



Impairment of assets

The assessment process under GRAP 21 & GRAP 26



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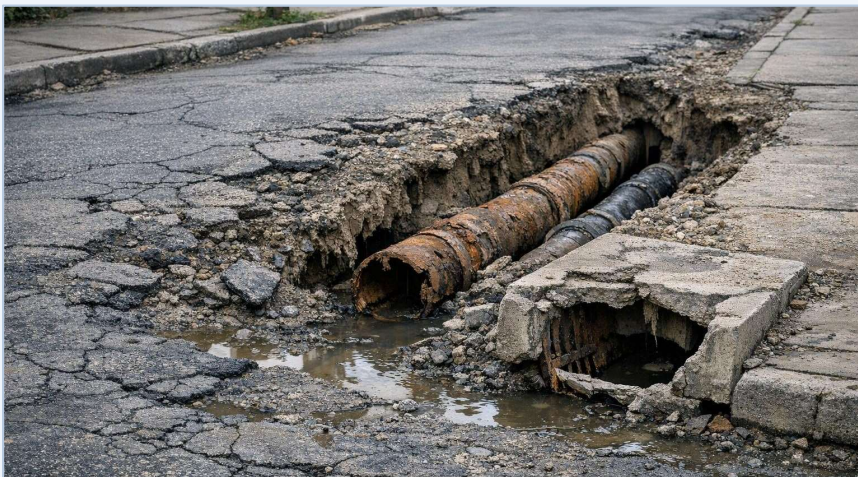
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Scope & applicable standards

GRAP 21 — Non-cash-generating assets

Assets held to deliver services, not to generate a commercial return (most municipal assets).

- **Recoverable service amount** = higher of fair value less costs to sell and value in use.
- **Value in use** = present value of the asset's remaining service potential (depreciated replacement cost, restoration cost or service-units approach).
- Indicators reviewed at each reporting date; tested when present



GRAP 26 — Cash-generating assets

Assets held primarily to generate a commercial return (e.g. trading or rental operations).

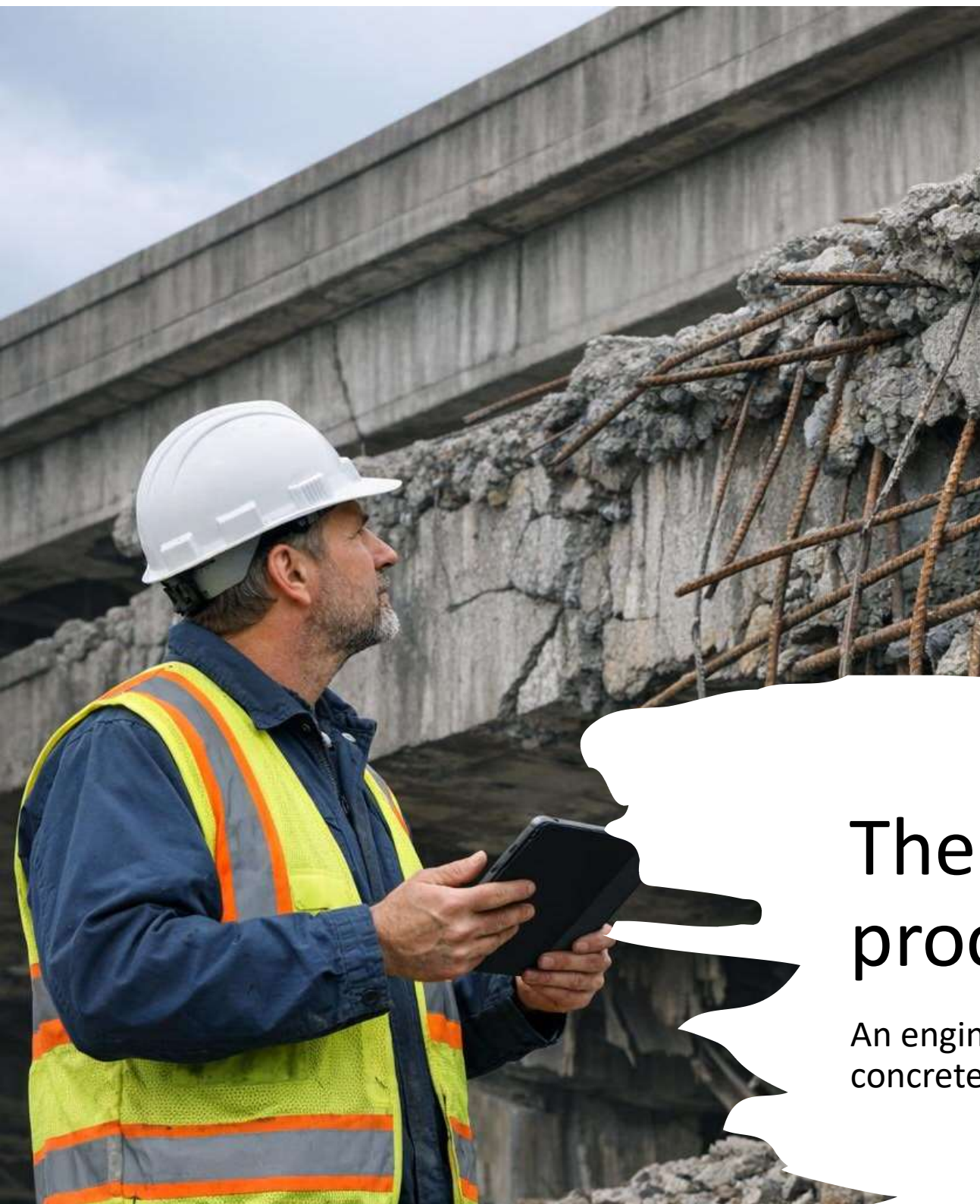
- **Recoverable amount** = higher of fair value less costs to sell and value in use.
- **Value in use** = present value of estimated future cash flows from the asset or cash-generating unit.
- Cash-generating units identified where an asset does not generate independent inflows.



First classify each asset as cash-generating or non-cash-generating — this drives which standard and which 'recoverable' measure applies.

The assessment process at a glance

- **1 Identify & classify** — split assets into cash-generating (GRAP 26) and non-cash-generating (GRAP 21).
- **2 Assess indicators** — review external and internal indicators of impairment at the reporting date.
- **3 Measure recoverable (service) amount** — where an indicator exists, determine the higher of fair value less costs to sell and value in use.
- **4 Compare & recognise** — if carrying amount exceeds the recoverable (service) amount, write the asset down to that amount.
- **5 Account for the loss** — recognise the impairment in surplus or deficit (or against a revaluation surplus) and adjust future depreciation.
- **6 Reassess & reverse** — at each reporting date test for indicators that a prior impairment has reduced or reversed.
- **7 Disclose & evidence** — disclose amounts, events and assumptions, and retain the supporting working papers for audit.



The assessment process at a glance

An engineer inspecting a reinforced concrete structure, with notes being taken

Step 2 — Indicators of impairment

External indicators

- Significant decline in an asset's market value or service demand.
- Adverse changes in technology, legislation or the policy environment.
- Cessation or planned discontinuance of the service the asset supports.
- For GRAP 26: market interest rates or returns have moved against the asset.

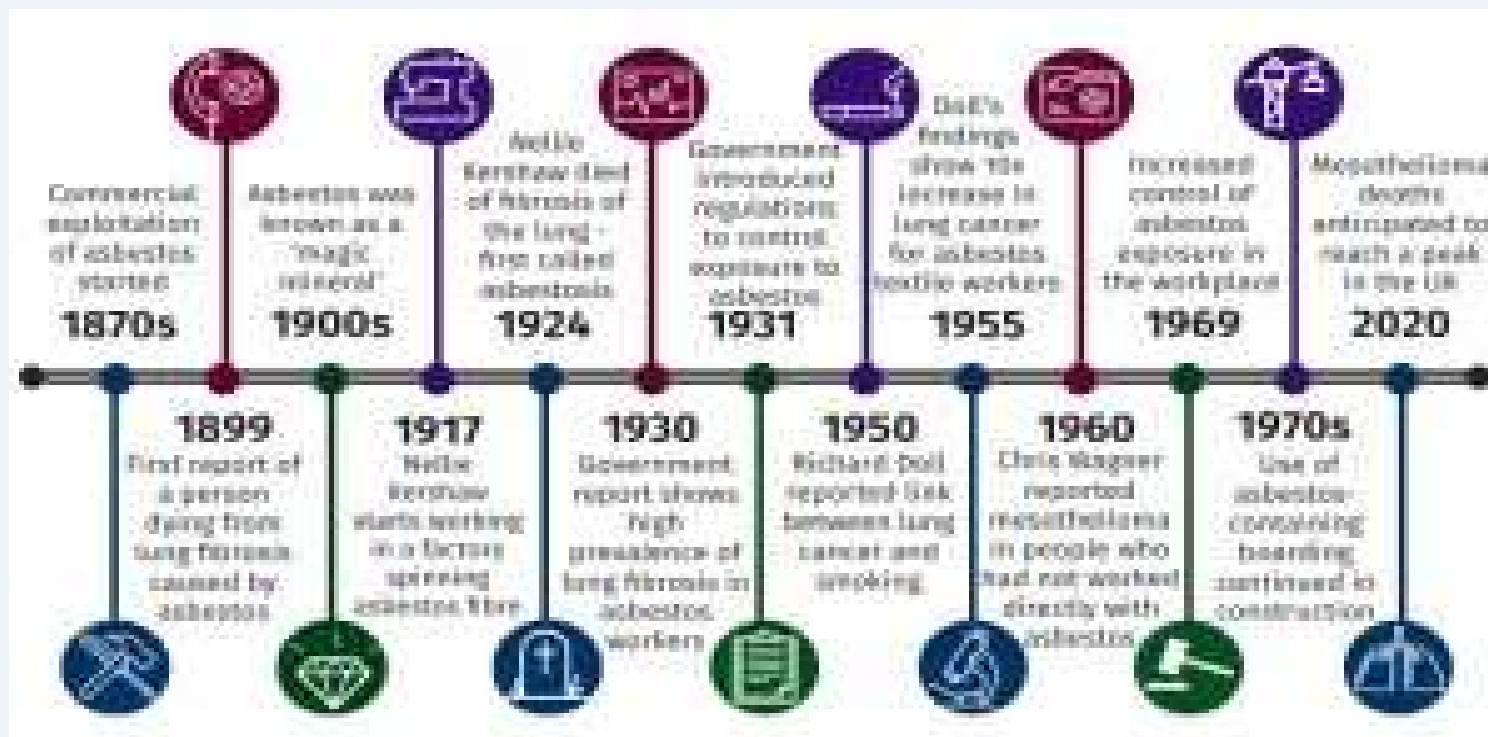
Internal indicators

- Physical damage, deterioration or obsolescence of the asset.
- Asset idle, part of a restructuring, or held for disposal.
- Evidence the asset's performance or service output is worse than expected.
- Operating losses or net cash outflows associated with the asset (GRAP 26).

If no indicator is present, no formal estimate of recoverable amount is required — the review itself is the evidence retained.

Step 2 — Indicators of impairment

External indicators: The AC pipe story Solar vs electricity?



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If no indicator is present, no formal estimate of recoverable amount is required — the review itself is the evidence retained.

Step 3 — Recoverable amount

GRAP 21 — service potential

Recoverable service amount = higher of:

- Fair value less costs to sell; and
- Value in use, estimated using one of:
 - depreciated replacement cost; – restoration cost approach; – service-units approach.

What is fair value?

GRAP 26 — cash flows

Recoverable amount = higher of:

- Fair value less costs to sell; and
- Value in use = present value of future cash flows, using:
 - reasonable, supportable cash-flow projections; – a pre-tax discount rate reflecting current market assessments.

Only the asset's remaining service potential or future cash flows are measured — not its original cost.

Depreciated replacement cost (DRC)

- **What it is** — depreciated replacement cost (DRC) estimates a building's value in use as the current cost to replace its remaining service potential — a value-in-use option under GRAP 21.
- **Step 1 – gross replacement cost** — estimate the cost today of a modern equivalent building that delivers the same service — the current, or gross, replacement cost.
- **Step 2 – depreciate for condition** — reduce that cost for the share of useful life already consumed (by age or condition), giving the depreciated, or net, replacement cost.
- **Worked example (municipal offices)** — a modern-equivalent build costs R90,000k, with a 50-year life and 20 years used — $\text{DRC} = \text{R}90,000\text{k} \times 30/50 = \text{R}54,000\text{k}$.
- **Compare & conclude** — the DRC of R54,000k is the value in use; set against a R56,000k carrying amount it signals a R2,000k impairment to write the building down.
- **When it is used** — the go-to measure for specialised assets with no market price; it sits alongside the restoration-cost and service-units approaches to value in use.

Replacement cost asks: what would it cost today to replace the service this building still provides? Figures are illustrative (R'000).

Free cash flow calculation - NPV

Cash flow line	R'000	Reference
Cash generated from operations	96,500	Operating activities
Less: Capital expenditure (PP&E additions)	(63,000)	Movement WP (A1–A4)
Add: Proceeds from disposal of PP&E	8,500	Movement WP — disposals
Free cash flow	42,000	✓

- **Operating cash flow** — cash generated from operations of R96,500k is the starting point, before any investing activities.
- **Capital expenditure** — additions to PP&E of R63,000k per the movement working paper (A1–A4) are the period's investing outflow.
- **Free cash flow** — adding R8,500k of disposal proceeds gives R42,000k — the cash left after maintaining and renewing the asset base.

Free cash flow = cash from operations less capital expenditure plus disposal proceeds. Capex and disposals agree to the PP&E movement schedule; operating cash flow is illustrative (R'000).

Steps 4–5 — Recognising the loss

- **Compare** — set the carrying amount against the recoverable (service) amount determined in Step 3. Which calculation reflects the damage?

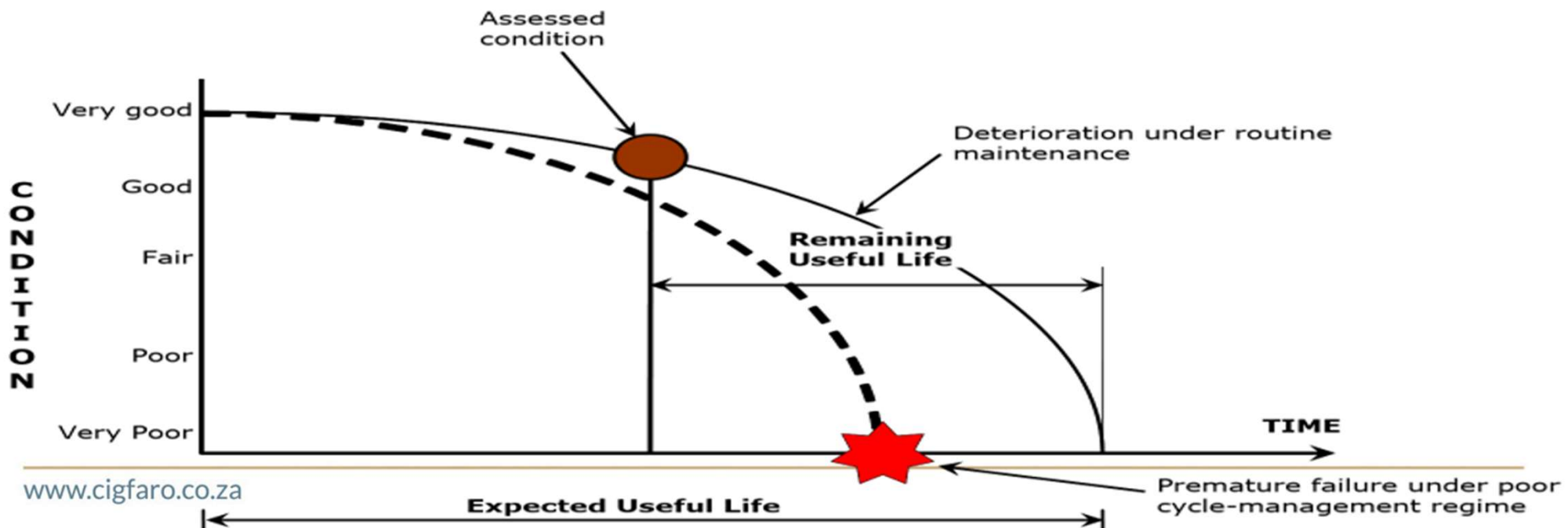


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The loss is the gap between what the asset is recorded at and what it is worth in service or cash terms.

Ideal Asset Life Cycle – 2 cases

- 1 – road allocated 12 years useful life. Hellen Mokgohloa is found swimming in a pothole at year 11
- 2 – Road is allocated 12 years useful life. Abram Zille is found swimming in a pothole at year 3



Steps 4–5 — Recognising the loss

- **Compare** — set the carrying amount against the recoverable (service) amount determined in Step 3.
- **Write down** — where carrying amount is higher, reduce the asset to its recoverable (service) amount; the shortfall is the impairment loss.
- **Recognise** — charge the loss to **surplus or deficit**, unless the asset is carried at a **revalued amount**, in which case it first reduces the revaluation surplus.
- **Re-base depreciation** — recalculate future depreciation on the new carrying amount over the remaining useful life.
- **Cash-generating units** — under GRAP 26, allocate a unit's loss pro rata to its assets, but not below each asset's own recoverable amount.

The loss is the gap between what the asset is recorded at and what it is worth in service or cash terms.

Steps 6–7 — Reversal & disclosure

- **Test for reversal** — at each reporting date assess whether a previously recognised impairment no longer exists or has decreased.
- **Reverse with a ceiling** — increase the carrying amount to the new recoverable (service) amount, capped at what it would have been (net of depreciation) had no impairment been recognised.
- **Disclose** — the impairment and reversal amounts, the events and circumstances, the class of assets, and the key assumptions and measurement basis used.
- **Audit evidence** — retain the indicator review, recoverable-amount calculations, management approval and journal entries as the working-paper trail.

Reversals are permitted under GRAP , but never above the asset's depreciated historical carrying amount.

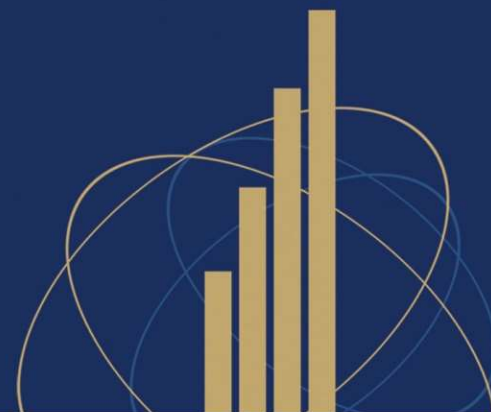
Steps 6–7 — Reversal & disclosure

- **At what level do we perform the assessment? Facility, component or asset?**
- **At what level do we quantify the losses**

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Thank You!



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