5m/CU5.0m)	CU1.00m CU2.0m x (CU2.5m/CU5.0m)	CU0.40m CU2.0m x (CU1.0m/CU5.0m)
CGU_B	CU0.16m CU1.0m x (CU0.5m/CU3.0m)	CU0.33m CU1.0m x (CU1.0m/CU3.0m)	CU0.50m CU1.0m x (CU1.5m/CU3.0m)
CGU_C	CU0.75m CU3.0m x (CU2.0m/CU8.0m)	CU0.384m CU3.0m x (CU1.0m/CU8.0m)	CU1.88m CU3.0m x (CU5.0m/CU8.0m)
Total reallocated goodwill (per CGU)	**CU1.51m**	**CU1.71m**	**CU2.78m**
Total reallocated goodwill			**CU6.0m**

Common errors in practice

1. There is a reallocation of goodwill for reasons other than the three limited circumstances set out above (e.g. reorganisations of legal structure without economic substance).
2. A portion of a CGU's goodwill is not included in the carrying amount of an operation which has been disposed of.
3. Following a reorganisation, an entity does not correctly reallocate its goodwill:
   - An appropriate basis is not used (not based on relative values)
   - Goodwill is allocated to newly created CGUs that have no synergies arising from the original business combination
   - Goodwill is not allocated to newly created CGUs that have synergies arising from the original business combination.
4. Goodwill is reallocated on a specific basis when this approach cannot be justified.

3. Indicators / Timing of impairment tests

3.1. Mandatory impairment test

The following assets are required to be tested for impairment annually (IAS 36.10):

- Goodwill (the cash generating unit (CGU) or group of CGUs to which goodwill has been allocated – see section 2)
- Intangible assets with an indefinite useful life
- Intangible assets not yet available for use.

This means that these assets are tested for impairment each year, regardless of whether there are any indications of impairment.

In respect of the two categories of intangible assets noted above, IAS 36.11 notes that an annual test is required as there is greater uncertainty regarding the ability of these assets to generate sufficient future economic benefits to recover their carrying amounts.

3.2. Timing of impairment tests

The timing of impairment tests for goodwill and the two classes of intangible assets does not need to be at the financial year end. This may permit impairment tests to be carried out at a different time of year when more internal resources may be available. However, an entity is also required to reassess goodwill for impairment and carry out an additional impairment test at its reporting date, even if an annual impairment test has already been carried out during the period, when there are any indicators of impairment as at that reporting date (IAS 36.9). Therefore, an entity that prepares interim financial statements may be required to perform multiple impairment tests within a single annual period if indicators of impairment exist as at multiple reporting dates.

- Goodwill (i.e. the cash generating unit (CGU) to which goodwill has been allocated to)
- Intangible assets with an indefinite useful life
- Intangible assets not yet available for use

Timing of impairment test:

Must be tested annually, and also at any reporting date when indicators of impairment are present.

If tested for impairment before the end of the reporting period, an additional test is required if there are indicators of impairment at the reporting date.

The mandatory annual impairment test can be at any time during an annual period, provided the test is performed at the same time every year.

There is no requirement for an entity to test all these assets at the same time (including individual CGU's).

Assets in this category which are initially recognised during the current annual period must be tested for impairment before, or at, the end of the current annual period.

- All other non-financial assets (within the scope of IAS 36)

Timing of impairment test:

Required to be tested for impairment at any reporting date when indicators of impairment are present.

Figure 2: Differences in timing of impairment tests

Common errors in practice

1. Impairment testing is not carried out when required by IAS 36:
   - Goodwill, intangible assets with an indefinite useful life, and intangible assets not yet available for use (annually at the same time every year)
   - All assets, including goodwill and intangibles identified above (at any reporting date at which there is an indicator of impairment).
2. Not considering the existence of indicators of impairment of goodwill at the reporting date when an annual impairment test has already been carried out during the reporting period.
3. Failing to conduct an impairment test at the reporting date for goodwill, intangible assets with an indefinite useful life, or intangible assets not yet available or use, that were recognised for the first time during the current annual period.

3.3. Identifying indicators of impairment

IAS 36 requires an entity to consider the following internal and external indicators when assessing whether there are indicators of impairment:

(i) External indicators

External indicators of impairment include (IAS 36.12(a)-(d)):

- a significant and more than unexpected decline in market value of the entity (or CGU)
- changes with an adverse effect on the technological, market, economic or legal environment in which the entity operates, such as:
  - increases in levies
  - the entry of a major competitor into the market
  - a change in consumer demand that the entity is unable to respond to.
- increases in interest rates, changes in foreign exchange rates, and/or commodity prices
- the carrying amount of the entity's net assets is more than its market capitalisation.

BDO Comment

External indicators must be based on conditions that existed at the end of the reporting period, or else they result from non-adjusting events after the reporting period (IAS 10.3).

For example, if an entity's manufacturing facility were destroyed by a hurricane 15 days after the end of a reporting period, then the relevant assets (e.g. property, plant and equipment, etc.) are not impaired by virtue of the damage caused by the hurricane, as their destruction does not relate to conditions at the end of the reporting period. The entity would provide disclosures as required by IAS 10.

In some cases, it may be difficult to determine whether an indicator of impairment that becomes known after the end of a reporting period relates to conditions that existed at the end of the reporting period. Generally, the shorter the period of time between the end of the reporting period and the indicator of impairment becoming known, the higher the likelihood that the indicator related to conditions that existed as at the end of the reporting period.

For example, consider an entity that had capitalised significant internally generated intangible assets related to developed technology. The product related to the technology launched one month subsequent to the end of the reporting period, with results significantly below forecasts along with negative reactions from analysts and the press. Despite the product launching after year-end and the poor results themselves occurring subsequent to the end of the reporting period, given the short period of time (i.e. one month), the indicators of impairment were likely to be indicative of conditions present at the end of the reporting period. That is, it is likely that the capitalised intangible asset was not capable of generating sufficient cash flows at period end. Therefore, an impairment test would be required on the capitalised intangible assets.

For further discussion of the interaction between IAS 36 and IAS 10 in the context of a significant event such as a pandemic or war, see section 9.8 of this publication.

The European Securities and Markets Authority (ESMA) has previously noted in a public report that it is sceptical when an entity states that it has determined that no impairment exists when its market capitalisation is lower than the carrying amount of its listed equity instruments.

The market capitalisation of an entity represents strong external evidence of the value that market participants place on an entity, and therefore its fair value. Consequently, an entity would need to be able to assert that its value in use exceeds its fair value to avoid recording an impairment.

(ii) Internal indicators

Internal indicators of impairment include (IAS 36.12(e)-(g) and 14):

- Evidence of obsolescence or physical damage
- Changes in the extent to which an asset is used or is expected to be used, such as:
  - an asset becoming idle
  - plans to discontinue or restructure the operation to which an asset belongs
  - plans to dispose of an asset before the previously expected date
  - a reassessment of the useful economic life of an asset as finite rather than indefinite.
- Evidence from internal reporting that the economic performance of an asset is, or will be, worse than expected, such as:
  - cash flows for acquiring the asset, or subsequent cash needs for operating or maintaining it, being significantly higher than originally budgeted
  - actual net cash flows or operating profit or loss flowing from the asset are significantly worse than budgeted
  - there is a significant decline in budgeted net cash flows or operating profit expected to be generated by the asset
  - operating losses or net cash outflows are expected for the asset, when current period amounts are aggregated with budgeted amounts for the future.
- An increase in the cost of capital (note, this can also be caused by external factors)
- Changes to the entity's business model and/or plans to restructure/discontinue operations
- Shelving or deferral of previously committed capital investment.

(iii) Indicators in respect of dividends received from a subsidiary, joint venture or associate ('investee')

An indicator of impairment exists when an investor recognises a dividend from its investee and evidence is available that either (IAS 36.12(h)):

the carrying amount of the investee in the investor's separate financial statements exceeds the carrying amount in the consolidated financial statements of the investee's net assets, including associated goodwill, or

the dividend from the investee exceeds the total comprehensive income of the investee in the period that the dividend is declared.

(iv) Materiality and previous calculations

IAS 36.15 emphasises that the concept of materiality also applies to impairment testing for assets that are only subject to impairment testing when indicators arise. For example, if previous calculations show that an asset's recoverable amount is significantly greater than its carrying amount (commonly referred to as 'headroom'), the entity need not re-estimate the asset's recoverable amount if no events have occurred that would eliminate that difference.

However, this does not apply to those assets listed in section 3.1. above, as they are required to be tested for impairment annually irrespective of whether any indicators of impairment exist:

- Goodwill (i.e. the cash generating unit (CGU) or group of CGUs to which goodwill has been allocated– see section 2)
- Intangible assets with an indefinite useful life
- Intangible assets not yet available for use.

It should also be noted that in carrying out the current period impairment test for a CGU (or group of CGUs) containing goodwill, IAS 36.99 permits the use of the recoverable amount that was determined in the most recent detailed calculation in the preceding period, if, and only if, all of the following criteria are met:

i. There has been no significant change in the assets and liabilities that make up the CGU since the most recent recoverable amount calculation

ii. The most recent recoverable amount calculation resulted in an amount that exceeded the asset's carrying amount by a substantial margin

iii. The likelihood that a current recoverable amount determination would be less than the current carrying amount of the unit (after considering all the facts, circumstances, and events since the most recent recoverable amount calculation) is remote.

(v) Events after Reporting Date

Entities also need to assess whether events after their reporting date provide any indication that CGUs (assets) may have been impaired as at the reporting date.

Common errors in practice

1. Incorrect assessment of the internal and external indicators of impairment (i.e. not identifying indicators when these are in fact present).

4. Impairment testing

The impairment test required by IAS 36 *Impairment of Assets* compares an asset's (or cash generating unit's (CGU's)) carrying amount (see section 4.1) with its recoverable amount (see section 4.2).

An asset's (or CGU's) recoverable amount is determined as being the higher of the asset's (or CGU's):

- Fair value less costs of disposal (see section 4.3)
- Value in use (see section 4.4).

An impairment is recognised when an asset's (CGU's) recoverable amount is lower than the asset's (CGU's) carrying amount.

No adjustment is required when the recoverable amount calculated is higher than the asset's (or CGU's) carrying amount, unless there has been an impairment loss recognised in previous periods and indications exist that the impairment loss may no longer exist or may have decreased and the requirements to reverse or partially reverse the impairment are satisfied (see section 6).

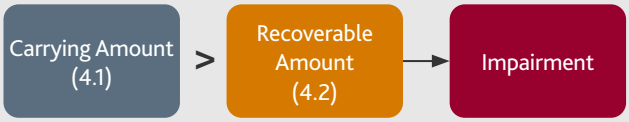


Figure 3: Impairment recognition

4.1. Carrying amount

IAS 36.6 defines an asset's or CGU's carrying amount as:

'…the amount at which an asset is recognised after deducting any accumulated depreciation (amortisation) and accumulated impairment losses thereon.'

The identification of the carrying amount for an individual asset (i.e. an item of property, plant and equipment) will usually be straightforward.

However, IAS 36 requires that an item assessed for impairment must generate cash inflows that are largely independent from other assets. For many individual assets, this is unlikely to be the case (e.g. a single piece of machinery in a factory would not generate cash inflows that are independent of the cash flows from other assets in the business).

Therefore, in most cases, individual assets (including goodwill) are required by IAS 36 to be grouped into cash generating units (CGUs). CGUs are defined as being:

'the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets'.

Accordingly, the determination of the carrying amount of a CGU requires the consideration of more factors than would apply to an individual asset.

IAS 36.75 requires that the carrying amount of a CGU is determined on a basis consistent with the determination of the recoverable amount.

Figure 4 below illustrates how the carrying amount of a CGU is calculated (each of the elements is discussed in more detail below):

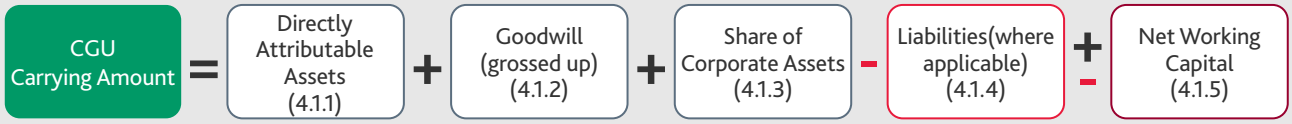


Figure 4: Illustration of the determination of an asset's (or CGU's) carrying amount

Example 4.1-1 – unit of account and lease components (IFRS 16)

Entity A leases five floors of an office building for its head office employees. The five floors were leased from the lessor under a single legal lease contract; however, each floor is distinct from the other (i.e. each floor could be used by a different lessee as they have separate elevator access, facilities, etc.).

The lease is for several years and contains fixed lease payments. Therefore, Entity A has recognised right-of-use assets and lease liabilities relating to the lease.

During the lease term, Entity A determines that it no longer requires all five floors due to changes in its business. However, because the lease is non-cancellable, Entity A must continue to pay the fixed lease payments for several more years. As Entity A only requires three floors, it decides to sublease the other two floors to sub-tenants. Due to changes in market conditions, the sublease payments receivable are significantly less than the amount Entity A is paying for the head lease. Assume that the sub-leases are classified as operating leases (i.e. Entity A continues to recognise the right-of-use asset relating to the head lease).

While Entity A remains profitable overall, Entity A identifies indicators of impairment relating to its assets; therefore, it must determine the recoverable amount of the right-of-use asset.

Entity A must determine the unit of account for determining the recoverable amount of the right-of-use asset – whether each floor of the building is tested individually, or all floors are a single unit of account. If all floors were a single unit of account, the practical consequence of this conclusion is that all floors of the office are likely to be tested for impairment as corporate assets allocated to various CGUs and therefore 'shielded' from impairment as Entity A remains profitable.

In our view, in this case, each floor of the building is tested individually for impairment. IFRS 16.B32 states:

The right to use an underlying asset is a separate lease component if both:

(a) the lessee can benefit from use of the underlying asset either on its own or together with other resources that are readily available to the lessee. Readily available resources are goods or services that are sold or leased separately (by the lessor or other suppliers) or resources that the lessee has already obtained (from the lessor or from other transactions or events); and

(b) the underlying asset is neither highly dependent on, nor highly interrelated with, the other underlying assets in the contract. For example, the fact that a lessee could decide to lease the underlying asset without significantly affecting its rights to use other underlying assets in the contract might indicate that the underlying asset is not highly dependent on, or highly interrelated with, those other underlying assets.

Each floor is capable of being used separately (criterion (a)) as each floor has access to the elevator and its own facilities and each floor does not depend on the other floors (criterion (b)). Therefore, each floor is a separate lease component, and the requirements of IAS 36.22 apply to each floor individually.

The fact that Entity A entered into a single legal contract does not change the fact that IFRS 16.B32 requires separate lease components to be identified. In practice, identifying separate lease components or a single 'larger lease' may not result in a practical difference in the accounting under normal circumstances.

The consequences of this conclusion are that the floors of the office are likely to be tested for impairment as follows:

1. Three floors continuing to be used by Entity A: corporate assets allocated to various CGUs which may mean that the right-of-use assets are 'shielded' from impairment as overall, Entity A remains profitable.
2. Two floors subleased: as these floors generate cash inflows that are largely independent of those from other assets or groups of assets (IAS 36.22), their recoverable amount is determined separately. As the subleases earn significantly less income than the fixed lease payments in the head lease, the right-of-use assets may be impaired.

4.1.1. Directly attributable assets

Assets are allocated to a CGU if either:

- They can be directly attributed to the CGU, or
- They can be allocated to the CGU on a reasonable and consistent basis.

In practice, this is not always a simple process for items such as goodwill and corporate assets (refer to 4.1.2. and 4.1.3.).

It is acceptable to include cash flows that result from assets that are excluded from the scope of IAS 36 if these assets form part of working capital (see section 4.1.5). However, other financial assets are excluded from the scope of IAS 36 and impairment is dealt with in accordance with the requirements of IFRS 9. Examples of such balances include:

- Intercompany receivables
- Amounts advanced to related parties (and or third parties)
- Investments measured at amortised cost or fair value through other comprehensive income (such as investments in government or corporate bonds not held for trading)

Common errors in practice

1. Incorrect allocation of directly attributable assets to a CGU:
   - Assets omitted
   - Assets allocated on an unreasonable and/or inconsistent basis
   - Assets included that produce largely independent cash flows from the CGU that have no practical reason to be allocated to the CGU.

4.1.2. Allocating goodwill to CGUs

IAS 36 requires that goodwill is allocated at the lowest level at which it is monitored internally. A CGU must also not be larger than an operating segment1 prior to applying aggregation criteria (as defined in IFRS 8). This links to the requirement in IFRS 8 that operating segments are identified on the basis of financial information provided internally to the Chief Operating Decision Maker (CODM).

This means that goodwill is allocated separately to individual operating segments (CGUs) before any operating segments are aggregated together into reportable segments (such aggregation is permitted by IFRS 8.12).

It is important to note that even though an entity may be outside of the scope of IFRS 8, it is still necessary to apply and refer to IFRS 8 for the purposes of impairment tests to be carried out in accordance with IAS 36.

(i) Goodwill determined on proportionate share of net assets

IFRS 3 permits two methods to determine the initial carrying value non -controlling interest, which affects the initial carrying value of goodwill:

- Fair value (including any goodwill attributable to non-controlling interests)
- The excess of purchase consideration over the investor's proportionate share of net assets.

An entity that elects to determine the initial carrying value of goodwill as the excess of purchase consideration over the investor's proportionate share of net assets is required to gross up goodwill to reflect 100% of the investee (meaning that goodwill attributable to non-controlling interests is included in the carrying amount for impairment testing). This is logical, as it results in 100% of the net cash inflows being compared to 100% of the net assets in each CGU.

(ii) Unallocated goodwill

Goodwill must be initially allocated to the appropriate CGUs, unless it is impractical to do so at the end of the reporting period during which an acquisition giving rise to goodwill took place (see section 2.3).

Where goodwill relates to a CGU, but has not been allocated to that CGU, the CGU is tested for impairment whenever there is an indication of impairment (IAS 36.88).

Common errors in practice

1. Inaccurate allocation of goodwill to CGUs following a business combination
   - goodwill may be allocated to CGUs on an arbitrary basis, or may not be attributed to CGUs at all.
2. Incorrect determination of an entity's CGUs and/or operating segments:
   - In practice, care is required to ensure that an entity's CGUs are not too large (i.e. that they are appropriately disaggregated, and are not larger than the operating segments identified for the purposes of internal reporting).

4.1.3. Corporate assets

Corporate assets are (IAS 36.6):

'… assets other than goodwill that contribute to the future cash flows of both the cash-generating unit under review and other cash-generating units.'

In practice, corporate assets typically comprise the assets of an entity that do not themselves generate independent cash inflows, but instead act to 'support' the entity's other CGUs (which represent assets that do generate independent cash inflows).

There is no specific guidance that sets out what corporate assets include and exclude, as the nature and form of corporate assets differ among entities based on a number of factors, including the structure of an entity itself.

Common examples would include many assets that would be seen as 'group' or 'divisional' assets, such as:

- The building that houses the headquarters of an entity or division
- IT infrastructure
- Research centres.

Corporate assets are normally allocated to CGUs on a reasonable and consistent basis for the purposes of impairment testing (IAS 36.102(a)).

BDO Comment

Usually, allocation based on the relative values of the CGUs may be considered to be reasonable and consistent. However, where there are significant differences in the remaining useful lives of the CGUs it may be necessary to incorporate some form of 'weighting' to ensure the allocation better reflects the reality of the entity's operations.

Example 4.1.3-1

- Entity A operates from a single centrally located headquarters
- The carrying value of the single centrally located headquarters is CU1,000
- Entity A has identified that it has 2 CGUs (X and Y, as set out below):

	CGU_X	CGU_Y	Total
Carrying amount	CU13,000	CU25,000	CU38,000
Remaining operational life	5 years	15 years	

Because there is significant difference in the remaining operational lives of CGU_X and CGU_Y, the entity incorporates 'weighting' based on the relative amounts.

Using CGUX as the benchmark weighting of 1.0, the weightings would be as follows:

	CGU_X	CGU_Y	Total
Weighting	1.0	3.0 (= 15ys / 5yrs)	4.0
Weighted relative amount	CU13,000 (= CU13,000 x 1.0)	CU75,000 (= CU25,000 x 3.0)	CU88,000

The allocation of the CU1,000 corporate asset would then be determined based on the weighted relative amount as follows:

CGU	Calculation	Allocation
CGU_X	= CU1,000 x (CU13,000 / CU88,000)	CU148
CGU_Y	= CU1,000 x (CU75,000 / CU88,000)	CU852
		CU1,000

In circumstances in which an entity determines that the allocation of corporate assets cannot be performed on a reasonable and consistent basis, the corporate assets are excluded from the carrying amount of a CGU(s). However, in such cases the entity is then required to (IAS 36.102(b)):

1. Test all CGUs with no allocation of corporate assets for impairment, and recognise any impairment
2. Aggregate CGUs to the lowest level at which corporate assets can be allocated, and allocate corporate assets at that level
3. Test the aggregated group (or groups) of CGUs, as a whole, for impairment, and if impairment exists, allocate the impairment loss pro-rata to all assets in the aggregated group of CGUs (including the corporate assets).

IAS 36 notes that corporate assets cannot be tested individually for impairment, because they do not generate separate cash flows and so their individual recoverable amounts cannot be determined unless management has decided to dispose of the asset. In this case, the fair value less costs of disposal may be estimated for the corporate assets.

BDO comment

We would expect that it would only be in rare cases that it is not possible to allocate corporate assets on a reasonable and consistent basis, and there is a relatively high hurdle to entities making such claims.

In practice, an allocation based on the (weighted) relative (recoverable) amounts is usually a straightforward approach.

An entity must still assess corporate assets (within the scope of IAS 36) individually for indicators of impairment, particularly if individually material.

In instances where indicators of impairment exist, an individual impairment test would be required in accordance with IAS 36 or the applicable IFRS if scoped out of IAS 36.

When an entity allocates corporate assets to a CGU, it must ensure that the estimated future cash flow's related to those corporate assets are used in determining the CGU's value in use (refer to section 4.4.1.).

Common errors in practice

1. Incorrect allocation of corporate assets to a CGU:
   - Corporate assets omitted
   - Corporate assets allocated on an unreasonable and/or inconsistent basis
   - Corporate assets not allocated to CGUs by the entity on the basis that:
     - The corporate assets themselves are not individually impaired
     - Allocation cannot be done on a reasonable and consistent basis, when in fact it can.
2. Corporate assets that have correctly not been allocated to individual CGUs by the entity (i.e. because this cannot be done on a reasonable and consistent basis) are subsequently not allocated at an aggregated CGU level and tested for impairment.

4.1.4. Attributable liabilities

Liabilities are **only** included in the carrying amount of a CGU when the recoverable amount a CGU cannot be determined without consideration of the liability.

In practice this would be the case if, for example, a potential buyer of a CGU would be required to assume the liability. This may be the case in certain circumstances to items including payables, pensions, leases and other provisions.

BDO Comment

It is important to note that liabilities that relate to the CGU's financing activities (i.e. interest bearing debt) are **excluded** from the carrying amount of the CGU. This is because cash flows from such activities (i.e. interest) are specifically excluded from value in use calculations (this is because the effect of financing activities is incorporated in determining the discount rate - refer section 4.4.1. for further discussion).

Where liabilities are attributed to a CGU's carrying amount, the entity must adjust the cash flows from these liabilities in determining the CGU's value in use calculation (e.g. the inclusion of cash outflows from payables that have subsequently been settled). This results in a lower net asset recoverable amount being impairment tested against the (lower) net cash flows that relate to those net assets (i.e. due to the cash outflows associated with the settlement of the allocated liability).

For discussion of how recognised lease liabilities affect the impairment calculation of related assets and CGUs (i.e. right-of-use assets and CGUs containing right-of-use assets), see sections 4.1.4(ii) and 4.4.1(i) below.

(i) Deferred tax liabilities

Significant deferred tax liabilities may be recognised on separately identifiable intangible assets (and other assets, such as investment property) in a business combination. As a consequence, these deferred tax liabilities increase the amount of goodwill recognised (i.e. they reduce the net identifiable assets assumed).

The general requirements of IAS 36 require that impairment tests are carried out on a **pre-tax** basis (i.e. **exclusive** of tax effects). However, if the deferred tax liability balance on the individual assets within a CGU were excluded, there would (mathematically) be an immediate impairment of goodwill allocated to that CGU – as the carrying amount of the CGU suddenly increases.

Consequently, in practice, these deferred tax liabilities are often included in the carrying amount of the related CGU, meaning that there is no immediate impairment loss.

(ii) Leases

CGUs may include right-of-use assets arising from leases in the scope of IFRS 16. In the case of determining such a CGU's fair value less costs of disposal, in many cases it will be necessary to include the carrying value of the lease liability. This is because many leases would require that upon disposal of a CGU containing a lease, the acquirer of the CGU would acquire the lease, which includes the recognised right-of-use asset and the lease liability.

In order to perform a meaningful comparison between the carrying amount of the CGU and its recoverable amount, the carrying amount of the liability is deducted in determining both the CGU's value in use and its carrying amount. In order to determine the value in use of a CGU which contains ROU assets:

- Lease payments included in the recognition of the lease liability (e.g. fixed lease payments) are excluded in the calculation of the CGU's value in use, however, the recognised lease liability is deducted from the value in use and carrying value of the of the CGU. This is because the recoverable amount is the higher of fair value less costs of disposal and value in use. If the carrying value of the lease liability is included in the determination of the fair value less costs of disposal, it must similarly be deducted from the value in use and carrying value of the CGU. See section 4.4.1(i) for a worked example of this.
- Lease payments that are excluded from the recognition of the lease liability (e.g. variable lease payments not based on an index or rate, such as lease payments that are dependent on the revenue derived from the leased asset's use) are included in the calculation of the CGU's value in use, but are not considered in determining the CGU's carrying amount. That is because such payments are not recognised in the carrying value of the right-of-use asset or the lease liability, as required by IFRS 16's measurement requirements.

For further discussion on the interaction between IAS 36 and IFRS 16, see section 4.4.1(i) for a worked example of determining the value in use of a CGU that contains recognised leases in the scope of IFRS 16. This example also provides guidance on which cash flows should be included in a value in use calculation, including how expiring leases are treated.

(iii) Restoration provisions

Provisions that result from a legal or contractual obligation to restore, rehabilitate, or 'make-good', that are directly attributable to a CGU, must be included in the CGU's carrying amount. This is because disposal of the CGU would require the buyer to assume the liability.

Examples of such provisions include:

- Environmental restoration costs that are required to be paid or incurred during and/or upon the completion of activities undertaken by the CGU (e.g. in the mining industry, it is a common legal requirement for an entity to either pay a fee or incur at its own cost amounts related to the environmental restoration of the mine site)
- Dilapidated building levies
- 'Make-good' provisions to buildings (or other assets) held under a lease.

BDO Comment

The cash flows related to these balances are equally relevant to determining the recoverable amount under fair value less costs of disposal and value in use methods (refer to section 4.3 and 4.4 respectively). Similar to 4.1.4(ii) relating to leases, the carrying value of recognised restoration provisions must be considered in determining the CGU's recoverable amount. See 4.4.1(h) for a worked example.

(iv) Pension liabilities (assets)

Entities need to consider whether pension liabilities (assets) would need to be attributed to the carrying amount of a CGU, with the associated estimated future cash flows being included in the calculation to determine the CGU's recoverable amount.

BDO Comment

There are practical difficulties when pension liabilities (assets) are allocated to a CGU.

In particular, differences (often significant) exist between:

- The measurement base of a pension liability (asset)
- Cash flows related to the pension liability (asset).

As a result it is often difficult to distinguish the cash flows that relate to each CGU, and therefore entities that allocate pension liabilities (assets) to the carrying amount of a CGU would need to devise a robust and reasonable allocation of the estimated future cash flows from the pension liabilities (assets) in determining the CGU's recoverable amount, to be applied consistently from one period to the next.

Common errors in practice

1. Incorrect allocation of liabilities to a CGU:
   - Liabilities omitted even when a potential buyer of a CGU would be required to assume the liability (note that these can include items which are technically outside the scope of IAS 36, such as employee benefit obligations)
   - Liabilities included even though a potential buyer of a CGU would not be required to assume the liability
   - Inconsistent treatment in respect of lease balances included/excluded in the carrying amount of the CGU and treatment of the related lease payments included/excluded in the future estimated cash flow projections.

4.1.5. Net working capital

Entities have a choice whether to include or exclude working capital balances from the carrying amounts of a CGU, so long as there is a consistent application to the inclusion or exclusion of cash flows from working capital items in determining the CGU's recoverable amount (refer to section 4.4.1.(f)).

BDO Comment

(i) Discounting

Working capital items are usually settled in the short term and therefore discounting is unlikely to have a significant effect on their carrying amounts.

However, should any of the entity's working capital items not be due for settlement in the short term, and the effect of discounting is material, then this would need to be included.

(ii) Working capital items outside the scope of IAS 36

IAS 36 scopes out a number of items that may be included within an entity's working capital balance (such as inventories). However for the purposes of determining the carrying amount of the CGU and related cash flows, it may be appropriate to include such (scoped out) items. This links to the way in which the recoverable amount of the CGU is determined.

Provided the entity is consistent in including or excluding net working capital, the outcome of the impairment test will be the same.

Example 4.1.5-1

Entity A has a single CGU with a carrying value of CU350,000, excluding a working capital net liability of CU(2,800).

The pre-tax cash flows (excluding working capital cash flows), and working capital balances over the 5 year forecast period are presented in the table below:

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
(a)	Pre-tax cash flows (excluding working capital cash flows)	CU35,000	CU70,000	CU105,000	CU140,000	CU175,000	-
(b)	Working Capital (Opening)	CU(2,800)	CU(5,250)	CU(10,500)	CU(15,750)	CU(21,000)	CU(26,250)[a]
(c)	Working Capital (Closing)	CU(5,250)	CU(10,500)	CU(15,750)	CU(21,000)	CU(26,250)[a]	-
(d)	Working Capital (Movement [= (b) – (c)])	CU2,450	CU5,250	CU5,250	CU5,250	CU5,250	CU(26,250)

[a] The closing working capital balance in year 5 is accounted for as a cash (out) flow in year 6.

(i) Calculation where opening working capital is included in the carrying value of the CGU

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Pre-tax cash flows	CU37,450	CU75,250	CU110,250	CU145,250	CU180,250	CU(26,250)
Discounted pre-tax cash flows [at 10%]	CU34,045	CU62,190	CU82,832	CU99,208	CU111,921	CU(14,817)
Recoverable amount [sum of discounted pre-tax cash flows]	CU375,379					
Carrying amount [= CU350,000 + (2,800)]	CU347,200					
Surplus (Deficit)	CU28,179					

(ii) Calculation where opening working capital is excluded from the carrying value of the CGU

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Pre-tax cash flows	CU40,250	CU75,250	CU110,250	CU145,250	CU180,250	CU(26,250)
Discounted pre-tax cash flows [at 10%]	CU36,591	CU62,190	CU82,832	CU99,208	CU111,921	CU(14,817)
Recoverable amount [sum of discounted pre-tax cash flows]	CU377,925					
Carrying amount [= CU350,000]	CU350,000					
Surplus (Deficit)	CU27,925					

Note: There is an insignificant (less than 1%) difference of CU254 between the surplus calculated in (i) and (ii) above. This is due to the effect of timing and discounting of the cash flows.

4.2. Recoverable amount

IAS 36.6 defines an asset's or CGU's recoverable amount as:

'… the higher of its fair value less costs of disposal and its value in use.'

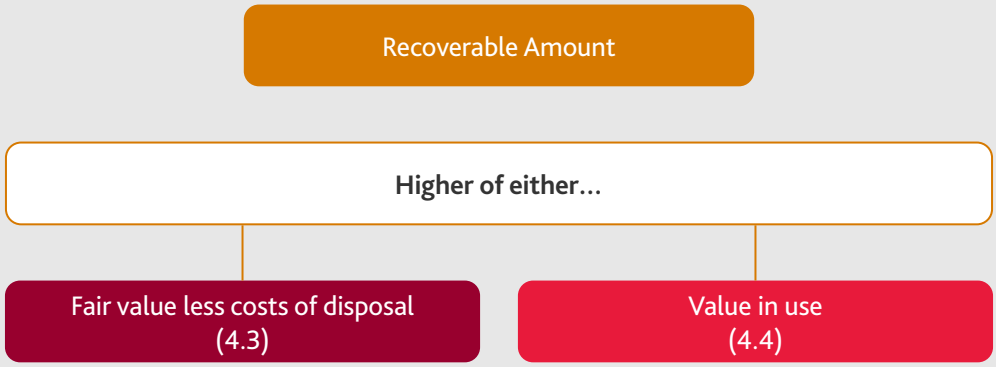


Figure 5: Illustration of the determination of an asset's (or CGU's) recoverable amount

IAS 36 does not require both fair value less costs of disposal and value in use to be calculated. It is sufficient to calculate only one of the above amounts (i.e. either fair value less costs of disposal, or, value in use) so long as that amount exceeds the carrying amount.

BDO Comment

In practice, it is not always the case that adequate information will be available for an entity to reliably measure fair value less costs of disposal.

In these instances, an entity would then be required to determine an asset's (CGU's) recoverable amount by calculating its value in use (which in the vast majority of cases will require a discounted cash flow approach to be followed).

4.3. Fair value less costs of disposal

Fair value is determined in accordance with the requirements of IFRS 13 *Fair Value Measurement*. Accordingly, the definition of fair value is (IAS 36.6):

'Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. (See IFRS 13 Fair Value Measurement.)'

BDO Comment

It might appear that an entity would obtain a higher present value through a DCF under the fair value less costs of disposal approach, than through (the more traditional) value in use route where IAS 36 includes many restrictions on which cash flows can be included (refer to section 4.4.).

However, the preparation of a DCF under the fair value less costs of disposal route contains a number of specific requirements of its own which need to be considered, including:

- The recoverable amount determined must be a reliable estimate of the amount at which the entity would be able to sell the asset (CGU) to a third party
- A DCF should only be used when this reflects a valuation technique that is common to the industry/ jurisdiction in which the asset (CGU) is operated
- The entity must be able to demonstrate that the DCF fully incorporates all relevant market factors that would be considered by market participants in valuing the asset (CGU). This includes both the type and amount of cash inflows and outflows to be included.

IFRS 13 contains a number of key concepts that entities will need to consider. In summary, these include:

Concept	Description/Impact
Highest and best use	Fair value (of a non-financial asset) takes into account either: • the entity's own use of the asset in its highest and best use, or • the sale of the asset to a party that would use the asset in its highest and best use. Highest and best use is defined as the use of a non-financial asset by market participants that would maximise the value of the asset or the group of assets and liabilities (e.g. a CGU) within which the asset would be used. IFRS 13 includes considerable guidance and requirements in determining highest and best use. Key points for entities to note are that highest and best use: • must be physically possible • must be legally permissible • must be financially feasible • considers the use in combination of other assets and liabilities • may be different to the way in which the entity is currently using the asset. As an example, an entity might acquire a competitor's brand in order that the brand can be eliminated from the market. The asset would not be measured on the basis of the entity's own (lack of) use of the asset, and would instead be on the basis of the value of the brand in the open market. Consequently, the fair value of the brand might be substantial at least during the initial period after it has been acquired.
Principal or most advantageous market	Fair value assumes the sale of the asset takes place in the principal market for the asset (the market that the entity uses in practice), or in the absence of a principal market, in the most advantageous market for the asset (the market that maximises the amount that would be obtained for the asset). If there is no principal market, transport costs (if applicable) must be deducted to arrive at the price that the asset could be sold in the most advantageous market.
Valuation techniques	Valuation techniques must maximise the use of observable inputs and minimise the use of unobservable inputs.

Common errors in practice

1. Errors in the application of IFRS 13 in determining fair value, such as:
   - incorrectly determining the asset's (CGU's) highest and best use
   - incorrectly determining the principal or most advantageous market
   - incorrectly using the principal or most advantageous market to determine fair value, resulting in the inappropriate inclusion or exclusion of transport costs
   - using a valuation technique that uses unobservable inputs that are significant to the measurement (Level 3 in the hierarchy) when observable inputs are available (Level 1 or 2 in the hierarchy). For example, using a discounted cash flow model when quoted prices are available.

(i) Costs of disposal and costs to sell

Both 'costs of disposal' and 'costs to sell' have the same definition (IAS 36.6):

'… incremental costs directly attributable to the disposal of an asset or cash-generating unit, excluding finance costs and income tax expense.'

Examples include:

- Legal costs
- Stamp duty (and similar charges)
- Costs of removing the asset
- Direct incremental costs to bring an asset into condition for its sale.

However, termination benefits and costs associated with curtailing or restructuring a business following the disposal of an asset are not direct incremental costs to dispose of the asset.

BDO comment

For the purposes of an impairment test carried out in accordance with IAS 36 which involves the determination of fair value less cost of disposal, the measurement requirements for fair value are set out in IFRS 13. However, the disclosure requirements remain located in IAS 36.

4.4. Value in use

Value in use is defined in IAS 36.6 as:

'… the present value of the future cash flows expected to be derived from an asset or cash-generating unit.'

Value in use is determined through the calculation of an asset's (CGU's) estimated discounted future cash flows (more commonly referred to as a discounted cash flow, or DCF).

At a high-level, DCFs utilised for a value in use calculation incorporate:

- An estimate of expected future cash flows
- Expectations about possible variations of the above cash flows
- The time value of money (that is, the discount rate)
- Uncertainty inherent in the price of the asset
- Other relevant factors that market participants would reflect in pricing the future cash flows (such as illiquidity).

The general principles of DCF calculations are set out in IFRS 13. However in practice, DCF calculations are more complex than the guidance in IFRS 13 suggests.

(a) Basic mechanics of a DCF

A discounted cash flow is commonly split into two distinct periods:

1. Forecast period:
   - The period where the cash flows are estimated by an entity (entity specific forecasts)
   - Each period within the forecast period is discounted back at the discount rate
   - Under IAS 36, the maximum entity specific forecast period is 5 years, unless a longer period can be justified.
2. Terminal period:
   - The period beyond the forecast period
   - The terminal value is an estimate of the present value all the cash flows in the terminal period, as at the end of the forecast period, based on the final cash flow in the forecast period.

For example, assume that an entity has a five year forecast period, the formula to determine the terminal value (TV) as at the end of year five is:

$$TV_5 = \left(\frac{\text{Cash Flow}_5 \times (1 + g^*)}{(\text{WACC} - g^*)} \right)$$

Cash Flow_5 = the forecasted cash flow in year five

g* = the estimated long-term growth rate

WACC = Weighted Average Cost of Capital (see 4.4.2 below)

- The terminal value (TV5) is discounted back from the end of the forecast period at the applicable discount rate.

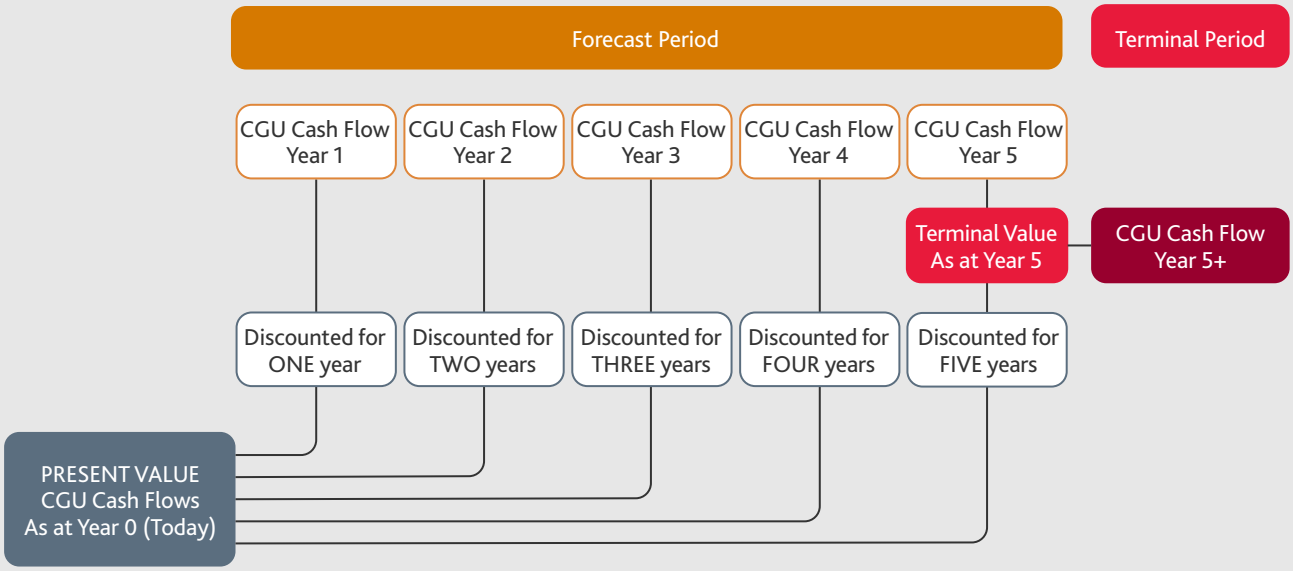


Figure 6: Illustration of the mechanics of a discounted cash flow (DCF) calculation

Assumptions and judgements

Entities are required to make assumptions and judgements regarding:

- Estimated future cash flows (4.4.1)
- Discount rate(s) (4.4.2).

Within each of these, there are a number of further parameters for which additional assumptions and judgements must be made. This is particularly the case for the discount rate (discussed below).

Because estimates of future cash flows and the determination of discount rate(s) often require significant estimates, judgements, and assumptions to be made, they are vulnerable to potential misstatement.

4.4.1. Estimated future cash flows

At a high-level, IAS 36 requires that the cash flows in a value in use DCF include:

- only cash inflows from continuing use
- only cash outflows that are necessary to generate the cash inflows and can be directly attributed, or allocated on a reasonable and consistent basis (such as management fees, executive salaries etc.), including cash outflows to prepare the asset for use
- any net cash flows upon disposal.

Estimated future cash flows should be based on appropriately detailed underlying assumptions, which include changes in working capital and capital expenditure.

Overhead costs relating to the day-to-day servicing of asset, as well as future overheads costs, are only included to the extent that they can be attributed directly, or allocated on a reasonable and consistent basis.

BDO Comment

In practice, it may be difficult to determine which types of overhead costs should be allocated amongst CGUs and what the basis of that allocation should be. An entity may have certain central administrative functions that benefit many CGUs within a group. For example, a retailer with centralised IT and payroll costs that are integral for the individual store locations to operate. Such costs should be allocated on a systematic and rational basis to the CGUs that require those services in order to operate. Entities may already allocate an estimate of these charges through internal 'management charges' in order to reflect the costs of these services in their internal management reporting. These charges may form an appropriate basis for the allocation of cash flows in a value in use calculation, however, the methodology for these charges must be assessed against the requirements of IAS 36. For example, do the charges contain prohibited cash flows, do they exclude required cash flows, is the basis for allocation to the CGUs reasonable, etc.

Additionally, entities have to consider whether certain share-based payments within the scope of IFRS 2 Share-based Payment should be included in the value in use calculation. For example, part of the remuneration package of key employees may include share based payment transactions. Such costs may form part of the allocable costs for centralised functions that should be attributed to CGUs. In our view, cash-settled share based payments should always be included in these calculations if they relate to costs (e.g. remuneration of employees) that are allocable to CGUs. This is because such share-based payments will result in a cash outflow in the future, and therefore are clearly 'cash flows' that may need to be allocated.

It is less clear as to whether equity-settled share-based payments should be included in value in use calculations. The definition of 'value in use' is 'the present value of the future cash flows expected to be derived from an asset or a CGU,' therefore, a literal reading of the definition may exclude equity settled share-based payments as they will never result in a cash outflow. Instead of the entity incurring cash outflows, the shareholders will ultimately bear the costs through a dilution of their holding. An alternative view is that (consistent with the principle in IFRS 2) equity settled share-based payments represent a cost to the entity issuing them, such that their exclusion from a value in use calculation may shelter an impairment that otherwise would be recorded. A further view, which might be considered to reflect the cash flows and economics of the arrangements, is that equity-settled share-based payments are excluded from the value in use test, with their effect instead being incorporated by increasing the discount rate to the extent that the equity shareholders would require an enhanced return to compensate them for the dilution of their interests.

The sub-sections below go into further detail regarding assumptions and judgements in respect of estimated future cash flows, including:

a) Basis (on budgets)

b) Specifically prohibited cash flows

c) Growth rate (g*)

d) Periods covered

e) Current condition

f) Movement in net working capital

g) Corporate assets

h) Restoration provisions (refer section 4.1.4 (iii) for a detailed discussion)

i) Leases

j) Internal transfer pricing.

a) Basis (on budgets)

The cash flows used in a value in use calculation should be based on budgets formally approved by management.

However, some adjustments might be required in order to comply with the requirements of IAS 36, for example, adjustments to make the cash flows represent **pre-tax** amounts.

An overall principle of IAS 36 is that cash flows are based on reasonable and supportable assumptions that represent management's best estimate of about future cash flows.

However, where an entity has a history of not achieving budgets prepared for internal management purposes, additional work may be needed in order to determine whether the most recent budgets represent realistic forecasts of future cash flows.

b) Specifically prohibited cash flows

There are a number of cash flows that are specifically prohibited by IAS 36 from being included in value in use calculations.

These include cash flows relating to:

- a future restructuring to which an entity is not yet committed
- improving or enhancing the asset's performance
- financing activities1
- income tax receipts or payments
- assets and liabilities already recognised that generate cash flows that are largely independent of the cash flows from the asset under review (e.g. financial assets such as receivables) and cash outflows related to obligations that have been recognised as liabilities (payables, pensions, etc.)
- non-cash items (such as depreciation and amortisation).

[1] *Cash flows relating to financing activities are **excluded** because borrowing costs are reflected in the discount rate that is used to discount future cash flows which is determined on the basis of how a typical entity in a business sector funds itself with debt and equity. It is not a rate that reflects an entity's own funding structure. Therefore, including cash flows from financing activities would double-count their effect on the present value of future cash flows. Financing cash flows may arise commonly from leases in the scope of IFRS 16. See section (i) below for an example of how lease cash flows are incorporated into value in use calculations.*

In addition, cash flows from activities such as the receipt or repayment of borrowed funds are not included in a DCF as they are not related to the CGU's capacity to generate future cash flows.

BDO Comment

In practice, it can be difficult to distinguish between cash flows that are related to future uncommitted restructurings (which are prohibited cash flows – see above) and efficiency improvements (refer to e) below).

As a general rule, if an entity is not permitted to recognise costs in accordance with IAS 37 Provisions, Contingent Liabilities and Contingent Assets, the cash flows should be excluded from value in use calculations.

c) Growth rate

Forecast period

Entities are permitted to apply different/specific growth rates to each year during the forecast period (refer to d) below). Like all judgements and assumptions used in the DCF, these rates must be reasonable and supportable.

Terminal period

The growth rate used to calculate the terminal value in the terminal period (g*) is termed the 'long-term growth rate'. This rate **must not exceed** the long-term average growth rate for the products, industries, or country (or countries) in which the entity operates, or for the market in which the asset is used (unless a higher rate can be justified).

The long-term growth rate used is required to be assessed individually for each CGU, and reflect the various considerations and risks noted above. In practice, the long-term growth rate should be steady or declining. Depending on the circumstances, it would also be possible to use a growth rate that is zero or negative.

d) Periods covered

As discussed above, the forecast period for entity specific cash flow projections is not permitted to exceed five years, unless a longer period can be justified. This is based on the premise that if, for example, an entity earns above average returns, others will enter the market and drive returns down to the industry average.

However, an entity may be able to justify a longer forecast period if it is involved in a limited life project (such as a mine with a seven-year forecast period of operations before it is abandoned).

An entity is required to disclose:

- The period over which management has projected cash flows in the forecast period
- Why it has used a forecast period that is longer than five years, if it considers it appropriate to do so.

e) Current condition

Future cash flows are projected on the basis of an asset (or CGU) in its current condition at the reporting date. Cash outflows that are necessary to keep an asset (or CGU) in its current condition (e.g. day to day serving, maintenance or repair costs) are included in the cash flow projections.

Future expected reductions in cash outflows relating to a future restructuring (such as cost savings related to a reduction in staff numbers) to which an entity is not yet committed are not included. Cash outflows that will result from investments to improve the performance of an asset, as well as the increased inflows as a consequence of the improvements, are also specifically excluded.

However, cost savings from efficiency improvements can be included in cash flow projections.

Judgement is required to distinguish between a restructuring program and an efficiency improvement.

Efficiency improvements will usually be implemented on an on-going basis and do not change an entity's business model significantly, whereas restructuring programs will result in more significant change at a certain point.

Cost savings and other benefits as a result of a restructuring program are reflected in the cash flow projection only if an entity is committed (based on the requirements in IAS 37) to a future restructuring at its reporting date.

f) Movements in net working capital

As discussed in section 4.1.5., the movements in net working capital are included in a CGU's estimated future cash flows if the net working capital balance has been included in the carrying amount of the CGU.

BDO Comment

In practice, many entities (for simplicity) assume that changes in working capital will be negligible year on year.

However, there may be instances in which specific facts, circumstances, and/or assumptions may result in changes in net working capital needing to be factored into the estimated future cash flows of a CGU.

When an entity estimates increases in revenue and/or cost of goods sold, these would be expected to flow through on a consistent basis to the carrying amounts of the associated working capital items, for example:

- An increase or decrease in sales will affect the carrying amount of trade receivables at period end
- An increase or decrease in cost of sales/goods sold will affect the carrying amount of trade creditors and inventory at period end.

The cumulative effect of these may affect net working capital.

g) Corporate Assets

When an entity allocates corporate assets to a CGU (refer to section 4.1.3.), it must ensure that the estimated future cash outflows related to those corporate assets are used in determining the CGU's value in use.

If the corporate assets have been apportioned across several CGUs on a reasonable and consistent basis, the estimated future cash outflows from the corporate assets must similarly be apportioned.

h) Restoration provisions

These relate to provisions that result from a legal or contractual obligations to restore, rehabilitate, or 'make-good' certain assets or sites – see section 4.1.4(iii) for further details.

Depending on the specific legal or contractual terms attached to these provisions, the balance will either be accrued over time as damage is caused (more common) or recognised in one single period as soon as the first sign of damage occurs (less common).

If amounts have been included in the carrying amount of the CGU (i.e. they meet the recognition criteria of IAS 37), the cash (out)flows associated with these balances are not included in the CGU's estimated future cash flows for the purposes of the value in use test, because a liability has already been recognised.

Example 4.4.1-1 – determining the carrying value and recoverable amount for a CGU containing a restoration provision

A company owns and operates a mine. The company is required to remediate the mine site once it completes its mining operations. A provision relating to the cost of restoration has been recognised as the mine was developed, and the cost was included in the carrying value of the mine, depreciated over its useful life. The carrying value of the provision is CU500 and is measured in accordance with IAS 37.

At its period end, the company is performing an impairment test for the mine, with the mine as a whole representing a CGU. The carrying value of the mine is CU1,000. A purchaser of the mine would be required to assume the restoration provision.

Company performs the impairment test by comparing:

- The carrying amount of the CGU: CU500 (CU1,000 carrying value of mine – CU500 carrying value of the restoration provision); and
- The recoverable amount, being the higher of:
  - Fair value less costs of disposal: CU800, based on an estimate of the price the company could obtain by selling the mine, which would include the transfer of the restoration obligation.
  - Value in use: CU700, calculated as the cash flows to be generated by running the mine, excluding the restoration cash flows (CU1,200) less the carrying value of the recognised restoration provision (CU500).

Despite the fact that the cash flows relating to the restoration provision are excluded from the cash flows from running the mine in the value in use calculation (CU1,200), the carrying value of the recognised restoration provision is still deducted to arrive at the value in use. This is required because the recoverable amount is the higher of the fair value less costs of disposal and value in use. As the fair value less costs of disposal contemplates the transfer of the restoration provision in a sale, an equal adjustment must be made to the value in use calculation in order to meaningfully compare the carrying value of the CGU and its recoverable amount. That is, the restoration provision must be considered in both the fair value less costs of disposal and the value in use.

As the recoverable amount (CU800) is higher than the carrying value of the CGU (CU500), no impairment is recorded.

i) Leases

Value in use calculations may have included 'on balance sheet' leases prior to the effective date of IFRS 16, since finance leases may have been allocated to CGUs. IFRS 16 was mandatorily effective for annual reporting periods beginning on or after 1 January 2019 and resulted in significantly more leases being recognised in the statement of financial position as right-of-use assets ('ROU assets') and associated lease liabilities. This increase in 'on balance sheet' leases highlights a number of areas where IAS 36 and IFRS 16 interact. The following example illustrates these concepts. To demonstrate the differences in value in use calculations that may arise subsequent to the adoption of IFRS 16, this example demonstrates how the value in use would be determined under both an 'off balance sheet' basis and an IFRS 16 basis ('on balance sheet' subject to certain exclusions).

Despite IFRS 16 being effective since 1 January 2019, this comparison has been maintained as many entities may still forecast future cash flows to include lease cash flows. This example demonstrates the adjustments required.

Example 4.4.1-2 – value in use calculation for a CGU containing right-of-use assets - (off balance sheet vs. on balance sheet)

While IFRS 16 requires most leases to be recognised in the statement of financial position by lessees, some entities may account for many leases 'off balance sheet' in their general ledger with an adjusting entry for financial reporting purposes to recognise them 'on balance sheet' as required by IFRS 16. This example demonstrates that in our view, are required to reconcile off balance sheet accounting to the requirements of IFRS Accounting Standards when impairment tests are being performed.

Common facts

Entity A is a retailer with 100 retail locations that sell consumer goods. Each store is determined to be a CGU since they each generate cash inflows that are largely independent of the cash inflows from other assets or groups of assets. At its 31 December 20x0 year-end, Entity A determines that its stores all have indicators of impairment, as sales have been steadily declining. As such, Entity A must determine the carrying amount of the CGU for each store and their respective recoverable amounts, being the higher of each store's fair value less costs of disposal and value in use. This example considers the calculation of these amounts for one of Entity A's stores, Store Z.

In these examples, it is assumed that the impairment allocable to the individual assets within the CGU is not reduced due to the 'floor' established by IAS 36.105. For discussion of this floor, see Section 5.

Assets allocated to Store Z (excluding amounts relating to leases) as at 31 December 20x0 are as follows:

Asset	Value
Leasehold improvements	CU500
Computer equipment	CU125
Corporate assets	CU65
Goodwill	CU35
Total	CU725

Store Z has a lease for the retail location it uses to operate the location. As at 31 December 20x0, the lease has two years remaining, after which Entity A will have to enter into a new lease contract with the lessor (or obtain the use of a replacement store), as the lease has no renewal options. In accordance with the terms of the existing lease agreement, over the next two years, Entity A will be required to make lease payments of CU 100 per annum plus 5% of the sales that occur in Store Z. All payments are made at the end of each year. As at 31 December 20x0, Entity A estimates stores sales and the 5% payment it will be required to make to the lessor to be as follows:

	Store Sales	5% variable payment to lessor
Year 1	CU200	CU10.00
Year 2	CU212	CU10.60
Year 3	CU222	CU11.10
Year 4	CU231	CU11.55
Year 5	CU245	CU12.25

Value in use calculation – Off balance sheet

Under an 'off balance sheet' approach, the lease for the store location is not recognised in the statement of financial position. Therefore, lease payments are included in the value in use calculation as cash outflows. As the current remaining lease term is for two years, Entity A has made an estimate of the lease payments under a newly negotiated lease in years three-five of the value in use calculation. The value in use calculation is as follows, assuming a discount rate of 6% and using five years of cash flows:

	Year 1	Year 2	Year 3	Year 4	Year 5
Sales	CU200	CU212	CU222	CU231	CU245
Lease payments – fixed (i)	CU100	CU100	CU110	CU112	CU114
Lease payments – variable (i)	CU10	CU10.60	CU13.32	CU13.86	CU14.70
Payroll	CU20	CU22	CU24	CU26	CU31
Other costs	CU5	CU7	CU9	CU11	CU14
Net cash inflow (undiscounted)	CU65	CU72.40	CU65.68	CU68.14	CU71.30
Net cash inflow (discounted @ 6%)	CU61.32	CU64.44	CU55.15	CU53.97	CU53.28
Value in use (total discounted CFs)	CU288.16				

(i) In years three-five, Entity A has included estimates of lease costs under a new lease, since the current lease terminates at the end of year two. These payments are based on assumptions about what market rates will be in the future, both for the fixed component and the percentage of sales owing to the lessor. In this case, lease payments are assumed to be CU110, CU112 and CU114 from years three-five respectively, and the percentage of sales owing to the lessor is expected to increase from 5% to 6%.

The carrying value of the CGU is CU 725, noted earlier. Assuming that the fair value less costs of disposal is equal to or less than the value in use, an impairment expense of CU436.84 (CU725 – CU288.16) would be recognised as the carrying value of the CGU exceeds its recoverable amount. The impairment expense would be allocated first to goodwill, then proportionately to all other assets in the CGU subject to the impairment requirements of IAS 36 (see Section 5).

Value in use calculation – IFRS 16 (on balance sheet)

Under IFRS 16 i.e. under an 'on balance sheet' approach, the carrying value of the CGU and the value in use calculation differ. This is because the store lease asset is recognised on balance sheet under IFRS 16. For purposes of calculating the value in use, the CGU of store Z is as follows:

Asset	Value
Leasehold improvements	CU500
Computer equipment	CU125
Corporate assets	CU65
Goodwill	CU35
ROU asset (ii)	CU164.01
Total	CU889.01

(ii) The carrying value of the ROU asset is based on the initial recognition of the lease three years previously (i.e. 1 January 20x8) using the fixed lease payments of CU100 per year, discounted using the lessee's incremental borrowing rate of 7%. This resulted in an initial lease liability and ROU asset of CU410.02. The carrying value of the ROU asset as at 31 December 20x0 is CU164.01 (CU410.02 – (CU410.02 / 5*_3)) and the carrying value of the lease liability as at 31 December 20x0 is CU180.80.

The value in use calculation is as follows, assuming a discount rate of 6% and using five years of cash flows. For explanations of the calculation, including explanations for where it differs from the 'off balance sheet' calculation, see the applicable footnotes.

	Year 1	Year 2	Year 3	Year 4	Year 5
Sales	CU200	CU212	CU222	CU231	CU245
Lease payments – fixed (iii) and (iv)	Nil	Nil	CU110	CU112	CU114
Lease payments – variable (v)	CU10	CU10.60	CU13.32	CU13.86	CU14.70
Payroll	CU20	CU22	CU24	CU26	CU31
Other costs	CU5	CU7	CU9	CU11	CU14
Net cash inflow (undiscounted)	CU165.00	CU172.40	CU65.68	CU68.14	CU71.340
Net cash inflow (discounted @ 6%) (vi)	CU155.66	CU153.44	CU55.15	CU53.97	CU53.28
Value in use (total discounted CFs)	CU471.49				

(iii) In years one and two, no cash outflow relating to the CU100 lease payment that Entity A is required to make to the lessor is included in the value in use calculation. As discussed in Section 4.1.4(ii), cash flows that are recognised in the carrying value of the lease liability are excluded from the value in use calculation. That is because such cash flows relate to financing.

(iv) In years three-five, the same estimate of future lease payments under a new lease as those in the 'off balance sheet' calculation are included. These payments are based on assumptions about what market rates would be in the future, similar to the 'off balance sheet' example. Despite this value in use calculation being performed on an IFRS 16 i.e. 'on balance sheet' basis, the lease term of the ROU asset that is included in the CGU's carrying value (two years) is not the same as the cash flow estimate (five years). In our view, an estimate of lease payments that extend beyond the lease term (as determined under IFRS 16) is required, as such cash flows do not relate to a recognised asset included in the carrying value of the CGU and they are required in order for the CGU to operate in its current condition (i.e. a lease for retail space is required for all of the other assets in the CGU to generate cash flows).

(v) In contrast to the fixed lease payments, variable lease payments based on Store Z's sales are included in the value in use calculation under both 'off balance sheet' and 'on balance sheet' (IFRS 16) approaches. This is because these payments are excluded from the determination of the ROU asset and lease liability carrying values (see Section 4.1.4(ii)).

(vi) This calculation assumes a discount rate that is unchanged from the impairment calculation prepared under the 'off balance sheet' approach. For discussion of how this rate may need to be adjusted in the initial periods subsequent to the adoption of IFRS 16, see 'calibration of the discount rate' discussion below.

The carrying value of the CGU and the value in use are both determined without considering the recognised lease liability. As required, by IAS 36.78, the carrying value of such a liability is deducted in determining the CGU's value in use and its carrying amount after the value in use calculation has been performed. This is done because the recoverable amount is the higher of the fair value less costs of disposal and the value in use. As the fair value less costs of disposal would consider the liability transferred, a similar adjustment must be made to the carrying value of the CGU and its value in use. Therefore, the carrying value of the CGU and the value in use are as follows:

	Before adjustment	Less: recognised lease liability	Final value
Carrying value of CGU	CU889.01	(CU180.80)	CU708.21
Recoverable amount	CU471.49	(CU180.80)	CU290.69
Impairment	CU417.52		CU417.52

Deducting the carrying value of the lease liability from both the carrying value of the CGU and the recoverable amount does not affect the amount of the impairment, however, it is required by IAS 36.78. Deducting the carrying value of the lease liability after determining the value in use is necessary because the entity must determine if the adjusted figure (CU290.69) is higher or lower than the fair value less costs of disposal since the recoverable amount is the higher of these two amounts. In this example, it is assumed that value in use is higher and is therefore the recoverable amount.

Comparison of Impairment under 'off balance sheet' and 'on balance sheet' (IFRS 16) approaches

	On balance sheet (IFRS 16)	Off balance sheet	Difference
Carrying value of CGU	CU708.21	CU725.00	(CU16.79)
Recoverable amount	CU290.69	CU288.16	CU2.53
Impairment	CU417.52	CU436.84	(CU19.32)

The carrying value of the CGU differs between an 'on balance sheet' (IFRS 16) and 'off balance sheet' approach because, under IFRS 16 it includes the carrying amount of the ROU asset (CU164.01) and is reduced by the recognised amount of the lease liability (CU180.80). The difference between these amounts is CU16.79 (CU164.01 – CU180.80).

As calculated above, the recoverable amounts differ despite the underlying economics being identical. Logically, a difference in impairment should not exist depending on whether an entity is applying IFRS 16 or an 'off balance sheet' approach. The reason for the difference in the impairment charge under IFRS 16 is because the discount rate used to measure the lease is 7%, whereas the discount rate used in the value in use calculation is 6%, which is identical to the rate used in the 'off balance sheet' calculation. Note that in many cases, the discount rate used in a value in use calculation will be higher than the discount rate used to measure a ROU asset. This is because leases are typically secured borrowings, which result in a lower discount.

As IFRS 16 has resulted in a change to the composition of reporting entities' financial structure, one would expect movements in observable discount rates used in value in use calculations. Despite there being no change in the underlying economics of leasing transactions upon adoption of IFRS 16, observable discount rates may not immediately adjust to account for the differences that arise from the adoption of IFRS 16. We expect that the need to calibrate discount rates (as demonstrated below) will be reduced over time as observable rates are updated.

Calibration of the discount rate

As demonstrated in the example above, entities may need to consider whether the discount rate should be 'calibrated' to ensure no difference in the impairment charge (or inversely, the headroom) after the adoption of IFRS 16, as the adoption of IFRS 16 should not result in a change in impairment. This may be accomplished by adjusting the discount rate used in the value in use calculation to whatever value is required to make the impairment or headroom equal what would be calculated on an 'off balance sheet' basis:

	Year 1	Year 2	Year 3	Year 4	Year 5
Net cash inflow (undiscounted)	CU165.00	CU172.40	CU65.68	CU68.14	CU71.30
Net cash in-flow (discounted @ 7.915%)	CU152.90	CU148.04	CU52.26	CU50.24	CU48.72
Value in use (total discounted CFs)	CU452.17				

Revised comparison of the value in use calculation under an 'on balance sheet' (IFRS 16) and 'off balance sheet' approach:

	On balance sheet (IFRS 16)	Off balance sheet	Difference
Carrying value of CGU	CU708.21	CU725.00	(CU16.79)
Recoverable amount	CU271.37[1]	CU288.16	CU16.79
Impairment	CU436.84	CU436.84	Nil

[1] *452.17 – 180.80 (carrying value of lease liability)*

In this example, 7.915% is the 'calibrated' discount rate required to result in the difference in the carrying value of the CGU and the recoverable amount under an 'on balance sheet' and 'off balance sheet' approaches being equal.

j) Internal transfer pricing

The cash inflows for some CGUs may be affected by internal transfer pricing. However, the determination of a CGU's (assets) recoverable amount is an 'outward looking' assessment.

This means that for the purposes of its impairment test, an entity is required use management's best estimate of the estimated future cash flows that could be achieved in arms-length transactions (i.e. with external market participants), rather than the amounts used for any internal transfer pricing purposes specific to the CGU. This is consistent with the recoverable amount being determined from the perspective of a general market participant, and not from an entity specific perspective.

k) Double-counting – recognised assets and liabilities

IAS 36 requires that the cash flows included in a value in use estimate be based on cash flow projections derived from management budgets and forecasts. However, these cash flow projections may include cash flows that relate to assets and liabilities already recognised in the statement of financial position. For example, section (i) above illustrates how the effect of lease cash flows should be reflected in a value in use calculation.

Other cash flows may also require adjustment, as demonstrated in the following example.

Example 4.4.1-3 – value in use calculation and the effect of recognised financial instruments

Entity H operates a steel mill, which is a single CGU. A major input into the manufacturing of steel is electricity. To hedge the price risk inherent in the spot price for purchasing electricity, Entity H enters into a derivative contract for the next five years to swap the variable spot rate for electricity for a fixed price. The derivative contract meets the definition of a derivative and is measured at fair value in the statement of financial position.

Entity H identifies indicators of impairment relating to the steel mill CGU and estimates its value in use. To estimate value in use, Entity H uses its budgets and cash flow projections. As the derivative economically fixes the price of electricity for Entity H over the next five years, the budgets reflect a constant price of electricity rather than the spot rate.

The value in use calculation must be adjusted relating to the effect of the derivative in the cash flow projections. This is because the cash flows associated with the derivative are already recognised in the carrying amount of the derivative, as required by IFRS 9. IAS 36.43 states that to avoid double-counting, estimates of future cash flows do not include cash inflows from assets that generate cash inflows that are largely independent of the cash inflows from the asset under review (e.g. financial assets such as receivables). Recognising the cash flows relating to the derivative in the carrying amount of the derivative and the value in use calculation would double count their effect.

To adjust the impairment calculation, two approaches may be applied, which would result in the same effect:

- Approach 1: Do not adjust the cash flows included in the value in use calculation, but add the carrying amount of the derivative to the carrying amount of the CGU (IAS 36.79). If the derivative was an asset as at period end, then adding the asset to the carrying amount of the CGU would offset the benefit of the derivative included in the cash flows, being the fixed electricity prices. If an impairment were recognised relating to the steel mill CGU, it would be allocated only to the assets in the scope of IAS 36. Said another way, while the carrying amount of the derivative asset may be included in the carrying amount of the steel mill CGU for purposes of performing the impairment test, the derivative asset is not part of the steel mill CGU for purposes of recognising an impairment loss because the derivative asset is not within the scope of IAS 36's requirements.
- Approach 2: Adjust the cash flows in the value in use calculation to be based on the estimate of spot electricity prices. The effect of this adjustment would be to 'carve out' the cash flows relating to the derivative, which fixes electricity prices over the five-year period.

Common errors in practice

1. Not basing cash flows on management approved budgets.
2. Basing cash flows on management approved budgets that historically have not been an accurate representation of actual results (meaning that current budgets do not represent the best estimate of future cash flows).
3. Using an entity specific forecast period of greater than 5yrs with no reasonable justification.
4. Not basing cash flows on continuing use.
5. Using overly optimistic growth rates, or growth rates that are inconsistent with the long-term average growth rate relating to the products, industries, or country (or countries) in which the entity operates, or for the market in which the asset is used (in the absence of any reasonable justification).
6. Not linking expected future cash outflows with those that would be necessary to generate the expected cash inflows. For example, this could be projecting revenue growth, with no corresponding increase in expenditure and capital investment.
7. Inconsistent assumptions in respect to cash inflows and outflows that are linked. For example, cash outflows relating to cost of sales would normally be expected to move in line with cash inflows from sales.
8. Under or over estimating net cash flows on disposal of an asset.
9. Including cash flows that are not reflective of the asset (CGU) in its current condition as at the date of the impairment test.

10. Including any of the prohibited cash flows in IAS 36 (refer to b) above).
11. Over optimistic revenue assumptions.
12. Understated expenditure assumptions.
13. Aggregating cash flows at too high a level when applying growth trends. Not all cash flows will respond in the same way to projected growth - some may increase, decrease, or stay constant (e.g. cost of sales, employee benefits and overheads.).
14. Over simplistic and/or inconsistent assumptions related to capital expenditure.

    In practice, many entities simply assume that the level of capital expenditure is equal to (and offsets) the amount of depreciation and/or amortisation during each period. However, this may not be consistent with forecast growth or other factors.

    It is also necessary to ensure that capital expenditure cash outflows reconcile to amounts reported in management approved budgets.
15. Over simplistic and/or inconsistent assumptions related to changes in working capital.

    In practice, many entities simply assume that the change in working capital will be nil (or insignificant). However, this may not be consistent with forecast growth rates.
16. Overstated (or understated) terminal value (TV), as a result of:
    - An over estimated cash flow in the final year of the forecast period
    - Inclusion of one-off cash inflows (outflows) relating to the sale (purchase) of capital expenditure.

    The effect of not excluding these one-off cash flows from the final forecast year, is that the terminal value calculation will assume that cash inflow (outflow) from the sale (purchase) will occur every year.
17. Use of internal transfer pricing amounts rather than management's best estimate of the estimated future cash flows that could be achieved in an arms-length transaction.

18. Including cash flows that arise from financing in value in use calculations (e.g. lease payments that are included in the carrying value of lease liabilities).
19. Excluding cash outflows for replacement assets in respect of leased assets where the lease term ends during the cash flow forecast period.
20. Not considering whether the discount rate appropriately considers leases included in the carrying value of CGUs.
21. Including cash flows in the value in use calculation which are attributable to items already recognised in the statement of financial position (e.g. cash flows related to derivative financial instruments).

4.4.2. Discount rate

Although estimated future cash flows (see above) are specific to the entity, the discount rate is not. Instead, the discount rate reflects the return that market participants would expect from the asset (CGU) based on its specific risks and the time value of money.

However, there must be consistency between the assumptions used in determining the estimated future cash flows (above) and the discount rate. For example, if an aggressive growth rate is included in the cash flows, the discount rate should be adjusted to reflect the risk of not achieving such growth.

The discount rate is usually not observable in the market meaning that a model or formula needs to be used. One of the more common models that is used in practice is the weighted average cost of capital (WACC).

Weighted average cost of capital (WACC)

An entity is typically funded from a mixture of debt and equity:

- Instruments held by debt funders (banks, financial institutions, debenture holders, lease liabilities, etc.) are usually secured against the entity's assets and have contractual payment streams of interest and principal.
- Equity shareholders have no contractual payment streams, and are only entitled to discretionary distributions and a proportionate share of the net assets of the entity once all liabilities have been settled (dividends are not contractual payments, instead being distributions at the discretion of the entity).

Equity shareholders are therefore exposed to higher risk than debt funders, and therefore demand a higher rate of return on their investment.

An entity's WACC represents the minimum return that must be earned from its asset base to satisfy both its debt funders and equity shareholders. For the purposes of IAS 36, the rate is 'weighted' based on the typical market levels of debt and equity for the entity. This may differ from an entity's own balance of debt and equity funding, and is designed to ensure that impairment testing is carried out on a consistent basis from a market participant, rather than entity specific, perspective.

$$WACC = [r_d \times (D / (D + E))] + [r_e \times (E / (D + E))]$$

r_d = Cost of debt D = Debt

r_e = Cost of equity E = Equity

Cost of equity (r_e)

While the cost of debt (r_d) is usually observable (or easily determinable) from the market, this is not usually the case for the cost of equity (r_e). This is because the rate of return demanded by equity shareholders varies significantly among different companies, industries and jurisdictions. Therefore, a model usually needs to be used to determine the cost of equity (r_e).

In practice, these models determine the cost of equity (r_e) based on the interaction of multiple parameters.

One of the more common models utilised in practice to determine the cost of equity (r_e) is the *Capital Asset Pricing Model* (CAPM), whereby the cost of equity is calculated as follows.

$$r_e = r_f + [\beta \times r_p] + r_c + r_s + r_a$$

r_e = Cost of equity

r_f = Risk free rate

β = Entity beta

r_p = equity risk premium

r_c = country risk premium

r_s = size premium

r_a = company specific risk premium

In practice, the above parameters are not usually available or easily determinable for small and medium-sized entities (SMEs). Therefore, SMEs typically need to engage with valuation experts to determine their cost of equity (r_e).

Parameters and other considerations used in the application of WACC, CAPM, and DCF in general are described in more detail below, including:

(a) Risk free rate (r_f)

(b) Beta (β)

(c) Equity, country, size and company specific risk premiums

(d) Cost of debt (r_d)

(e) Capital structure (debt (D) and equity (E))

(f) Other considerations

(a) Risk free rate (r_f)

This rate can usually be observed from long-term government bonds issued in the jurisdiction of the asset (CGU). Entities with CGUs that operate in jurisdictions with a deep market for high quality corporate bonds are also permitted to use these rates as their risk free rate (r_f).

In all cases, an entity is required to use a risk free rate that applies to the jurisdiction in which it operates. This is because government bond rates (and corporate bond rates) differ between jurisdictions (e.g. due to different expectations about future inflation and other market pressures). In addition, the term (maturity) of the risk free rate used must match the term of the estimated future cash flows.

Therefore, in practice, when an entity estimates its cash flows for an infinite period (which is the approach followed when the DCF incorporates a terminal value), a bond with a long-term maturity (at least ten-years) should be used.

Where applicable, the risk free rate (r_f) used to calculate the cost of equity (r_e) and cost of debt (r_d) must be consistent.

(b) Beta (β)

Beta measures systematic risk in terms of the magnitude and direction of movements in an entity's share price compared to movements in the market as a whole. A summary of this is illustrated in the table below:

Value of β (descending)	Movement direction	Movement magnitude	Common example (shares and other instruments)
$\beta > 1$	Same as the market	Greater than the market	Volatile share prices influenced by daily market news (i.e. start-up companies, entities in certain industries such as technology etc.).
$\beta = 1$	Same as the market	Same as the market	Shares in larger mature entities that are a significant contributor to the market.
$0 < \beta < 1$	Same as the market	Less than the market	Shares in stable entities producing staple goods and services that are not as susceptible to day to day market fluctuations.
$\beta = 0$	Movements in share prices are uncorrelated with the market		Any form of a fixed-yield instrument whose return is independent of market movements.
$\beta < 0$ ('negative beta')	Movements in share prices are in the opposite direction to movements in -the market		Certain 'investment' commodities (such as gold) typically move in the opposite direction to the market (i.e. when the share market falls, participants typically move to interests in these 'investment' commodities as they are seen as a more stable and appreciating investment).

Figure 7: Table illustrating the meanings of various beta (β) values and common examples

There is a distinction between a leveraged and an unleveraged beta:

- Leveraged beta (β_l) includes the financial effects from leverage (i.e. where an entity is funded by both debt and equity) when this can be observed from markets
- Unleveraged beta (β_u) does not include leverage. (i.e. it represents the beta for an entity that is has no debt funding and is instead fully funded by equity shareholders).

An entity must apply a leveraged beta (β_l) based on the typical market levels of debt and equity for an equivalent entity in the same industry sector if this factor is available.

However, in many cases, an entity may be comprised of numerous CGUs. In such cases, when the entity has access to an entity-level unleveraged beta (β_u), the entity must, depending on the level at which impairment is being assessed:

- Apply leverage to the entity-level market unleveraged beta
- Apply leverage to the market unleveraged beta based on the typical market levels of debt and equity for each individual CGU (i.e. apply separate CGU-level leveraged betas to each CGU).

(c) Equity, country, size and company specific risk premiums

The equity risk premium quantifies the expected equity risk premium for the entity's equity instruments.

The country risk premium is the additional return or premium demanded by an investor to compensate them for the higher risk associated with investing in a foreign country.

The size premium reflects the fact that in some cases, the size of the entity or CGU as at the time of the impairment test may affect the discount rate.

The company specific risk premium reflects the risks inherent in achieving the entity's forecasted discretionary cash flows.

(d) Cost of debt (r_d)

Although some entities have debt instruments that are traded in a market (such as debentures), the majority of entities do not. In practice a common method of determining the cost of debt (r_d) is to use the risk free rate (r_f) of the jurisdiction in which the entity (or certain of its CGUs) operates, and then adjust to take account of the market risk premium that would apply to a similar entity or CGU.

In addition, an entity could also use the borrowing rate that applied to a loan that had recently been taken out with a third party at arm's length as a proxy for the current cost of debt (r_d). However, it would not be appropriate to use a borrowing rate (or a credit spread) for borrowings that had not been taken out recently. This is because, during the period since those borrowings had been taken out, there might have been changes to:

- the overall credit market
- the entity's credit quality.

One or both of the above could mean that the entity would pay a different rate of interest for the same amount of borrowings, if a new arrangement was entered into on the date of the impairment test (the entity could be subject to a higher or lower borrowing rate).

The requirement to determine a current borrowing rate applies in all cases, including where the entity has no need for additional financing and/or has no need to repay any of the existing loans within the forecast and terminal period.

(e) Capital structure (debt and equity)

The WACC is calculated based on the proportions of debt (D) and equity (E) to the overall capital structure (D + E).

- The 'weighting' applied to the cost of debt (r_d) is equal to [D / (D + E)]
- The 'weighting' applied to the cost of equity (r_e) is equal to [E / (D + E)].

IAS 36 is clear that the discount rate used in a value in use calculation **must be independent** of the entity's actual capital structure. Where WACC is used as a proxy for the discount rate, this requirement extends to the amounts of debt (D) and equity (E) used in calculating the 'weightings'.

Consequently, the amounts and weightings of debt (D) and equity (E) must be based on those of a peer group of entities that are reflective of the capital structure that an investor would apply when investing in the entity or CGU (i.e. the 'market capital structure'). This requirement is based on the fact that future cash flows generated by an entity or CGU are not affected by the way an entity or CGU is funded (i.e. whether funded by debt or equity, or a various mixture of the two).

To illustrate, assume a CGU was funded in full by equity. If the WACC were determined on the entity's specific capital structure (rather than the market capital structure), the entity:

- would have a higher discount rate (WACC) than an identical company with a different capital structure (a 'comparable leveraged entity'), due to more weight being placed on the higher cost of equity (re) demanded by equity shareholders.
- would calculate a lower recoverable amount compared to a comparable leveraged entity due to the use of a higher discount rate (WACC).
- would be subject to impairment at an earlier point than a CGU for a comparable leveraged entity.

BDO Comments

Upon adoption of IFRS 16, the amount of recognised assets and liabilities in an entity's statement of financial position differs, which may affect the computed WACC since the capital structure of an entity will change. The effect of discount rates in value in use calculations subsequent to the adoption of IFRS 16 is discussed in Section 4.4.1(i), including a worked example.

(f) Other considerations

There are a number of other considerations that an entity needs to consider when determining the discount rate to be applied in a DCF:

Factor to consider	Description
Discount rate (by CGU)	In practice, it is common for an entity to have more than one CGU. It is also common for different CGUs to be exposed to different risks, due to exposure to different markets, industries, jurisdictions, products, currencies, interest rates etc. IAS 36 requires a discount rate to be applied to **each individual CGU** based on that CGU's exposure to specific risks. Therefore, for many entities, it is inappropriate to apply a single discount rate calculated at an entity level across multiple CGUs, as such a rate will not incorporate the specific risks of the cash flows of each CGU.
Foreign currency	The estimated future cash flows used in a DCF to determine value in use are required to be estimated in the currency in which they will be generated. As a consequence, the discount rate(s) should also reflect all the currency specific risks to which a CGU is exposed. A CGU, for example, may generate cash flows in two different currencies. For the purposes of an impairment test for that CGU, it would be necessary to discount the two different currency cash flow streams using two separately determined discount rates that incorporate the risks associated with each of those currencies. `The present values would then be translated back into the entity's functional currency using the spot rates as at the date of the impairment test.
Taxation	IAS 36 requires a company to use a **pre-tax** discount rate in the value in use calculation. This means that interest costs which are deductible for tax purposes (commonly known as a 'tax shield') are not reflected in the discount rate. In theory, using a post-tax discount rate together with post tax cash flows should result in the same recoverable amount as would be determined when using a pre-tax rate discount rate with pre-tax cash flows. In practice, because management budgets and forecasts are constructed to incorporate tax, DCFs for determining value in use are usually prepared based on these post-tax discount rates and estimated future cash flows. For these purposes, it is necessary to adjust for the timing of tax cash flows.

Factor to consider	Description
Taxation - continued	However, IAS 36 specifically requires the disclosure of the pre-tax discount rate(s) used. In circumstances in which an entity has used a post-tax rate, the pre-tax rate can be determined by using an iterative computation, as set out in IAS 36.BCZ85.

Common errors in practice

General areas

1. Incorrect assessment of any of the above parameters (for more specific details refer below).
2. Not applying separate discount rates to individual CGUs, where CGUs are exposed to different markets, industries, jurisdictions, products, currencies, interest rates etc.
3. Not accounting for cash flows generated or incurred in foreign currencies appropriately:
   - Not applying separate discount rates to cash flows derived in foreign currencies
   - Not translating the discounted foreign currency cash flows at the spot rate as at the date of the impairment test.

Specific areas relating to the use of WACC

4. Using inputs with characteristics that are inconsistent with the period (forecast or terminal) for which they are being included:
   - E.g. determining cost of debt (r_d) on a short term basis (i.e. one year) when the forecast period is five years.
5. Basing the cost of debt (r_d) on a rate attributable to borrowings taken out by the entity that were not:
   - received recently
   - at arms-length.
6. Determining weightings of debt (D) and equity (E) on the entity's specific debt and equity ratios, rather than on those of a peer group of entities that are reflective of the external market capital structure that an investor would apply when investing in the CGU.
7. Using the post-tax WACC formula rather than the pre-tax formula and failing to make appropriate adjustments – see above. IAS 36 specifically requires that cash flows are exclusive of tax, and therefore for consistency, the discount rate must exclude the tax effect.

Specific areas relating to the use of CAPM to determine the cost of equity (r_e)

8. Incorrect determination of the risk free rate (r_f):
   - Use of a corporate bond rate when there is no deep high quality market
   - Use of a rate from a jurisdiction outside of the jurisdiction of the asset or CGU
   - Sourcing the risk free rate (r_f) from instruments that do not have a long-term maturity.

9. Incorrect determination of the market risk premium (MRP):
   - Using an MRP that is not based on a long-term perspective
   - Over-reliance on a backwards looking MRP
   - Use of MRP from outside of the jurisdiction of the asset or CGU.
10. Incorrect determination of the entity beta (β):
   - Simply assuming that the value moves in the same direction and in the same magnitude as the overall market ($\beta = 1$)
   - Not using a leveraged beta (β_l) based on the typical market levels of debt and equity for the entity (CGU)
   - Applying an entity level leveraged beta (β_l) to all CGUs within the entity.

5. RECOGNISING AN IMPAIRMENT

If the recoverable amount of an asset (CGU) is lower than its carrying amount, the asset (CGU) is impaired (refer to figure 3). The carrying amount of the asset (CGU) is then required to be reduced to its recoverable amount.

An impairment loss is recognised in profit or loss, except when the related asset is carried at its revalued amount in which case the impairment loss is recognised in other comprehensive income to the extent that the impairment loss does not exceed the revaluation surplus for that asset.

CGUs to which goodwill has been allocated

For individual assets, allocating the impairment will be straightforward. Where the impairment relates to a CGU (or to a group of CGUs), IAS 36.104 requires that any impairment loss is first taken to reduce the carrying amount of goodwill allocated to the CGU, with any remaining impairment allocated to all other impairable assets within the CGU (that are within the scope of IAS 36) based on their relative values. This allocation to all other assets must not subsequently result in the carrying amount of these assets being below the higher of (IAS 36.105):

a) Fair value less costs of disposal (if measurable)

b) Value in use (if determinable), and

c) Zero.

The requirements of IAS 36.105 are sometimes referred to as a 'floor', where the carrying amounts of certain assets are not reduced below their individual fair value less costs of disposal, despite them being tested for impairment as part of a CGU or group of CGU.

For individual assets, if the amount estimated for an impairment loss is greater than the carrying amount of the related asset, a liability for the excess is recognised only if that is required by another IFRS.

For CGUs, after the requirements in IAS 36.104 and 105 have been applied, entities are only required to recognise any remaining amount of impairment loss if this is required by another IFRS.

BDO Comments

The allocation of impairment losses attributable to a CGU (or to a group of CGUs if goodwill cannot be allocated individually to CGUs) that are greater than the carrying amount of goodwill may be affected by the extent to which fair value less costs of disposal and value in use can be measured for individual assets.

Property, plant and equipment

For certain items of plant and equipment, it may not be possible for an entity to measure an individual asset's fair value less costs of disposal or to determine the asset's value in use. In others, particularly for specialised equipment, fair value less costs of disposal may be low or negligible. Therefore excess impairment losses, after impairing goodwill in full, would be allocated on a relative value basis.

However, for certain items of property, information to measure an assets fair value less costs of disposal will be readily available in most cases. For example, a CGU might contain the head office of an entity (as the head office does not generate separately identifiable cash flows). In most instances, the market value (which approximates fair value less cost of disposal) would be readily available.

Therefore, if the head office was measured in accordance with the revaluation model under IAS 16, because its carrying amount (market value) should approximate fair value less cost to sell, there should be either no or a nominal amount of impairment allocated to the head office.

If however the head office is measured in accordance with the cost model under IAS 16, the market value will not be reflected in the depreciated carrying amount of the head office. Therefore:

- if market value was greater than the carrying amount, no impairment would be allocated
- if the market value was lower than the carrying amount, impairment would be allocated in accordance with paragraphs 104 and 105 above.

Right-of-use assets

Determining the fair value less costs of disposal of a right-of-use asset for the purposes of determining the 'floor' for the amount of impairment to allocate to it when it is included in the carrying value of a CGU may be complex. As noted above, the fair value less costs of disposal for certain items of property, plant and equipment may be measurable in certain situations. For certain right-of-use assets, this may be more challenging. In other cases, where right-of-use assets do not generate cash inflows largely independent of other assets, instead, forming part of a cash generating unit, the fair value of the right-of-use asset on a standalone basis may be relatively small. If a lessee is able to enter into a sublease, the fair value of the right-of-use asset may be estimable by reference to the cash flows that may be generated via the sublease.

CGUs to which goodwill has not been allocated

As discussed in section 2.2, goodwill may relate to multiple CGUs, but may not be allocable to the carrying value of each of those CGUs. In this instance, the 'ordering' of the recognition of the impairment loss is modified compared to above. If a CGU is tested for impairment and goodwill is included in its carrying value, then goodwill is always impaired first. If the carrying value of a CGU does not contain goodwill (i.e. it is not allocated to the CGU), but it is part of a group of CGUs containing the goodwill, an entity first recognises any impairment for that CGU before testing impairment for the group of units to which goodwill is allocated (IAS 36.98).

Example 5-1 – recognition of impairment for a group of CGUs to which goodwill relates, but has not been allocated

XYZ Company is acquired in a business combination by ABC Company. ABC determines that XYZ consists of three CGUs, and while goodwill is recognised in the business combination, it cannot be allocated to the individual CGUs on a non-arbitrary basis. Therefore, the goodwill is unallocated, however, it relates to the X, Y and Z CGUs.

As at period end, ABC determines that indicators of impairment exist for all three CGUs, therefore, an impairment test is required. ABC determines that value in use is higher than fair value less costs of disposal for all CGUs, therefore, value in use represents the recoverable amount for all CGUs. The carrying amount of the CGUs, goodwill and the recoverable amounts are:

	X	Y	Z	Goodwill	Total
Carrying amount	CU200	CU250	CU110	CU175	CU735
Value in use	CU130	CU300	CU50		CU480
Impairment of CGUs carrying amount	CU70	Nil	CU60		

As the carrying amounts of X and Z CGUs exceeded their recoverable amount (i.e. their value in use), the carrying amounts of the CGUs are reduced first. Subsequent to this impairment being recognised, the carrying amounts of all CGUs are now recoverable. However, some of the goodwill related to those CGUs but not allocated to their carrying values is not recoverable, as the CU130 impairment loss recognised (CU70 + CU60) is less than the total difference between the carrying amount of all CGUs and the goodwill related to those CGUs (CU-735 – CU480 = CU255). Consequently, additional impairment must be recognised.

The additional impairment (CU255 – CU130 = CU125) reduces the carrying value of goodwill to CU50 (CU175 – CU125). After all impairment charges are recorded, the carrying amounts and value in use are equal in aggregate:

	X	Y	Z	Goodwill	Total
Carrying amount	CU130	CU250	CU50	CU50	CU480
Value in use	CU130	CU300	CU50		CU480

Common errors in practice

1. Allocating impairment to assets before the carrying amount of goodwill has been reduced to nil, except in certain circumstances in which goodwill can only be allocated to a group of CGUs (see 2 below).
2. When there is objective evidence of impairment and goodwill can only be allocated to a group of CGUs, failing to test the individual CGUs for impairment excluding goodwill and recording any impairment before aggregating the CGUs for the purposes of impairment of goodwill.
3. Allocating impairment to other assets which take their carrying value below their measurable fair value less costs of disposal (or determinable value in use).
4. Including cash in-flows in measuring the fair value less costs of disposal of a right-of-use asset without considering all the applicable cash-outflows (e.g. variable lease payments not based on an index or rate).

6. REVERSING AN IMPAIRMENT

Where assets (CGUs), other than goodwill, have been impaired in prior periods, IAS 36 requires an entity to assess at the end of each reporting period whether there are indicators that a previous impairment loss has reduced (these indicators are the same as the indicators as discussed in section 3.2). If so, the entity is required to estimate the recoverable amount of that asset (CGU) – as detailed in the sections above.

A previous impairment (other than of goodwill) is also reversed if an entity changes the estimates used to determine the recoverable amount of an asset (CGU), and this results in the recoverable amount exceeding the carrying amount.

However, a previous impairment is not reversed solely because of the unwinding of the discount used to determine the recoverable amount. This is illustrated in the following example.

Example 6-1

An asset is purchased for CU140. It has a useful life of seven years, and it is amortised on a straight-line basis. At the end of year one, it has a carrying value of CU120 (CU140 – (CU140 / 7)). At the end of year one, indicators of impairment exist and an impairment test is performed. The recoverable amount is determined to be value in use using a discount rate of 8%. The nominal and discounted cash flows are as follows (rounded):

	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Total
Nominal cash flows	CU20	CU24	CU22	CU20	CU18	CU13	CU117
Discounted cash flows	CU19	CU21	CU17	CU15	CU12	CU8	CU92

The discounted cash flows of CU92 are lower than the carrying value of CU120, therefore, a CU28 impairment is recorded at the end of year one. The new carrying value of CU92 is used for subsequent amortisation.

At the end of year two, the carrying value of the asset is CU76 (CU92 – (CU92 / 6 year remaining useful life)).

The cash flow estimates used in the impairment test occur as predicted, therefore, the value in use at the end of year two is equal to the value in use at the end of year one, plus the unwinding of the discount less the cash flows collected in year two (CU19). Therefore, the recoverable amount at the end of year two is CU79 (CU92 + (CU92 * 8%) – CU19).

Despite the recoverable amount exceeding the carrying value at the end of year two, this is not an indicator of a reversal of impairment and no reversal should be recorded. The recoverable amount only exceeds the carrying value due to the unwinding of the discount rate on the cash flows used in the impairment calculation. There has not been any change in the estimated cash flows that were used to determine that the asset was impaired at the end of year one, therefore, no indicators of a reversal of impairment exist, and no such reversal may be recorded. IAS 36.116 prohibits a reversal in situations where an increase in recoverable amount occurs solely due to the unwinding of the discount on the cash flows in the impairment calculation.

It should also be noted that even if a reversal of impairment can be recorded, the amount of the reversal is limited to the amount that brings the asset (CGU) to the current carrying amount that would have been determined (net of amortisation or depreciation) had no impairment loss been recognised for the asset (CGU) in prior years. Consequently, there is a decreasing 'cap' on the amount of potential impairment reversal for depreciable assets.

As an exception to the general approach of permitting reversal of impairments, amounts allocated against the carrying amount of goodwill are never reversed. This is because of the practical difficulty of determining whether the increase in value results from elimination of the reason for the original impairment, or whether the increase instead results from subsequent internally generated goodwill (which IFRS does not permit to be recognised as an asset).

Example 6-2 – cap on reversal

At the end of the current period:

- An asset (carried at cost) has a carrying amount of CU100 and a remaining useful life of ten years
- Depreciation is charged on a straight-line basis with a residual value of nil (i.e. annual depreciation charge of CU10)
- The asset is impaired to a recoverable amount of CU60.

At the end of the subsequent period:

- The entity has charged depreciation for the year of CU6 (i.e. CU60 / 10yrs), resulting in a carrying amount of CU54 (i.e. CU60 – CU6)
- The entity identifies that there are indicators that the impairment has reversed, and determines that the recoverable amount is CU110.

The resulting treatment would be:

- Because the carrying amount of the asset would have been CU90 had the impairment never been recorded (i.e. CU100 – CU10), the entity increases the carrying amount of the asset to CU90 (i.e. the impairment reversal is CU364, not CU564).

IAS 36 does not specify the manner in which the reversal should be recorded, including how the reversal of impairment should affect the amount of accumulated amortisation. Specifically, should accumulated amortisation immediately after the reversal of the impairment be:

- The balance that would have existed had the impairment not been previously booked (i.e. a 'catch up' adjustment to undo the effect of the previous impairment); or
- Unchanged from the amount calculated immediately prior to the reversal of the impairment (i.e. the cumulative amount of amortisation recorded in profit or loss).

Generally, impairment of assets are included in a separate line in the notes to the financial statements that reconcile the balance of assets (e.g. property, plant and equipment, intangible assets, etc.) from one period to the next. This amount is presented separately from accumulated amortisation as it does not represent the 'systematic allocation of the depreciable amount of an asset over its useful life' (the definition of depreciation and amortisation, IAS 16.6). As such, the reversal of a previously recorded impairment does not generally affect accumulated amortisation (i.e. a 'catch up' adjustment is not required).

Any reversal of impairment is recognised in profit or loss (unless the asset is carried at revalued amount in accordance with another IFRS). The reversal of an impairment loss of a revalued asset is treated as a revaluation increase in accordance with that other IFRS.

A reversal of an impairment loss for a cash-generating unit is allocated to the impairable assets of the unit, except for goodwill, based on their relative values.

Common errors in practice

1. Incorrectly determining that there are indicators of a reversal of impairment, when no such indicators exist.
2. Reversing a previous impairment of the carrying amount of goodwill.
3. Reversing an impairment to an amount that results in the carrying amount of the asset (CGU) being greater than the carrying amount that would have existed had the impairment never been recognised.

7. DISCLOSURE

IAS 36 requires extensive disclosures for impairment regardless of whether an impairment has been recognised.

7.1. Assumptions used

When a CGU's recoverable amount is based on its value in use, considerable judgement has to be exercised by management. IAS 36.134 requires detailed disclosures on estimates used to measure the recoverable amount of cash-generating units (CGUs) to which significant goodwill or intangible assets with indefinite lives have been allocated. The aim of the requirements is to help users understand the approach followed by the management.

In addition to the specific disclosure requirements of IAS 36, IAS 1.122 and 125 require an entity to disclose significant judgements and estimates made in preparing the financial statements. Such judgements and estimates may include items not specifically required by IAS 36.

In the past, regulators have emphasised that more detailed instead of aggregated quantitative disclosures should be provided in the financial statements with a particular focus on:

- Key assumptions used
- Periods over which cash flows are forecast
- Growth rates
- Discount rates applied
- Consistency of those assumptions with past experience.

Common errors in practice

1. Not identifying (and therefore not disclosing) all key assumptions.
2. Disclosing assumptions that are not key assumptions (i.e. excessive disclosure).
3. Over aggregation of key assumptions.

   For example, the discount rate (i.e. WACC) is itself made of various parameters with associated (and quite separate) assumptions.

   Therefore it may be possible that the determination of a discount rate may require multiple associated key assumptions to be disclosed (rather than just one single overall key assumption).
4. Non-disclosure of specifically required items (above) for each CGU.
5. Disclosure of a post-tax discount rate(s) (rather than the required pre-tax discount rate(s)).
6. Over aggregation of disclosed assumptions (e.g. multiple CGUs subject to impairment testing with differing assumptions)

7.2. Sensitivity analysis

IAS 36 requires disclosures on the sensitivity of the recoverable amounts to reasonably possible changes in key assumptions when those changes would cause an impairment to be recognised. In the current economic environment, these disclosures may be particularly relevant.

It may therefore be appropriate to include sensitivity analyses related to key assumptions used, which may include:

- Growth rates
- Discount rate
- Parameters within the discount rate
- Operating margin and their impact on revenues or volume of sales.

It is important that entities present the effect of a reasonably possible change in key assumption(s).

For example, an analysis that shows the effects of an increase or decrease in the discount rate of 25 basis points would not be appropriate if past experience for interest rates indicated that a reasonably possible change in interest rates was +/- 100 basis points.

Common errors in practice

1. Not identifying (and therefore disclosing a sensitivity analysis for) all reasonably possible changes in key assumptions.
2. Not presenting a reasonably possible change in the sensitivity analysis, including:
   - Over or under estimating the upper and or lower boundaries of the analysis.
   - Assuming that the absolute value of the upper and lower boundaries are the same.

   For example, a reasonably possible change in the cost of debt (r_d) may be an increase of 100 basis points (upper boundary) but only a decrease of 25 basis points (lower boundary).

   This is the likely scenario where interest rates are at historic lows, and therefore it would be reasonably expected that they would not fall much lower.

7.3. Disclosures per CGU

The disclosures discussed in sections 7.1 and 7.2, as well as other information such as the carrying amount of goodwill and/or intangible assets with indefinite useful lives or the recoverable amount allocated to each CGU, are required to be presented in the notes for each CGU to which a significant proportion of the entity's total goodwill has been allocated.

Omission of these disclosures for confidentiality reasons is not permitted.

Entities are also required to disclose the events and circumstances that led to the recognition of an impairment separately for each CGU to which goodwill has been allocated.

8. CGUs WITH NON-CONTROLLING INTERESTS

Appendix C of IAS 36 provides guidance for testing cash generating units (CGUs) for impairment when a CGU contains both goodwill and non-controlling interest (NCI).

NCI represents the equity in a subsidiary that is not directly or indirectly attributable to the parent and arises when a parent does not hold 100% of the equity interests in the subsidiary.

IFRS 3 provides a choice of methods to measure NCI, for each individual business combination. This choice permits recognition of goodwill only for the parent's own (majority) holding (proportionate share of net assets), or for the entire entity including goodwill attributable to the NCI (fair value).

The table below demonstrates this difference where an entity is purchasing a business that will subsequently be treated as a single CGU.

Method	Carrying amount of goodwill and NCI
Proportionate share of net assets	The value of the NCI is based on the level of net assets multiplied by the interest held by NCIs. For example, if: • Fair value of consideration = CU1,500 • Fair value of net assets = CU1,000 • NCI = 20% NCI = CU200 [CU1,000 x 20%] Goodwill = CU700 [CU1,500 – (CU1,000 - CU200)]
Fair Value	The value of the NCI is determined based on its fair value in accordance with IFRS 13. In some instances, it may be appropriate to use the fair value of the consideration paid by the parent as a proxy for fair value, although care is required in respect of any control premium. For example • Fair value of consideration = CU1,500 • Fair value of net assets = CU1,000 • NCI = 20% Fair value of NCI = CU375 [CU1,500 x [20%/80%]] Goodwill = CU700 (as above) plus CU175 attributable to NCI [CU375 – CU200]: CU875

Figure 8 – NCI measurement methods under IFRS 3

In addition to the difference in the calculated NCI and goodwill, the way in which any impairment loss is allocated against the carrying value of the CGU differs. This is summarised in the table below.

Method	NCI share of goodwill is included in goodwill calculated	Impact on subsequent impairment of the CGU
Proportionate share of net assets	**No**	• The goodwill attributable to the NCI must be calculated1 • The carrying amount of the CGU must be notionally adjusted to include the goodwill attributable to the NCI • Any impairment loss is prorated to the portions of goodwill based on ownership interests [1] *This amount is not recognised in the entity's consolidated financial statements.*
Fair Value	Yes	No impact. Any impairment loss is allocated to the goodwill calculated without any notional adjustments to the carrying amount of the CGU.

Figure 9 – Impact on subsequent impairment of a CGU depending on the method used to measure any NCI

Example 8-1 – NCI calculated using proportionate share of net asset method

Using the same amounts as in *Figure 9* above, as at acquisition date

- Fair value of consideration = CU1,500
- Net assets = CU1,000
- NCI @ 20% = CU 200
- Goodwill = CU 700

Now assume as at reporting date:

- Net assets (excl. goodwill) = CU1,200
- Recoverable amount = CU1,300

Calculations

(i) Goodwill attributable to NCI

= CU175 (see above)

Total notional goodwill is therefore equal to CU875 [CU700 + CU175]

(ii) Notionally adjusted carrying amount of CGU (for the purpose of impairment testing)

= CU1,200 + CU700 + CU175

= CU2,075

(iii) Impairment loss (Based on CGU notionally adjusted carrying amount, and recoverable amount)

= CU1,300 – CU2,075

= (CU775)

(iv) Allocation of impairment loss and carrying value of goodwill

Goodwill Portion	Allocation of Impairment	Carrying value of goodwill
Parent @80%	CU620 [= CU775 x 80%]	CU80 [= CU700 – CU620]
NCI @20%	CU155 [= CU775 x 20%]	CU20 [= CU175 – CU155]

(v) Amounts recognised in the consolidated financial statements of the parent

Statement of financial position

Net assets	CU1,200
Goodwill	CU 80

Statement of comprehensive income

Impairment expense	CU 620

Note: The carrying amount and associated impairment loss attributable to the NCI's share of goodwill is not recognised in the parent's financial statements.

Example 8-2 – NCI calculated using fair value method

Using the same amounts as in *Figure 9* above, as at acquisition date

- Fair value of consideration = CU1,500
- Net assets = CU1,000
- NCI @ 20% = CU375 [including CU175 of attributed goodwill]
- Goodwill = CU875

Now assume as at reporting date:

- Net assets (excl. goodwill) = CU1,200
- Recoverable amount = CU1,300

Calculations

Note: Because the goodwill attributable to the NCI has been included in its acquisition date fair value, there is no need to calculate a notional carrying amount for the NCI's goodwill and the CGU.

(i) Carrying amount of CGU

= CU1,200 + CU875

= CU2,075

(ii) Impairment loss (Based on CGU carrying amount, and recoverable amount)

= CU1,300 – CU2,075

= (CU775)

(iii) Carrying value of goodwill

= CU875 – CU775

=CU100

(iv) Amounts recognised in the consolidated financial statements of the parent

Statement of financial position

Net assets	CU1,200
Goodwill	CU 100

Statement of comprehensive income

Impairment expense	CU 775
NCI share	CU(155) [i.e. CU775 x 20%]

9. OTHER PRACTICAL CONSIDERATIONS

9.1. Impairment of assets (disposal groups) held for sale in accordance with IFRS 5

Assets held for sale in accordance with the criteria of IFRS 5 are outside the scope of IAS 36 (IAS 36.2(i)).

However, IFRS 5 requires that, immediately prior to the classification of assets (disposal groups) as held for sale, the assets (disposal groups) are required to be measured in accordance with other applicable IFRS Accounting Standards. As a result, and assets within the scope of IAS 36 would be required to be assessed and/or tested for impairment or reversal of impairment. Where impairment is identified, an impairment loss would be recognised (or vice versa for a reversal of impairment when applicable).

This approach ensures that impairment losses are recognised and presented to users of the financial statements as part of the results from operations, rather than being recognised and presented as a fair value loss on disposal when the assets (disposal groups) are sold.

9.2. Borrowing costs capitalised into qualifying assets

Entities are required to capitalise borrowing costs into qualifying assets in accordance with IAS 23 *Borrowing Costs*. A qualifying asset is an asset that necessarily takes a substantial period of time to get ready for its intended use or sale (IAS 23.5).

For the purposes of impairment testing, the carrying value of qualifying assets is not adjusted to remove capitalised borrowing costs. However, as previously discussed in section 4.1.4., the cash flows from interest bearing debt are **excluded** from value in use calculations as the effect of financing activities is incorporated in determining the discount rate.

The question which then arises is whether an entity should continue to capitalise borrowing costs as an addition to the carrying value of an impaired qualifying asset. Neither IAS 23 nor IAS 36 address this issue. However, there would not appear to be any basis for an entity to discontinue the capitalisation of borrowing costs to an impaired qualifying asset. Consequently, borrowing costs should continue to be capitalised, with an additional charge for impairment being recognised as appropriate.

9.3. CGUs containing plant and equipment no longer in use

Cash inflows for many items of plant and equipment are unlikely to be identifiable on an individual item basis and, therefore, the carrying amount of such assets is typically aggregated into a cash generating unit (CGU) and assessed for impairment on that basis.

However, where items of plant and equipment are no longer in use (i.e. redundant and/or abandoned), they are no longer generating cash inflows or contributing to the cash inflows of the CGU. Consequently, such assets should be excluded from the carrying amount of the CGU and unless another amount can be supported through an assessment of fair value less costs of disposal, such assets should be fully impaired. This is regardless of whether the recoverable amount of the CGU can support the full carrying amount of the redundant and/or abandoned plant and equipment.

9.4. Interim financial statements

IFRIC Interpretation 10 *Interim Financial Reporting and Impairment* (IFRIC 10) requires that when an entity has recognised impairment against the carrying amount of goodwill in its interim financial statements, the impairment is not permitted to be reversed in its subsequent interim or annual financial statements should changes in facts and circumstances result in the recoverable amount of the CGU be higher than its carrying amount as at its subsequent interim or annual period end.

Therefore an entity will recognise in its interim or annual financial statements any impairment in goodwill that was recognised at a previous interim reporting date. Consequently, a difference in approach could arise for two otherwise identical entities, one of which prepares interim financial statements with the other preparing only annual financial statements. This would arise if the recoverable amount of the goodwill had recovered such that it fully supported the unimpaired carrying amount at the financial year end, with the entity that reported annually carrying out its annual impairment test at that point.

9.5. Recognition of goodwill - separate financial statements

Goodwill typically results from a business combination involving the acquisition of (a controlling interest in) the equity instruments of the acquiree (i.e. the acquiree's equity share capital). In these cases, goodwill relating to the business combination is recognised only in the acquiror's consolidated financial statements, and not in its separate financial statements. Therefore, goodwill would be tested for impairment in the consolidated financial statements.

However, if a business combination does not involve the acquisition of a separate entity (i.e. it is a trade and net assets purchase) then goodwill will be recognised in both the entity's separate and consolidated financial statements.

Business combination facilitated through the acquisition of the acquirees equity instruments?	Consolidated financial statements	Separate financial statements
Yes	Goodwill recognised	Goodwill is **not** recognised. The entity recognises its investment in its subsidiary in accordance with IAS 27 *Separate Financial Statements*, either: • at cost; • in accordance with IFRS 9 *Financial Instruments;* or • Applying the equity method (IAS 28).
No (acquisition of trade and net assets)	Goodwill recognised	

Figure 10 – Recognition of goodwill in separate and consolidated financial statements

9.6. Impairment losses from foreign operations

Any impairment loss is calculated based on the carrying amounts in the separate financial statements before they are included in the financial statements of the investor. For example, if an investor has a functional and presentation currency of X and a subsidiary with a functional currency of Y, that subsidiary records any impairment before it is consolidated by the investor.

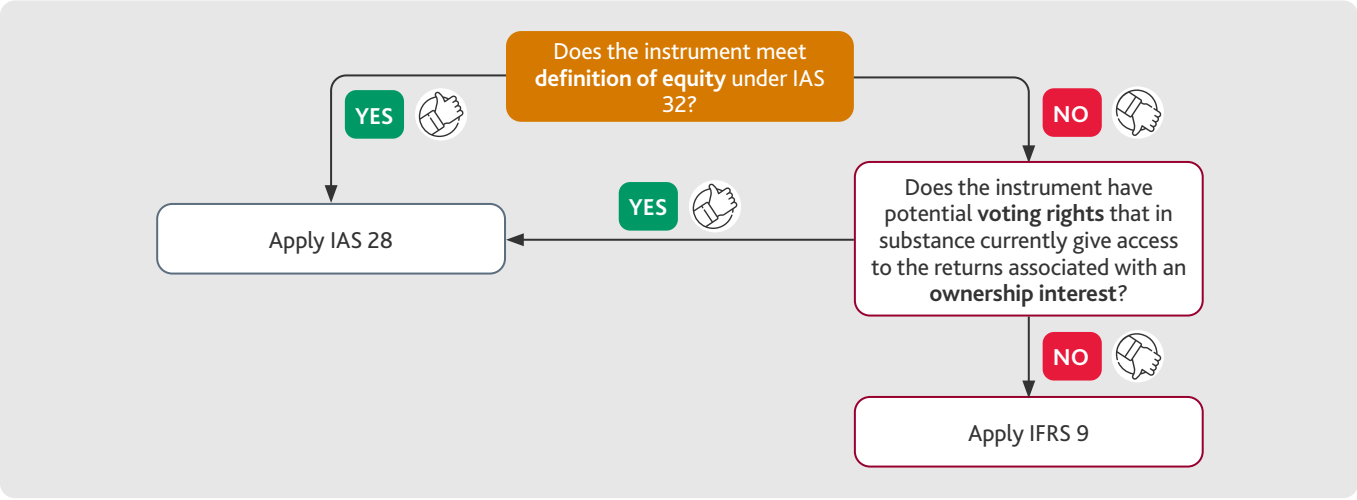
Despite the fact that impairment results in a reduction in the net assets of a foreign operation, no portion of the exchange differences relating to that foreign operation recognised in other comprehensive income may be reclassified from equity to profit or loss. This is because the requirements of IAS 21.48 only apply to a disposal or partial disposal of a foreign operation, and impairment does not result in the disposal or partial disposal of the foreign operation.

9.7. Impairment of equity accounted investees

In October 2017, IAS 28 was amended to clarify the accounting for long-term Interests in associates and joint ventures. These amendments clarify that entities apply IFRS 9 to long-term interests in an associate or joint venture to which the equity method is not applied such as long-term interests that, in substance, form part of the entity's net investment in an associate or joint venture.[1] Such items may include preference shares and long-term receivables or loans, but do not include trade receivables, trade payables or any long-term receivables for which adequate collateral exists, such as secured loans.[2] In this context, a distinction is made between those investments that are accounted for using the equity method (to which a share of net assets in the investee is applied) and the accounting for long-term interest (to which a share of profit or loss may be applied).

This is relevant to IAS 36 as it establishes the order in which an entity applies the requirements of IAS 28, IFRS 9 and IAS 36.

The decision tree below can be used to determine whether an instrument is within the scope of IAS 28 or IFRS 9.

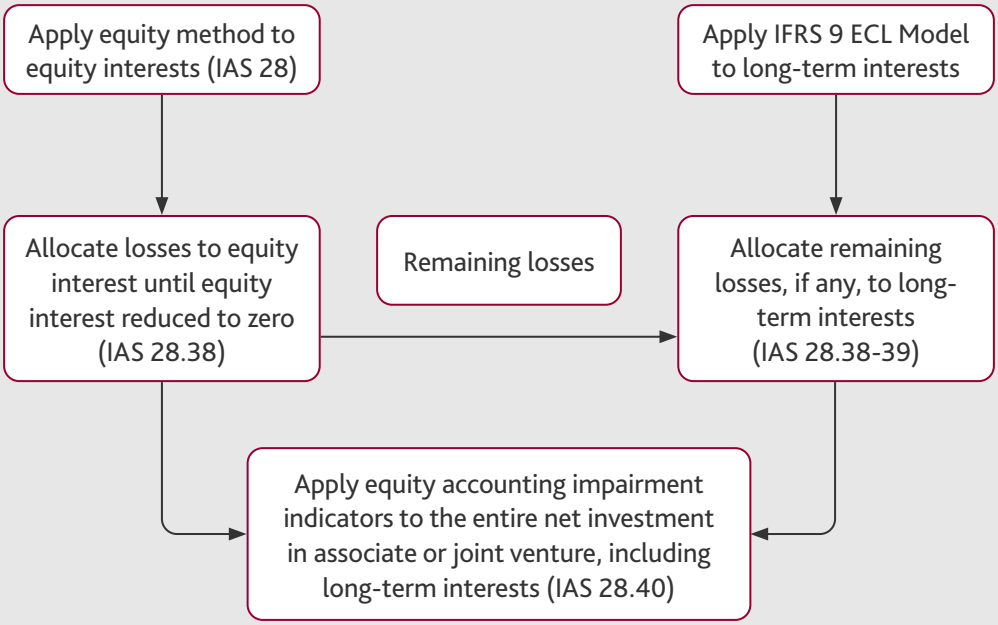


The equity method set out in IAS 28 is applied to those instruments that give the holder a right to the share of net assets of the investee, for example equity instruments or those instruments with potential voting rights that in substance currently give access to the returns associated with an ownership interest.

Once each component has been identified as either being equity accounted or a long-term interest, the approach set out in the following diagram is required to be followed:

[1] IAS 28.14A

[2] IAS 28.38



It is important to note that although losses may be applied to long-term interests such as preference shares and long-term receivables or loans that in substance form part of the entity's net investment in an associate or joint venture, this is not application of the equity method because it is an allocation of losses, and not of all changes in net assets.

In applying IFRS 9's ECL model to long-term interests, an entity does not take into account any adjustments to the carrying amount of long-term interests that arise from applying IAS 28.

The process is summarised in the diagram below:

Step 1: Determine if the interest is in the scope of IAS 28 or IFRS 9

Step 2: Apply IFRS 9 ECL model to the long-term interest

Step 3: Apply the equity method to equity interests

Step 4: Allocate any remaining losses to the long-term interest

Step 5: Apply IAS 28 impairment indicators to the net investment and, if there is objective evidence of impairment, apply IAS 36

This is illustrated by the following two examples:

Example 9.7-1

Entity A holds a 30% interest in Entity B. At 31 December 20X1 the equity interest is CU15,000. Entity A also provided a CU5,000 long-term loan to Entity B on 1 October 31 20X1. Entity B generated CU10,000 in losses during 20X1. Assume that an expected credit loss of CU1,000 should be recognised if Entity A applies the IFRS 9 ECL model to the long-term loan. Entity A also notes that, although Entity B has generated losses during the reporting period, there is no objective evidence of impairment.

First, Entity A determines whether the interests are in the scope of IAS 28 or IFRS 9:

- The equity interest of CU15,000 is in the scope of IAS 28, and
- The CU5,000 long-term loan to Entity B is in the scope of IFRS 9.

Secondly, Entity A applies the IFRS 9 ECL model to the long-term loan determining that a CU1,000 expected credit loss should be recognised leaving a net long-term loan balance of CU4,000.

Thirdly, Entity A applies the equity method to the CU15,000 equity interest by allocating the losses of CU3,000 (CU10,000 x 30%) to the equity interest leaving a balance of CU12,000.

The fourth step does not result in any adjustment to the long term interest, because Entity A does not have losses greater than the amount of the equity accounted interest.

Lastly, Entity A applies the IAS 28 impairment indicators to the net investment in Entity B. The net investment at 31 December 20X1 is the total of the equity and long-term interests in Entity B of CU16,000 (CU12,000 equity interest plus CU4,000 long-term loan). Entity A notes that, although Entity B has generated losses during the reporting period, there is no objective evidence of impairment. The final balance of the net investment in Entity B at 31 December 20X1 is CU16,000.

Example 9.7-2

The same facts as Example 9.7-1 above except Entity B generated CU40,000 of losses during 20x1 and is experiencing significant financial difficulty. Expected credit losses of CU4,500 would be recognised if Entity A applies the IFRS 9 ECL model to the long-term loan. Entity A determines that there is objective evidence of impairment in accordance with IAS 28.40 and 41A-C.

First, Entity A determines whether the interests are in the scope of IAS 28 or IFRS 9:

- The equity interest of CU15,000 is in the scope of IAS 28, and
- The CU5,000 long-term loan to Entity B is in the scope of IFRS 9.

Secondly, Entity A applies the IFRS 9 ECL model to the long-term loan determining that a CU4,500 expected credit loss should be recognised leaving a net long-term loan balance of CU500.

Thirdly, Entity A applies the equity method to the CU15,000 equity interest by allocating CU12,000 (CU40,000 x 30%) of the losses to the equity interest which results in the equity accounted component reaching CU3,000.

There are no additional losses to allocate in the fourth step.

Lastly, Entity A then applies the IAS 28 impairment indicators to the net investment in Entity B. The net investment at 31 December 20X1 is the total of the equity and long-term interests in Entity B of CU3,500. Entity A notes that there is objective evidence of impairment of its net investment in Entity B, as Entity B is experiencing significant financial difficulty. The recoverable amount of net investment is determined to be CU600, therefore an impairment of CU2,900 is recorded. This impairment is allocated to the equity accounted component, because it ranks behind the long term loan.

BDO Comment

The carrying amount of an equity accounted investee includes any goodwill.

However, for the purposes of impairment testing in accordance with IAS 36 the carrying amount of an equity accounted investee is treated as a single asset (i.e. any goodwill related to the equity accounted investee is not tested for impairment separately) and any impairment charged is capable of being reversed in full. Consistent with the requirements of IAS 36 applicable to other assets, a reversal of a previously recorded impairment is only recorded when there is an indication that an impairment loss recognised in prior periods no longer exist or may have decreased. Said another way, there must be changes in assumptions and estimates that have occurred since the impairment was originally recorded in order for it to be reversed. Otherwise, impairment might be reversed solely due to the carrying value of the equity accounted investee decreasing due to the application of the equity method.

9.8. Special considerations – Significant events

Note: The principles set out in this guidance are relevant for financial reporting when significant events take place (for example, a pandemic such as COVID-19, geopolitical uncertainties including wars such as the Russian invasion of Ukraine), and there are associated uncertainties over future cash flows.

WHEN THE IMPAIRMENT IMPLICATIONS OF THE SIGNIFICANT EVENT SHOULD BE RECOGNISED

Determining when the effects of a significant event should be reflected in the impairment calculations in accordance with IAS 36 will depend on:

- The period end of the financial statements (i.e. the balance sheet date); and
- When the significant event takes place.

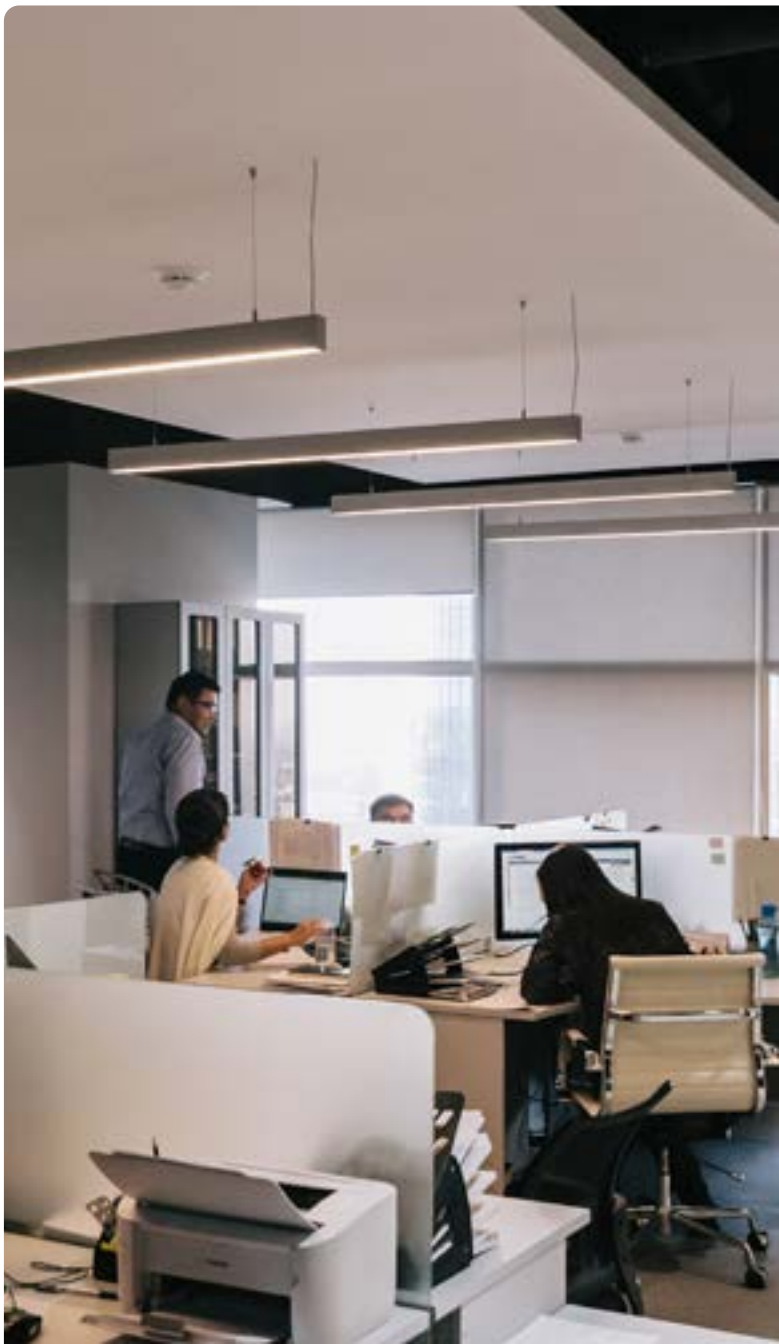
The effects of a significant event evolve and change on a day-to-day basis, such that it may be difficult in a practical sense for entities to 'cut-off' the information that is relevant as at a particular period end. While it is not appropriate to use hindsight, it will be appropriate to assess whether the various scenarios that are used for the purposes of IAS 36 at each reporting date incorporate all reasonable and supportable assumptions at that date about the range of economic conditions that are forecast to exist in future.

IAS 10.22(g) uses the example of 'abnormally large changes after the reporting period in asset prices or foreign exchange rates' as an example of a situation that is normally a non-adjusting event (i.e. not reflected in period end financial statements). This is premised on the assumption that significant changes in value are typically an indication of events occurring at that point in time. This may be challenging to determine in relation to the effects of significant events such as a pandemic or war, as the effects of these events develop over time and may develop rapidly.

The following examples illustrates the impairment implications of a pandemic such as COVID-19. The principles set out in the examples are relevant for other significant events also.

Background for examples 9.8.1 and 9.8.2:

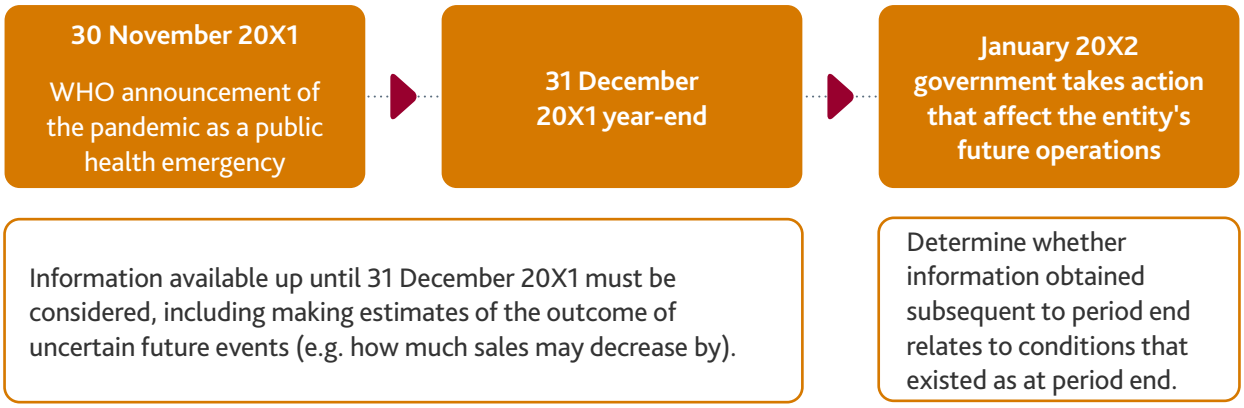
A pandemic is announced as a public health emergency by the World Health Organisation in November 20X1. Entity A's annual reporting period end is 31 December.



Example 9.8-1 – effect of the pandemic on the financial statements for the year ended 31 December 20X1

A retailer with a 31 December 20X1 year-end would need to consider the effects of the pandemic in its impairment calculations under IAS 36 applicable to its assets, including property, plant and equipment, and right-of-use assets. However, if actions were taken by levels of government in January 20X2 that affected the entity's operations (e.g. forced closures), management would have to consider whether those actions related to conditions that existed at the end of the reporting period, and hence, whether they would affect impairment calculations as at 31 December 20X1.

To illustrate the timeline:



Using information available as at 31 December 20X1, management may have included the possibility of the government action in its impairment calculations under IAS 36. The receipt of confirmation of one of the scenarios it had predicted to occur may require an adjustment to the 31 December 20X1 impairment calculation if management concludes that the event occurring subsequent to period end is simply a confirmation of conditions present as at period end. However, care is required. The fact that a government took action after a reporting date does not mean that the reporting date forecasts should be adjusted to reflect that action as having been 100% likely, because that would incorporate hindsight which is not permitted. Instead, if a government took action shortly after a period end then it would be appropriate to consider whether the potential for that action to take place was included in forecasts with an appropriate probability weighting, based on all evidence available at the reporting date.

While future cash flows used in impairment calculations in accordance with IAS 36 are based on budgets and forecasts prepared by management, IAS 36.38 acknowledges that entities must also consider whether the information reflects reasonable and supportable assumptions and management's best estimate of the set of economic conditions that will exist over the remaining life of the assets. In circumstances where the effects of the outbreak are developing quickly, a budget approved by management some time before the reporting date may need to be adjusted significantly before the preparation of the financial statements is completed.

In addition, when there is significant uncertainty about future events and potentially very significant adverse effects on entities, it is likely to be necessary for cash flows to be based on a number of probability weighted scenarios, including a significant adverse downside.

Examples of information obtained subsequent to period end that would generally not be reflected in estimates made in financial statements if the information becomes known before the financial statements are released:

- Announcement of government assistance and/or tax relief that had not previously been committed;
- Movements in market interest rates that would affect the discount rate used in impairment calculations.

Instead, detailed and transparent disclosures will be required of non-adjusting post balance sheet events that may have a significant effect on the reporting entity. The timing of an entity's period end and the development of the consequences of the outbreak may have significant effects on an entity's financial reporting from one period to another. This highlights how important disclosure of the key estimates and

assumptions used in preparing financial statements will be during periods most affected by the significant event, in this case the pandemic.

Example 9.8-2 – information obtained subsequent to period end

Entity Z operates in the tourism industry and has a 30 June 20X2 reporting date. Entity Z's operations have been significantly affected by the pandemic and its impairment calculations in accordance with IAS 36 are significantly affected by how long travel restriction and government imposed 'lockdowns' remain in place. As at 30 June 20X2, Entity Z has probability weighted four scenarios in its value in use calculations:

- Positive case: restrictions are lifted 4 weeks after year-end
- Base case: restrictions are lifted 6 weeks after year-end
- Negative case: restrictions are lifted 10 weeks after year-end
- Worst case: restrictions are lifted 16 weeks after year-end

Following are two distinct scenarios that occur before Entity Z completes its financial statements:

Scenario	BDO Comment
A – on 10 July 20X2, based on government action and medical announcements, the 'base case' is almost certain to occur.	Determining whether the information obtained on 10 July 20X2 should be incorporated into the cash flow model in the value in use calculation will depend on the precise facts and circumstances. While future cash flows used in impairment calculations in accordance with IAS 36 are based on budgets and forecasts prepared by management, IAS 36.38 acknowledges that entities must also consider whether the information reflects reasonable and supportable assumptions and management's best estimate of the set of economic conditions that will exist over the remaining life of the assets. In circumstances where the effects of the outbreak are developing quickly, a budget approved by management some time before the reporting date may need to be adjusted significantly before the preparation of the financial statements is completed. In the case of Entity Z, the cash flows included in the value in use calculation reflected management's estimate of cash flows as at the reporting date, 30 June 20X2. Information obtained after period end must be analysed based on the requirements of IAS 10, Events after the reporting period to determine if it is an adjusting or a non-adjusting subsequent event. Given that the additional information was obtained on 10 July 20X2, shortly after the reporting date, that may be an indication that it 'provides evidence of conditions that existed as at the end of the reporting period' (IAS 10.3 – definition of adjusting events after the reporting period).

Scenario	BDO Comment
	However, the fact that a government took action after a reporting date does not mean that the reporting date forecasts should be adjusted to reflect that action as having been 100% likely, because that would incorporate hindsight which is not permitted. Instead, if a government took action shortly after a period end then it would be appropriate to consider whether the potential for that action to take place was included in forecasts with an appropriate probability weighting, based on all evidence available at the reporting date. Information obtained subsequent to a reporting date may require adjustment to impairment tests, however, this will not always be done as a rule, as the use of hindsight is not permitted.
B – on 5 August 20X2, based on government action and medical announcements, the 'worst case' is almost certain to occur.	In contrast to Scenario A, the information obtained in Scenario B became available 5 August 20X2, more than a month after year-end. While not being entirely conclusive, a significant amount of time elapsing between the end of a reporting period and the information being obtained is likely to be 'indicative of conditions that arose after the reporting period end' (IAS 10.3 – definition of non-adjusting events after the reporting period). Determining whether such information is adjusting or non-adjusting may require significant judgement. As is the case in Scenario A, the specific facts and circumstances must be analysed. In the case of Scenario B, not adjusting the value in use cash flow model as at 30 June 20X2 to reflect the information obtained on 5 August 20X2 when the outcome seems almost certain to occur may seem counter-intuitive. However, if the information obtained does not relate to conditions as at the reporting date, the effects of the information obtained should be reflected in subsequent reporting periods. It should also be emphasised that auditing standards and/or regulation in many jurisdictions require the assessment of going concern to cover at least 12 months from the date of approval of the financial statements and the dating of the auditor's report, rather than 12 months from period end. Therefore, for example, an auditor may conclude that impairment should not be recorded in a particular reporting period due to the application of IFRS, but nonetheless, the going concern assumption is not satisfied based on information available as at the date of the auditor's report , based on the requirements of that jurisdiction. While the cash flows included in a going concern assessment should be based on consistent assumptions compared to other estimates (e.g. a value in use calculation required by IAS 36), the requirement to assess going concern contains less specific requirements than IAS 36.

WHEN TO TEST FOR IMPAIRMENT

IAS 36 requires assets within its scope to be tested for impairment when indicators of impairment exist at the end of a reporting period (IAS 36.9). Many of the indicators of impairment noted in IAS 36.12 (a)-(h) may exist due to the effects of the significant event, including declines in quoted asset values, operational disruptions to supply chains, and decreases in revenue and profitability. Many entities will have to perform impairment calculations in accordance with IAS 36, and these calculations may need to be significantly more detailed than have been prepared at previous period ends (e.g. the inclusion of multiple probability weighted scenarios).

IAS 36 requires goodwill, intangible assets with indefinite useful lives and intangible assets not yet available for use (e.g. capitalised research costs on incomplete intangible assets) to be tested at least annually for impairment and at the end of each reporting date whether there is any indication of impairment (IAS 36.9-10). Consequently, entities that prepare interim financial statements may need to prepare impairment calculations on these assets more regularly as indicators of impairment may exist at multiple reporting dates despite the minimum requirement (i.e. an annual test) having been carried out already. For example, an entity with a 31 December 20X1 year-end may have tested its goodwill and indefinite life intangible assets for impairment as at 31 December 20X1. Despite this, the entity may need to test the same assets for impairment again prior to 31 December 20X2 (the next mandatory testing date), because indicators of impairment may exist at an interim reporting date.

Entities may also be required to prepare impairment calculations after entities have begun recovering from the effects of the significant event. Impairment charges for most assets other than goodwill are reversed in subsequent periods if indications exist that previous impairment may have reduced or be eliminated. This may occur if actual cash flows are more positive than what was originally included in an impairment model, including asset values recovering, uncertainty relating to the effects of the significant event are resolved and entities are able to resume operations to their normal levels that existed before the significant event.

LEVEL AT WHICH THE IMPAIRMENT TEST IS PERFORMED AND GROUPING OF ASSETS

Assets are tested for impairment at the individual asset level (e.g. a single item of property, plant and equipment) unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. Practically speaking, many assets will need to be grouped into cash generating units (CGUs) for the purpose of impairment testing.

In some cases, goodwill cannot be allocated to individual CGUs and is instead allocated to a group of CGUs. In such cases, if indicators of impairment exist, the individual CGUs (excluding goodwill) are tested first and any impairment recorded. The impaired carrying amounts are then aggregated and used for the purposes of the goodwill impairment test.

DETERMINING THE RECOVERABLE AMOUNT

To measure impairment, the recoverable amount of an asset or CGU is compared to the asset's (or the CGU's) carrying value amount. The recoverable amount is the higher of:

- Fair value less costs of disposal (FVLCOD); and
- Value in use (VIU).

Recoverable amount is a 'higher of' test and it applies regardless of how management intends to use an asset. For example, if the carrying value of a CGU is higher than its VIU and management has no realistic intention of disposing of the CGU, if its FVLCOD is higher than its carrying value, the CGU is not impaired. This approach therefore prevents management from making provisions for future operating losses.

VIU calculations will always require a discount rate to be used and, if FVLCOD is estimated using a discounted cash flow ('DCF') model, then discount rate considerations will be applicable to both. The following points should be noted in relation to discount rates and DCF models used in IAS 36:

- Discount rates are not entity specific; they reflect the current market assessment of the time value of money and the risks specific to the assets (IAS 36.55). The rate is meant to be representative of what market investors would require when choosing an equally risky investment, resulting in the use of a rate which is estimated based on the rate implicit in current market transactions for similar assets, or from the weighted average cost of capital of a listed entity that has a single asset (or portfolio of assets) similar in terms of service potential and risk to the asset (or CGU) under review (IAS 36.56); and
- Discount rates do not reflect risks for which the future cash flows have already been adjusted or else the risks are 'double counted' (IAS 36.56, A15, A18). This may be especially important to note given the increased uncertainty in cash flow projections affected by a significant event. However, an appropriate discount rate in a VIU calculation with multiple scenarios may still increase compared to previous impairment calculations, as market investors may require higher returns in order to accept risks that are not wholly entity-specific (e.g. risks related to a particular industry sector).

Additionally, entities may have previously used a single, best estimate cash flow projection in their DCF models. Such an approach may have been appropriate when the variability in future cash flows was low or the risks inherent in the cash flows could be appropriately captured in the discount rate used. Given the high level of uncertainty that a significant event such as a pandemic or war creates, entities may be required to

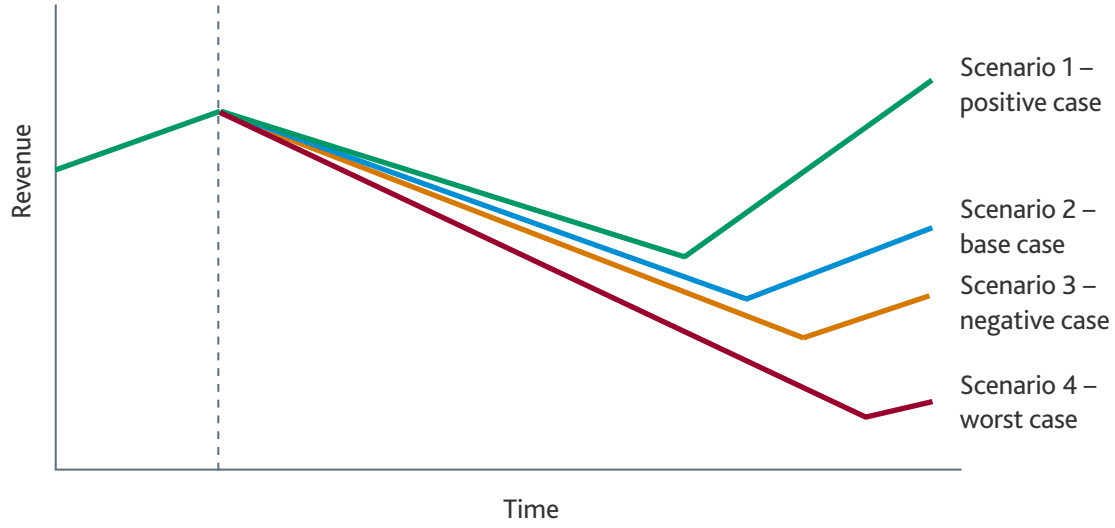
consider multiple scenarios in a DCF model, each of which are probability weighted.

For example, in case of a pandemic, consider an entity that operates a number of restaurants, some of which are traditional 'sit down' dining, while others are primarily focused on delivery. Depending on the length of mandated cessation of operations by governments and the enduring caution of consumers to visit restaurants in the future, it will need to forecast multiple scenarios in its DCF models. An illustration of this follows:

Scenario	Probability Weighting	Key Assumptions	Discount Rate Used*
1 – positive case	5%	Operations at sit down restaurants are halted for 4 weeks, take-out and delivery options are popular with consumers and result in a net reduction in revenue of 20% for the year.	5%
2 – base case	60%	Operations at sit down restaurants are halted for 8 weeks, take-out and delivery options only compensate for a portion of lost revenue and result in a net reduction in revenue of 40% for the year.	5%
3 – negative case	30%	Operations at sit down restaurants are halted for 12 weeks, take-out and delivery options only compensate for a portion of lost revenue, resulting in a net reduction in revenue of 50% for the year.	5%
4 – worst case	5%	Operations at sit down restaurants are halted for 20 weeks, take-out and delivery options are not popular with consumers and operational and supply chain disruptions require most take-out options to cease operations, resulting in a net reduction in revenue of 65% for the year.	5%

*A single discount rate is applied to each probability weighted scenario as the rate reflects the risk specific to the assets from a market perspective for which the cash flows have not been adjusted (i.e. not including risks addressed by probability weighting multiple scenarios). Applying a different discount rate to each scenario would result in 'double counting' of the risks, as they would be reflected in the cash flows and the discount rate.

In many cases, DCF models will be significantly affected by the assumptions underlying the length of time it will take for revenue and operational activities to recover from the effects of the pandemic. This can be illustrated by the length of time the 'V-shape' of the operational disruption takes to begin recovering. The amount of uncertainty in this assumption will depend significantly on the jurisdiction or jurisdictions in which an entity operates and the expected timeframe for the effects of the pandemic to begin decreasing. To illustrate:



Determining the number of scenarios to include, their relative weightings, the key assumptions and the single discount rate used in all scenarios will require significant judgement.

RECOVERABLE AMOUNT: FAIR VALUE LESS COSTS OF DISPOSAL (FVLCOD)

'Fair value' is defined in IFRS 13, as 'The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.'

Depending on an entity's period end, the price it would receive at that specific point in time may be significantly lower than prices or estimates of prices it may have received at previous dates due to the implications of the significant event on global asset prices, availability of capital and risk appetites of market participants.

These decreases in value at a point in time may appear to be a 'distress sale' requiring adjustment in the fair value estimation. However, other than in extreme cases, such decreases in value would not be attributable to factors that would be adjusted for (e.g. a lack of current information, declines in trading). Significant decreases in prices at one point in time are a consequence of fair value measurement, which is a current amount as at the period end. Similarly, the fact that there may have been a significant reduction in trading volumes for a particular asset listed on a public market does not mean that it is appropriate to disregard the 'level 1' quoted price.

As noted in the previous section, many FVLCOD estimates may be carried out using a DCF model. In these cases, the model used is likely to incorporate significant unobservable inputs (e.g. financial forecasts developed using the entity's own data – IFRS 13.B36(e)), which require specific disclosures (IFRS 13.91-99).

RECOVERABLE AMOUNT: VALUE IN USE (VIU)

Whereas FVLCOD is not an entity-specific measure, VIU is entity-specific to the extent that the cash flows included in the model reflect the expected cash flows to be derived from the asset/CGU. This reflects management's intentions (e.g. how it expects to deploy the asset or CGU to generate cash flows). The effects of the significant event may significantly impact DCF models used, as noted in the earlier sections, however, several points should be considered in VIU calculations:

- The expected effect and endurance of operational disruptions (i.e. the slope and severity of the 'V-curve' as noted earlier). Note that the 'V curve' above has been used for illustrative purposes; depending on information available at a reporting date, and the economic and other forecasts at that time, the curve may be different, such as 'U' (prolonged downturn) or 'W' (for example, incorporating a second lockdown for a pandemic) in shape;
- The availability of necessary resources to 'ramp up' operations once the entity expects to be able to increase (or resume) operations (e.g. employees, raw materials, etc.);
- The survival rate of competitors;
- The demand for its goods and services during and following the harshest effects of the significant event; and
- VIU calculations are based on assets in their current condition. That is, future restructurings to which the entity is not yet committed or improvements to assets may not be considered (IAS 36.44). Therefore, if an entity is considering a significant overhaul to its operations to redeploy assets given the significant event, these cash inflows and outflows may not be considered unless an entity is committed to such a restructuring (e.g. the plan has started to be implemented and the main features have been announced to those affected).

REVERSALS OF IMPAIRMENT AND INTERACTION WITH IAS 34 AND IFRIC 10

As discussed in section 9.4, for entities that prepare interim financial statements in accordance with IAS 34 *Interim Financial Reporting*, several specific points should be noted.

IAS 34 requires the same accounting policies to be applied in interim financial statements as annual financial statements, and the frequency of an entity's reporting should not affect the measurement of results in either an annual or an interim financial statement. For example, impairment recorded relating to property, plant and equipment in an interim financial statement may be reversed in subsequent interim or annual financial statements, as IAS 36 permits such a reversal. However, there is an exception because IFRIC Interpretation 10, *Interim Financial Reporting and Impairment* (IFRIC 10) requires that no such reversal may occur for goodwill, as IAS 36 does not permit an impairment recorded against the value of goodwill to be reversed.

If indicators of impairment exist for CGUs that contain goodwill, then goodwill will need to be tested for impairment at an interim period reporting date, even if that does not align with the annual testing cycle for goodwill. This is because IAS 36.9 requires an impairment test to be carried out at the end of any reporting period if there is any indication that an asset may be impaired. For a CGU that contains goodwill, any impairment is allocated first to goodwill and then pro rata to other assets based on their carrying amounts.

Additionally, if goodwill should have been impaired in an interim financial statement (e.g. a half-year or quarterly financial statement) due to the above-noted interaction between IAS 34, IAS 36 and IFRIC 10, then this will affect the next annual financial statements. That is, if goodwill was not impaired in an interim financial statement, but it should have been, that impairment should be reflected in the next annual financial statements, even if goodwill would not have been impaired if the impairment test had been performed at the annual reporting period end (e.g. if conditions had improved by the year-end period). This is because IFRIC 10 clarifies that the requirements of IAS 36 (i.e. 'impair goodwill and never reverse') override the general requirement of IAS 34 that the frequency of an entity's reporting should not affect the measurement of its annual results (IAS 34.28).

For any assets whose carrying values are written down due to impairment as required by IAS 36, the impairment can be reversed in subsequent periods under certain conditions, other than for goodwill. The reversal of asset impairment is discussed in section 6 of this publication.

9.9. Special considerations – Climate change

Climate change may affect the future cash flows of an entity, meaning that despite the fact that IAS 36 does not explicitly reference climate change or its effects on an entity and its cash flows, the effects of climate change should be considered in applying IAS 36, as well as other IFRS Accounting Standards.

For example, in estimating the value in use of a coal fired power plant, an entity would be required to consider the effects that changes in government regulation may have on the cash flows that may be derived from the asset over its useful life. A ban on coal fired power plants from a specified date by a government may reduce the value in use of the asset. This is an example of the effect of transition risk on the application of IAS 36.

Alternatively, physical risks should also be considered in applying IAS 36. For example, increased wildfires or long-term changes in weather patterns that result from climate change may affect an entity's cash flows, such as the cost of operating assets, increased insurance premiums or the inability of the entity to operate its facilities at all (e.g. agriculture in a region where long-term temperature increases may make certain crops unviable). An inability to obtain insurance as a result of more conservative underwriting may also need to be reflected in estimates of future cash flows.

In November 2019, IASB® member Nick Anderson published an article – IFRS Standards and climate-related disclosures. The article set out broad guidance on incorporating the effects of climate change on an entity in applying IFRS Accounting Standards, including making materiality judgements, financial reporting considerations, disclosures, and management commentary.

In November 2020, the IFRS Foundation published educational material - Effects of climate-related matters on financial statements. The educational material was subsequently republished in July 2023 after the International Sustainability Standards Board (ISSB) issued IFRS S1 *General Requirements for Disclosure of Sustainability-related Financial Information* and IFRS S2 *Climate-related Disclosures*. The educational material sets out examples illustrating when IFRS Accounting Standards may require entities to consider the effects of climate-related matters. BDO published a complementary publication – IFR Bulletin 2020/14 – Effects of Climate-Related Matters on Financial Statements.

As explained in the educational material, climate-related matters may give rise to indications that an asset (or a group of assets) is impaired. For example, a decline in demand for products that emit greenhouse gases could indicate a manufacturing plant may be impaired, requiring the asset (or related cash-generating unit) to be tested for impairment. External information such as significant changes in the environment (including, for example, changes in regulation) in which a company operates with an adverse effect on the company is an indication of impairment.

If a company is estimating recoverable amount using value-in-use, cash flow projections are based on management's best estimate of the range of future economic conditions. This requires companies to consider whether climate-related matters affect those assumptions. A value-in-use test requires future cash flows to be estimated for an asset in its current condition, meaning that these exclude any estimated cash flows expected to arise from future restructurings or enhancements to the asset.

IAS 36 also requires disclosure of the events and circumstances that led to the recognition of an impairment loss (e.g. the introduction of emission-reduction legislation that increased manufacturing costs).

During the IASB's Third Agenda Consultation, stakeholders expressed views that entities might apply IFRS Accounting Standards inconsistently to the reporting of climate-related risks in financial statements, including how climate is considered in applying the requirements of IAS 36. In response to this feedback, the IASB decided to explore how targeted actions could improve the reporting of financial information about climate-related and other uncertainties. In September 2023, the IASB decided to respond to stakeholder concerns by:

- exploring the development of educational materials and articles (see supporting material);
- consulting on some matters with the IFRS Interpretations Committee;
- exploring possible illustrative examples; and
- exploring possible narrow-scope standard-setting in relation to disclosures about estimates.

As at the date of publishing, this project remains ongoing.

10. DEFINITIONS

Definitions of various terms within IAS 36.

Carrying amount	The amount at which an asset is recognised after deducting any accumulated depreciation (amortisation) and accumulated impairment losses thereon.
Cash-generating unit	The smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets.
Corporate assets	Assets other than goodwill that contribute to the future cash flows of both the cash-generating unit under review and other cash-generating units.
Costs of disposal	Incremental costs directly attributable to the disposal of an asset or cash-generating unit, excluding finance costs and income tax expense.
Depreciable amount	The cost of an asset, or other amount substituted for cost in the financial statements, less its residual value.
Depreciation (Amortisation)	The systematic allocation of the depreciable amount of an asset over its useful life.
Fair value	The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. (See IFRS 13 Fair Value Measurement.)
Impairment loss	The amount by which the carrying amount of an asset or a cash-generating unit exceeds its recoverable amount.
Recoverable amount	The higher of fair value less costs of disposal and value in use.
Useful life	Either: a) The period of time over which an asset is expected to be used by the entity; or b) The number of production or similar units expected to be obtained from the asset by the entity.
Value in use	The present value of the future cash flows expected to be derived from an asset or cash-generating unit.

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