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1 INTRODUCTION

This paper provides detailed guidance on when impairment reviews of non-cash generating assets need to be conducted and how they should be performed. In the context of the United Nations, non-cash-generating assets include all items of property, plant & equipment (PP&E) and all intangible assets.

An overview of the overall process is as follows:

**Flowchart – Overview of impairment assessment**

While the next sections of the paper focus on providing the reader with a good understanding of the accounting requirements around impairment of PP&E and intangibles, section 8 will provide an overview of the suggested workflows for the impairment of property, plant and equipment. Details on the suggested workflows for the impairment of inventory and financial assets are covered in Corporate Guidance #4 Inventory and #9 Financial Instruments.
workflows for the impairment of intangible assets can be found in Corporate Guidance #12 Intangible assets.

As detailed in section 8, the United Nations has decided to approach the review of potential impairment triggers for items of PP&E through three channels:

- The recognition of impairments throughout the year triggered by certain events;
- A check of certain assets as part of the physical verification process; and
- An annual strategic assessment of high-level impairment indications.

Once an impairment trigger has been identified through one of these channels, a detailed impairment assessment is to be conducted, the process of which is the same no matter through which approach the impairment trigger was established.
2 DEFINITIONS

An **impairment** is a loss in the future economic benefits or service potential\(^2\) of an asset, over and above the systematic recognition of the loss of the asset’s future economic benefits or service potential through depreciation.

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

The **carrying amount** of an asset is defined as the amount at which an asset is recognized in the statement of financial position after deducting any accumulated depreciation and accumulated impairment losses thereon.

**Depreciation** is the systematic allocation of the depreciable amount of an asset over its useful life.

**Useful life** is either:

- The period of time over which an asset is expected to be used by the United Nations; or
- The number of production or similar units expected to be obtained from the asset by the United Nations.

The **recoverable service amount** is defined as the higher of the non-cash generating asset’s fair value less costs to sell and its value in use.

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

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

**Costs of disposal** (costs to sell) are incremental costs directly attributable to the disposal of an asset, excluding finance costs and income tax expense.

**Cash-generating assets** are assets held with the primary objective of generating a commercial return.

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

An **active market** is a market in which all the following conditions exist:

- The items traded within the market are homogeneous;
- Willing buyers and sellers can normally be found at any time; and
- Prices are available to the public.

\(^2\) Unfortunately, IPSAS does not provide a definition of the term *service potential*, even though it regularly refers to it. However, some guidance is available in IPSAS 1 *Presentation of Financial Statements* and is as follows: An entity, such as the United Nations, generally uses assets to achieve its objectives. If such an asset provides services, but does not generate any cash flows directly, it is considered to have service potential. Service potential therefore describes an essential characteristic of an asset.
3 IDENTIFICATION OF ASSETS REQUIRING AN IMPAIRMENT REVIEW

Contrary to popular belief, IPSAS 21 does not require a detailed impairment review of assets on a regular basis, but instead specifies that an impairment review should only be undertaken when there is an indication that an impairment has occurred.

Consequently, the United Nations Secretariat (United Nations) should assess at each reporting date, whether an indicator of impairment exists, which would trigger a detailed impairment assessment. When considering whether indicators for impairment exist, it is important to bear in mind that circumstances and situations that usually give rise to an impairment are often significant events that would have far-reaching impact on the entire organization.

Irrespective of whether there is any indication of impairment, the United Nations must perform an annual impairment review/assessment on:
- all individual items of communications and IT equipment, vehicles, machinery and equipment and furniture and fittings with a net book value, as at the year-end reporting date, of more than $25,000;
- on land, buildings and infrastructure assets with a net book value, as at the year-end reporting date, of more than $500,000;
- intangible assets with an indefinite useful life or intangible assets under construction/not available for use.

While many different situations and circumstances can be indicators of impairment and while no list of indicators can be exhaustive, IPSAS 21 describes some scenarios as specific indicators for impairment. While the flowchart provides an overview over the information provided in IPSAS 21, further information is included in the narrative description below the flowchart.

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3 The workflow details for impairment of items of property, plant and equipment are discussed in Section 8. Specifics on the workflows for impairment of intangible assets are included in Corporate Guidance #12 Intangible Assets.
### Flowchart – Overview of impairment indicators

#### Types of impairment indicators

- **Internal indicators**
  - Cessation, or near cessation of the demand or need for services provided by the asset
  - Significant and long-term adverse changes regarding the expected use of the asset
  - Service performance of an asset is worse than expected
  - Halting of construction of an asset before completion

- **External indicators**
  - Physical damage or obsolescence of an asset
  - Significant and long-term adverse changes on the organization in the technological, legal, or government policy environment

- **Other indicators**
  - Cessation, or near cessation of the demand or need for services provided by the asset
  - Significant and long-term adverse changes on the organization in the technological, legal, or government policy environment

#### Examples of impairment indicators

- **Internal indicators**
  - A building closes due to lack of occupancy;
  - Significant amounts of equipment are no longer needed.

- **External indicators**
  - Obsolete computer hardware;
  - A plant does not meet new environmental standards;
  - Changes in arrangement with local government.

- **Other indicators**
  - Damaged car;
  - Earthquake or other natural disaster;
  - Hostile action.

- **Examples**
  - Obsolete computer hardware;
  - A plant does not meet new environmental standards;
  - Changes in arrangement with local government.

- **Internal indicators**
  - A building closes due to lack of occupancy;
  - Significant amounts of equipment are no longer needed.

- **External indicators**
  - Obsolete computer hardware;
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- **Other indicators**
  - Damaged car;
  - Earthquake or other natural disaster;
  - Hostile action.

- **Examples**
  - Obsolete computer hardware;
  - A plant does not meet new environmental standards;
  - Changes in arrangement with local government.
3.1 External indicators

3.1.1 CESSATION, OR NEAR CESSATION OF THE DEMAND OR NEED FOR SERVICES PROVIDED BY THE ASSET

If the demand for services provided by an asset or goods produced by an asset reduces significantly, the United Nations should consider whether this is an indicator of impairment.

Examples – Assets impaired due to cessation of demand

- A building complex closes due to lack of occupancy;
- Originally, significant amounts of equipment were purchased, but later on it turns out that half of it is not needed and cannot be used otherwise.

3.1.2 SIGNIFICANT AND LONG-TERM ADVERSE CHANGES ON THE ORGANIZATION IN THE TECHNOLOGICAL, LEGAL, OR GOVERNMENT POLICY ENVIRONMENT

An asset’s value might be impaired due to changes in the environment the United Nations operates in. Examples of impairments due to such reasons are as follows:

Example – Asset impaired due to changes in technological environment

Computer hardware that has become obsolete as the result of technological development.

Examples – Assets impaired due to changes in legal or government policy environment

- A drinking water plant that cannot be used because it does not meet new environmental standards;
- Changes in an arrangement with local government and the United Nations is obliged to abandon its location (e.g. mission liquidation).

3.2 Internal indicators

3.2.1 PHYSICAL DAMAGE OR OBSOLESCENCE OF AN ASSET

In situation where an asset is damaged, it becomes unlikely for it to continue to provide the services it used to be able to provide.

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4 Please note that while some of the examples provided below refer to buildings or equipment, all impairment indicators apply to all types of property, plant and equipment / intangibles.

5 Please note that while some of the examples provided below refer to buildings or equipment, all impairment indicators apply to all types of property, plant and equipment / intangibles.
**Examples – Assets impaired due to physical damage**

- A car is destroyed in an accident;
- An earthquake or other natural disaster makes a building structurally unsound and it can no longer be used;
- Hostile action resulting in destruction of assets.

**3.2.2 Significant and long-term adverse changes regarding the expected use of the asset**

While the asset might not lose its service potential, a change in use of the asset might indicate impairment.

**Example – Asset impaired due to change in use**

- If the asset is not being used in the same way as it was when originally put into service, the asset may be impaired. An example of an impaired asset that might be identified by this indication is a school building that is being used for storage rather than for educational purposes;
- Other indications could be the asset becoming idle. For example, a non-armored vehicle which is no longer used because it doesn't have the required security features needed for a change in security conditions;
- Plans to restructure the operation to which the asset belongs.

**3.2.3 Halting of construction of an asset before completion**

If the construction of an asset is halted, before the asset can provide the service it is intended to provide, an indicator for impairment might exist.

**Example – Asset impaired due to halting of construction**

Construction was stopped for the foreseeable future due to identification of an archaeological discovery or environmental condition, such as a nesting ground for a threatened or endangered species.

**3.2.4 Service performance of an asset is worse than expected**

An indicator for impairment might exist, if internal reporting indicates that the service performance of an asset is much worse than expected.

**Example – Asset impaired due to worsened service performance**
An internal health department report on operations of a rural clinic may indicate that an x-ray machine used by the clinic is impaired because the cost of maintaining the machine has significantly exceeded that originally budgeted.

Originally, the United Nations expected that approximately $50,000 would have to be spent on maintenance on the clinic every year. However, following recent assessment, the expectation is now that annual maintenance expenditure required to keep the clinic running is at least $150,000 instead of $50,000.

3.3 Other indicators

Besides the external and internal indicators mentioned in IPSAS 21 and summarized above, the following scenarios might also be considered indicators of impairment:

- Faulty equipment;
- Mishandling;
- Theft;
- Expropriation of assets by governments;
- Impairment of a related asset;
- Planned closure of site.

As mentioned in the introduction and in section 8, the United Nations will assess the need for impairment reviews for items of PP&E through three different processes:

- The recognition of impairments throughout the year triggered by certain events;
- A check of assets as part of the physical verification process; and
- An annual strategic assessment of high-level impairment indications.

While any indicator of impairment can generally be identified through any one of the three processes, the expectation would be that certain indicators would typically arise from one of the three processes. The following overview provides a possible mapping of which indicators of impairment of PP&E are most likely to be identified through what process:
### Identification of assets requiring an impairment review

<table>
<thead>
<tr>
<th>Category</th>
<th>Indicators</th>
</tr>
</thead>
</table>
| **Even triggered impairment throughout the year** | - Cessation, or near cessation of the demand or need for services provided by the asset;  
- Physical damage or obsolescence of an asset;  
- Halting of construction of an asset before completion;  
- Service performance of an asset is worse than expected;  
- Other indicators (faulty equipment, mishandling, theft, expropriation of assets by government, impairment of related asset). |
| **Physical verification process**             | - Cessation, or near cessation of the demand or need for services provided by the asset;  
- Physical damage or obsolescence of an asset;  
- Halting of construction of an asset before completion;  
- Service performance of an asset is worse than expected;  
- Other indicators (faulty equipment, mishandling, theft, expropriation of assets by government). |
| **Annual strategic impairment**              | - Significant and long-term adverse changes on the organization in the technological, legal, or government policy environment;  
- Significant and long-term adverse changes regarding the expected use of the asset;  
- Cessation, or near cessation of the demand or need for services provided by the asset;  
- Halting of construction of an asset before completion;  
- Other indicators (planned closure of site). |

If the United Nations identifies an indicator of impairment at the reporting date, it needs to perform a detailed impairment assessment and establish the assets recoverable service amount (see below). However, before starting an analysis of the recoverable service amount, the United Nations should consider the need for the analysis from a materiality standpoint. If it was established as part of previous reviews, that the recoverable service amount is significantly greater than the carrying amount, there might not be a need to re-estimate the recoverable service amount if no events incurred that could have impacted the difference.

**Example – No need to re-establish the recoverable service amount of an asset**

A few years ago, the United Nations purchased significant amounts of cars, as it expected to need them at one of its main offices.

As part of the annual strategic assessment conducted in the prior year as part of the closing process for its financial statements, the United Nations acknowledged that it did not need as many cars as originally expected and conducted an impairment review.

The results of the impairment assessment were as follows:

- Carrying value pre-impairment: $25,000;
- Recoverable service amount: $40,000;
Based on these results, no impairment was recognized in the financial statements in the prior year.

During the annual strategic assessment conducted as part of the closure of the current year’s financial statements, the United Nations comes across the same assets and acknowledges that the facts are the same: Originally, too many cars were purchased and most of them are not needed. As this can be considered as a trigger of impairment, the United Nations technically needs to conduct a detailed assessment.

However, before establishing the different amounts needed for the detailed assessment, the United Nations assesses whether such a detailed assessment is necessary, considering it was performed in the prior year.

Typical aspects to consider can be as follows:

- There is no indication that the fair value less costs to sell of the asset has changed significantly compared to prior years;
- The margin between the recoverable service amount and pre-impairment carrying value reviewed as part of the prior year assessment was so significant, that the risk of the recoverable service amount being less than the asset’s pre-impairment carrying amount in the current year is considered to be low, even after amending the depreciated replacement cost for an additional year of owning the car;
- No other events or circumstances are known that could have a significant impact on the difference between recoverable service amount and pre-impairment carrying value established during the prior year impairment assessment.

Based on these aspects, management believes that there is very little risk that the recoverable service amount of the asset is less than its pre-impairment carrying value and therefore decides not to conduct a detailed impairment assessment in the current year.\(^6\)

\(^6\) While there can be circumstances where a detailed impairment assessment might not be necessary, the expectation would be that such circumstances are rare. In addition, the circumstances are generally not very clear cut, but require significant judgment from management.
4 PERFORMING AN IMPAIRMENT REVIEW

If the United Nations identifies an indicator of impairment, it is required to conduct a detailed impairment review for the asset under review. While an impairment review incorporates multiple steps, the main aspect is to compare an asset’s carrying amount before impairment with the asset’s recoverable service amount. If the asset’s recoverable service amount is less than the asset’s carrying value, the asset is considered to be impaired and needs to be written down.

4.1 Determining recoverable service amount

An asset’s recoverable service amount is defined as the higher of the asset’s fair value less costs to sell and its value in use.

Flowchart – Determining recoverable service amount

Consequently, if the United Nations identifies an indicator of impairment, the next step of the impairment review is to determine the asset’s recoverable service amount.

4.1.1 Fair value less costs to sell

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

While IPSAS 21 does not provide detailed guidance on how to estimate or calculate the fair value less costs to sell, it instead provides a hierarchy of the preferred sources of the amount:

1) Price in a binding sale agreement;
2) Market price for an asset traded in an active market;
3) Amount obtainable from the disposal of the asset.

IPSAS 21 generally requires an impairment assessment to be completed on an asset by asset basis. However, in certain, rare cases where the circumstances of the impairment are identical and where the assets are of similar nature, an impairment assessment can be done on a higher level for a whole group of assets. In such a situation, the aggregate carrying amount would be compared to the aggregate recoverable service amount.
4.1.1.1 Price in a binding sale agreement

IPSAS 21 considers a sale price in a binding sale agreement in an arm’s length transaction, adjusted for incremental costs that would be directly attributable to the disposal, as the best evidence of an asset’s fair value less costs to sell. If such a price is available, IPSAS 21 encourages organizations to use it in any impairment assessment.

Examples – Price in a binding sale agreement

In 2015, the United Nations decides to significantly reduce the scope of one of its missions and determines it has to conduct an impairment assessment for those assets that will no longer be needed. One of the items no longer needed is a big truck used for transportation and as part of the impairment assessment, the United Nations attempts to establish its fair value less costs to sell.

As the decision was made that it is uneconomical to transport the truck to another mission, the decision was made to sell the truck locally and the United Nations has received a binding offer from a local business to buy the truck for $45,000.

In order to ensure the truck is properly transferred to the local business, including license plate and registration details, the United Nations would have to spend approximately $3,000.

Consequently the fair value less costs to sell of the truck is $42,000.

4.1.1.2 Market price for an asset traded in an active market

If the United Nations does not have a binding sale agreement to establish the asset’s fair value less costs to sell, it has the option to use an asset’s current market price or latest transaction price less any costs of disposal as a basis for the asset’s fair value less costs to sell. This option is only available, if the asset is traded in an active market.

An active market is a market in which all the following conditions exist:

- The items traded within the market are homogeneous;
- Willing buyers and sellers can normally be found at any time; and
- Prices are available to the public.

Examples – Market price for an asset traded in an active market

Following the verification exercise of its assets, the United Nations noted that an impairment assessment is necessary for one of its armoured trucks. As part of the impairment assessment, the fair value less costs to sell has to be established, an as there is no binding sales agreement for the asset in this example, the market price is considered to be the best approach to establish the truck’s fair value.
As the United Nations recently bought a similar armored truck, it knows that the current market price for such a vehicle is $90,000.

If the United Nations would sell the asset, it would incur removal costs of approximately $5,000 and consequently the armored truck’s fair value less costs to sell is $85,000.

### 4.1.1.3 Amount obtainable from the disposal of the asset

If neither of the above options are available to the United Nations, it should use any information it can obtain from the disposal of the asset at reporting date to establish the asset’s fair value less costs to sell. As part of this assessment, any recent transactions for similar assets should be considered and integrated in the determination of the fair value.

**Examples – Amount obtainable from the disposal of an asset**

During the year, one of the cranes the United Nations owns is damaged by flooding and as the event is considered to be a potential impairment trigger, a detailed assessment is conducted.

As no binding sale agreement is available and no market price on a similar crane can be identified, the United Nations has decided to establish the crane’s fair value less costs to sell by reference to the amount it can achieve if it disposed of the asset.

Considering the features of the crane and the damage it incurred, the United Nations believes it could achieve approximately $200,000 if it disposed of the asset.

As removal costs of $20,000 would be incurred as part of a disposal, the asset’s fair value less costs to sell is $180,000.

While IPSAS 21 prescribes that the fair value less costs to sell should be assessed by going through the different approaches in order, the expectation is that the United Nations would mostly use the third method (amount obtainable from the disposal of the asset) for its impairment review purposes.

### 4.1.1.4 Costs to sell

Irrespective of which of the three approaches is chosen to establish the asset’s fair value less costs to sell, so called disposal costs always have to be deducted.

When considering what qualifies as such a disposal cost, it is important to ensure, that only such costs that are incremental to the transaction, i.e. that result directly from the transaction, are included in the assessment.

**Examples – Costs to sell**

- Legal and similar professional costs (e.g. brokers fees);
- Stamp duty and similar transaction taxes;
Performing an impairment review

- Transportation costs;
- Advertising costs;
- Costs of removing the asset; and
- Direct incremental costs to bring an asset into condition for its sale.

Please note that costs such as employee benefits and costs related to restructuring a business following the disposal of an asset are not to be deducted.

4.1.2 Value in Use

IPSAS 21 defines an asset’s value in use as the present value of the asset’s remaining service potential and offers organizations three methods to establish an asset’s value in use:

- Depreciated replacement cost approach;
- Restoration cost approach;
- Service units approach.

While the United Nations generally has the option to use any of the three methods to calculate an asset’s value in use, IPSAS recommends that the United Nations should base its choice of method on the availability of data and nature of the impairment.

Additional information is provided by IPSAS 21 regarding when to use what approach and can be summarized as follows:

**Depreciated replacement cost approach**

IPSAS recommends that this approach should generally be used, when the potential impairment is due to long-term changes in the technological, legal or government policy environment.

As mentioned above, examples of such impairment events are as follows:

**Example – Asset impaired due to changes in technological environment**

Computer hardware that has become obsolete as a result of technological development.

**Example – Asset impaired due to changes in legal or government policy environment**

- A drinking water plant that cannot be used because it does not meet new environmental standards.
- Another example of impairment is when the United Nations is forced to abandon a location.

---

8 Please note that the depreciated replacement cost approach is also used to establish the fair value of buildings and land for opening balance sheet purposes. Further information regarding this topic can be found in corporate guidance #10 Property, Plant and Equipment.
While impairments falling under this category should generally be assessed using the depreciated replacement cost approach, the approach can also be used for any other impairment. The United Nations will use this methodology to determine value in use except for cases where impairment is due to physical damage (see below the "restoration cost" approach).

**Restoration cost approach**

The restoration cost approach is most appropriate method for calculating an asset’s value in use when the impairment is due to physical damage.

In line with the examples provided above, this approach could therefore be used in the following scenarios:

**Example – Asset impaired due to physical damage**

- A car is damaged or completely destroyed in an accident;
- An earthquake or other natural disaster makes a building structural unsound so it needs repair or it can no longer be used;
- Hostile action resulting in destruction of assets.

**Service units approach**

IPSAS recommends that the service units approach is used for impairments due to significant long-term changes in the use of an asset. The approach can also be used for impairment reviews when the impairment is due to long-term changes in the technological, legal or government policy environment.

**Example – Asset impaired due to changes in use of asset**

The United Nations purchases a printing press with the intention to produce 50,000 specific publications. Shortly after purchase, the decision is made that instead of 50,000 publications, only 20,000 are needed.

### 4.1.2.1 Depreciated replacement cost approach

Further, more detailed information on the depreciated replacement cost approach can be found in section 7.1. As the depreciated replacement cost approach is also used as part of the opening balance sheet assessment for specific areas of property, plant and equipment, further information can also be found in Corporate Guidance #10 Property, plant and equipment.
Under this approach, the value in use is based on the cost of replacing or reproducing the asset and adjusting this amount for accumulated depreciation to reflect the already consumed service potential.

Or, in easier terms:

The United Nations makes an estimate of the current cost of a new asset that would replace the current asset’s level of service. That current estimate is then depreciated to reflect that the asset is not new.

The estimate of the current cost can be based on calculations to replace or to reproduce the current asset.

**Example – Depreciated replacement cost approach**

In 1997, the United Nations constructed an elementary school at a cost of $10 million. The estimated useful life of the school is fifty years. In 2003, the school is closed because enrollments in the district declined unexpectedly due to a population shift caused by the bankruptcy of a major employer in the area. The school is converted to use as a storage warehouse, and the United Nations has no expectation that enrollments will increase in the future such that the building would be reopened for use as a school. The current replacement cost for a warehouse with the same storage capacity as the school is $4.2 million.

The calculation of depreciated replacement costs would be as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement cost of a storage facility of similar capacity</td>
<td>$4,200,000</td>
</tr>
<tr>
<td>Accumulated depreciation ($4,200,000 × 6 ÷ 50)</td>
<td>$504,000</td>
</tr>
<tr>
<td>Value in use (depreciated replacement cost)</td>
<td>$3,696,000</td>
</tr>
</tbody>
</table>

While the main intention of the above example is to provide an overview of how to establish depreciated replacement cost, the following additional information on how the remaining steps of an impairment review would be completed are included for illustrative purposes:

**Facts:**
- Carrying value of elementary school before impairment: $8,800,000\(^{10}\)
- Fair value less costs to sell of asset: $3,000,000\(^{11}\)

**Step by step impairment assessment:**

1) Establish recoverable service amount

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset’s value in use (established via depreciated replacement cost approach)</td>
<td>$3,696,000</td>
</tr>
<tr>
<td>Asset’s fair value less costs to sell</td>
<td>$3,000,000</td>
</tr>
<tr>
<td>Recoverable service amount (higher of both)</td>
<td>$3,696,000</td>
</tr>
</tbody>
</table>

\(^{10}\) The carrying value is calculated by depreciating the original cost of $10,000,000 over six years (1997-2002 inclusive): ($10,000,000 – ($10,000,000/50*6)).

\(^{11}\) In this example, the fair value less costs to sell was established by reference to an offer an individual made to buy the school building.
2) Calculation of impairment amount

| Asset’s carrying amount pre impairment | $8,800,000 |
| Recoverable service amount            | $3,696,000 |
| Impairment                            | $5,104,000 |

3) Reflect impairment in financial records

| Dr | Impairment expense (Statement of financial performance) | $5,104,000 |
| Cr | PP&E accumulated impairment (Statement of financial position) | $5,104,000 |
4.1.2.2 Restoration cost approach

Using this approach, the value in use is established by subtracting the cost to restore the impaired asset to pre-impaired service potential from the cost of replacing the asset. The latter cost is usually determined as the depreciated reproduction or replacement cost of the asset, whichever is lower.

**Example – Restoration cost approach**

In 1998, the United Nations acquired a bus at the cost of $200,000 to help students from a nearby village to commute free of charge. The school estimated a useful life of 12 years for the bus. In 2003, the bus sustained damage in a road accident, requiring $40,000 to be restored to a usable condition. The restoration will not affect the useful life of the asset. The cost of a new bus to deliver a similar service is $250,000 in 2003.

The calculation of depreciated replacement costs would be as follows:

<table>
<thead>
<tr>
<th>Replacement cost</th>
<th>$250,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulated depreciation ($250,000 × 5 ÷ 12)</td>
<td>$104,167</td>
</tr>
<tr>
<td>Depreciated replacement cost (undamaged)</td>
<td>$145,833</td>
</tr>
<tr>
<td>Less: restoration cost</td>
<td>$40,000</td>
</tr>
<tr>
<td>Value in use</td>
<td>$105,833</td>
</tr>
</tbody>
</table>

While the main intention of the above example is to provide an overview of how to establish an asset’s value in use using the restoration cost approach, the following additional information on how the remaining steps of an impairment review would be completed are included for illustrative purposes:

Facts:
- Carrying value of bus before impairment: $116,667\(^{12}\)
- Fair value less costs to sell of bus: $45,000\(^{13}\)

Step by step impairment assessment:

1) Establish recoverable service amount

| Asset’s value in use (established via restoration cost approach) | $105,833 |
| Asset’s fair value less costs to sell | $45,000 |
| Recoverable service amount (higher of both) | $105,833 |

2) Calculation of impairment amount

| Asset’s carrying amount pre impairment | $116,667 |
| Recoverable service amount | $105,833 |

\(^{12}\) The carrying value is calculated by depreciating the original cost of $200,000 over five years (1998-2002 inclusive): ($200,000 – ($200,000/12*5)).

\(^{13}\) In this example, the fair value less costs to sell was established by reference to an offer an individual made to buy the damaged bus to salvage its parts.
### Impairment

3) Reflect impairment in financial records

<table>
<thead>
<tr>
<th>Account Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Impairment expense (Statement of financial performance)</td>
<td>$10,834</td>
</tr>
<tr>
<td>Cr PP&amp;E accumulated impairment (Statement of financial position)</td>
<td>$10,834</td>
</tr>
</tbody>
</table>

### 4.1.2.3 Service units approach

The calculation of value in use under this approach is similar to the restoration cost approach. However, instead of deducting the cost to restore the asset to pre-impaired service potential from the depreciated replacement cost of the asset, the United Nations reduces the replacement cost to compensate for the reduced number of units expected to be produced by the impaired asset.

#### Example – Service units approach

In 1988, the United Nations constructed a 20-story office building for use by the organization in downtown New York at the cost of $80 million. The building was expected to have a useful life of 40 years. In 2003, National Safety Regulations required that the top four stories of high rise buildings should be left unoccupied for the foreseeable future, thus only sixteen floors can be used. The current replacement cost of a similar 20-story building is $85 million.

The calculation of depreciated replacement costs would be as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement cost (20-story building)</td>
<td>$85,000,000</td>
</tr>
<tr>
<td>Accumulated depreciation ($85,000,000 × 15 ÷ 40)</td>
<td>$31,875,000</td>
</tr>
<tr>
<td>Depreciated replacement cost before adjustment for remaining service units</td>
<td>$53,125,000</td>
</tr>
<tr>
<td>Value in use ($53,125,000*16 ÷ 20)</td>
<td>$42,500,000</td>
</tr>
</tbody>
</table>

While the main intention of the above example is to provide an overview of how to establish an asset’s value in use using the service unit approach, the following additional information on how the remaining steps of an impairment review would be completed are included for illustrative purposes:

**Facts:**
- Carrying value of building before impairment: $50,000,000\(^{14}\)
- Fair value less costs to sell for building: $35,000,000\(^{15}\)

---

\(^{14}\) The carrying value is calculated by depreciating the original cost of $80,000,000 over fifteen years (1988-2002 inclusive): ($80,000,000 − ($80,000,000/40*15)).

\(^{15}\) In this example, the fair value less costs to sell was established by reference to the price per square foot achieved in recent sales of surrounding buildings.
Step by step impairment assessment:

1) Establish recoverable service amount

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset’s value in use (established via service unit approach)</td>
<td>$42,500,000</td>
</tr>
<tr>
<td>Asset’s fair value less costs to sell</td>
<td>$35,000,000</td>
</tr>
<tr>
<td>Recoverable service amount (higher of both)</td>
<td>$42,500,000</td>
</tr>
</tbody>
</table>

2) Calculation of impairment amount

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset’s carrying amount pre impairment</td>
<td>$50,000,000</td>
</tr>
<tr>
<td>Recoverable service amount</td>
<td>$42,500,000</td>
</tr>
<tr>
<td>Impairment</td>
<td>$7,500,000</td>
</tr>
</tbody>
</table>

3) Reflect impairment in financial records

<table>
<thead>
<tr>
<th>Dr</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impairment expense</td>
<td>PP&amp;E accumulated impairment</td>
</tr>
<tr>
<td>(Statement of</td>
<td>(Statement of financial</td>
</tr>
<tr>
<td>financial</td>
<td>position)</td>
</tr>
<tr>
<td>performance)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>$7,500,000</td>
<td>$7,500,000</td>
</tr>
</tbody>
</table>
5 MEASUREMENT OF IMPAIRMENT LOSS

As mentioned above, an asset is impaired when its recoverable service amount is less than the asset’s carrying amount. The impairment loss is calculated as the difference between these two amounts and the new carrying value of the asset is the lower of the two.

Consequently, once the asset’s fair value less costs to sell and value in use have been established as described above and the recoverable service amount is less than the asset’s current carrying value, the United Nations is in a position to calculate the impairment charge and write down its asset.

If an asset’s carrying amount is less than its recoverable service amount, the asset is not impaired and no impairment charge is recognized in the financial statements.

Considering an asset’s recoverable service amount is defined as the higher of its fair value less costs to sell or value in use, the United Nations does not have to calculate both amounts, if one of them has been established and is higher than the asset’s carrying amount.
6 IMPAIRMENT REVERSAL

In addition to assessing every year whether any events have occurred that might require an impairment, the United Nations should also review such assets that were impaired in the past.

If any of the estimates used to establish the asset’s recoverable service amount have changed since the last impairment test, the United Nations should re-establish the asset’s recoverable service amount to understand whether the impairment previously recognized has reversed16.

The aspect that an estimate used to establish the asset’s recoverable service amount has changed since the previous impairment test is a key requirement for potential impairment reversals as the simple passage of time is not acceptable as a basis for impairment reversal.

6.1 Impairment reversal indicators

Similarly to the requirements for performing an impairment test for an asset for the first time, the accounting standard does not require entities to reassess the recoverable service amount for all previously impaired assets, but rather requires entities to consider whether there are any indicators that the impairment might no longer exist.

While there is no conclusive list of such indicators staff can go through, one can generally assume that the opposites of the indicators for impairment mentioned above qualify as indicators for impairment reversals.

<table>
<thead>
<tr>
<th>Example – Indicators for impairment reversal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External sources of information:</strong></td>
</tr>
<tr>
<td>• Resurgence of the demand or need for services provided by the asset;</td>
</tr>
<tr>
<td>• Significant long-term changes with a favorable effect on the entity in the technological, legal, or government policy environment in which the entity operates.</td>
</tr>
<tr>
<td><strong>Internal sources of information</strong></td>
</tr>
<tr>
<td>• Significant long-term changes with a favorable effect on the United Nations have taken place during the period, or are expected to take place in the near future, in the extent to which, or manner in which, the asset is used or is expected to be used. These changes include costs incurred during the period to improve or enhance an asset’s performance or restructure the operation to which the asset belongs;</td>
</tr>
<tr>
<td>• A decision to resume construction of the asset that was previously halted before it was completed or in a usable condition.</td>
</tr>
</tbody>
</table>

6.2 Measuring an impairment reversal

---
16 Please note that impairment reversals generally tend to be rare and should be confirmed with the Accounts Division.
When an indicator of impairment reversal has been identified, the United Nations should establish the asset’s recoverable service amount as described in section 4.1.

6.3 Recording an impairment reversal

If the recoverable service amount of the asset is higher than its carrying amount, the asset’s carrying amount should be increased to its recoverable service amount with the difference being recognized in the statement of financial performance.

Please note that any impairment reversal is limited to increasing the carrying amount to what the carrying amount would have been at the current point in time, if the original impairment had never been recognized in the first place.

Following the impairment reversal, the asset’s depreciation method and useful life should be reassessed.

---

**Example – Reversal of impairment**

For its United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) operations, the United Nations constructed a building complex in Bangkok, which it moved into in 1975. The building complex consists of 3 buildings including the secretariat building, the service building and the conference center.

In 2010, following an assessment of its strategy, UNESCAP decided to change the scope of services provided from Bangkok. While the secretariat building was mostly used for office purposes up to that point, the expectation was that a significant part of it would be used for storage purposes and only a remaining handful of floors would be used for office purposes. As this decision was considered to be a potential trigger for impairment, a detailed impairment assessment for the secretariat building was conducted in 2010.

The facts during the impairment review in 2010 were as follows:

- The original cost of the building was $350,000,000
- The asset is depreciated over 50 years and consequently had been depreciated over 36 years (1975 – 2010 inclusive)
- Consequently the carrying value in 2010 pre impairment is $98,000,000 ($350,000,000 – (350,000,000/50*36)).
- As part of the impairment assessment, the recoverable service amount was established. Please note that the values established below are based on the expectation that a significant part of the building would be used as storage space and only a few remaining floors would continue to function as office space.

<table>
<thead>
<tr>
<th>Fair value less costs to sell of the asset (established by reference to price per square foot achieved in recent sale of buildings nearby)</th>
<th>$90,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value in use (established using the depreciated replacement cost approach)</td>
<td>$80,000,000</td>
</tr>
<tr>
<td>Recoverable service amount (higher of both)</td>
<td>$90,000,000</td>
</tr>
</tbody>
</table>
Following the calculation of these amounts, an impairment of $8,000,000 ($98,000,000 - $90,000,000) was recognized in the 2010 financial statements. No additional adjustment for useful life was considered necessary.

In 2012, the scope of administrative services provided by UNESCAP in Bangkok was increased significantly, which led to the recruitment of additional staff and the need for office space. Management is of the opinion that this development is an indication of a potential impairment reversal and believes that one of the estimates used in the original impairment assessment, the amount of building space UNESCAP will use for office purposes, has changed. Consequently, an impairment reversal could be recognized and a detailed impairment assessment is done as part of the 2012 closure process.

The facts during the impairment review in 2012 are as follows:

- After accounting for two more years of depreciation, the carrying value in 2012 is $77,142,857 calculated as follows:

<table>
<thead>
<tr>
<th>Remaining useful life</th>
<th>14 years (2011-2024, or 50-36)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual depreciation</td>
<td>$6,428,571</td>
</tr>
<tr>
<td>Carrying value end of 2012</td>
<td>$90,000,000 – (2*$6,428,571)</td>
</tr>
</tbody>
</table>

- The recoverable service amount is $88,000,000 established as follows:

<table>
<thead>
<tr>
<th>Fair value less costs to sell of the asset (established by reference to price per square foot achieved in recent sale of buildings nearby)</th>
<th>$88,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value in use (established using the depreciated replacement cost approach)</td>
<td>$80,000,000</td>
</tr>
<tr>
<td>Recoverable service amount (higher of both)</td>
<td>$88,000,000</td>
</tr>
</tbody>
</table>

As mentioned in section 6.3, an impairment reversal is recognized if an asset’s recoverable service amount is higher than its carrying amount. These two amounts therefore need to be compared:

| Carrying value end of 2012 | $77,142,857 |
| Recoverable service amount (see above)                                                                             | $88,000,000 |
| Difference                                                                   | $10,857,143 |

As the recoverable service amount exceeds the carrying amount by $10,857,143, an impairment reversal can be recognized. However, as mentioned in section 6.3, the recognition of any impairment reversal is limited to increasing the carrying amount to what the carrying amount would have been at the current point in time, if the original impairment had never been recognized in the first place.
UNESCAP therefore needs to calculate, what the carrying value would have been at the end of 2012, if no impairment had been recognized in 2010:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrying amount pre-impairment at the end of 2010</td>
<td>$98,000,000</td>
</tr>
<tr>
<td>Annual depreciation (assuming no impairment recognized)</td>
<td>$7,000,000</td>
</tr>
<tr>
<td>($350,000,000 / 50)</td>
<td></td>
</tr>
<tr>
<td>Carrying amount at the end of 2012 assuming no impairment had been recognized</td>
<td>$84,000,000</td>
</tr>
</tbody>
</table>

Consequently, while the asset’s recoverable service amount is $88,000,000, the impairment can only be reversed to the extent that the carrying value post impairment reversal does not exceed $84,000,000.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrying value end of 2012</td>
<td>$77,142,857</td>
</tr>
<tr>
<td>Maximum carrying value allowed</td>
<td>$84,000,000</td>
</tr>
<tr>
<td>Allowed impairment reversal</td>
<td>$6,857,143</td>
</tr>
</tbody>
</table>

The allowed impairment reversal would be recognized as follows:

- Dr  Accumulated impairment (statement of financial position) $6,857,143
- Cr  Impairment reversal (statement of financial performance) $6,857,143
7 SPECIFIC TOPICS

7.1 Determining value in use using the depreciated replacement cost approach

The depreciated replacement cost method determines value by subtracting depreciation from replacement cost:

![Depreciated Replacement Cost Diagram]

- **Replacement cost** is the cost to replace the asset with an equivalent asset. Replacement cost can be calculated by collecting construction cost data, utilizing in-house cost data (if it exists), or using external cost estimators.

- **Depreciation** in the context of depreciated replacement cost is the sum of physical deterioration, functional obsolescence, and economic obsolescence:
  
  - **Physical deterioration** is the result of wear and tear combined with a lack of necessary maintenance and other factors that may impact the prospective life of the asset such as weathering from the elements.
  
  - **Functional obsolescence** is caused by changes in technology, legislation or regulation that affect the ability of the asset to perform to modern standards or requirements and relates to a deficiency or super-adequacy in design of the asset.
  
  - **Economic obsolescence** is the impact of external macroeconomic and microeconomic conditions on the utility of the asset.

Depreciation should be applied on a **straight line** basis over the **useful life** of the asset.

7.1.1 **Calculating Depreciation**

In calculating straight line depreciation, two basic inputs are required, (i) the expected useful life of the asset and (ii) the chronological age of the assets. Depreciation is then calculated by dividing the age of the asset
by the useful life (11 year chronological age / 20 year useful life = 55.0% depreciation). The resulting fraction represents the total amount of accrued depreciation. Depreciated replacement cost is then calculated as follows:

\[(\text{Replacement Cost New}) \times (1 - \text{Depreciation}) = \text{Depreciated Replacement Cost}\]

However, when the chronological age of an asset exceeds its useful life, depreciation under the straight line method will result in a negative fair value estimate, which is not logical. As long as an asset is in service and providing an economic benefit, it must have a positive value.

It is not uncommon for the actual age of an asset to exceed its expected useful life, particularly if the asset has been well maintained or received repairs during its life. The straight line depreciation method can be modified to accommodate this situation. Regardless of how old an asset is, at any point during its life a qualitative or quantitative assessment of the assets remaining useful life can be made. When an asset is nearing the end of its expected useful life, such an assessment should be made.

In the context of the United Nations and the consideration of a possible impairment, such an assessment is required for buildings or infrastructure assets. Infrastructure assets are assets that display some or all of the following characteristics:

- They are part of a system or network;
- They are specialized in nature and do not have alternative uses;
- They are immovable; and
- They may be subject to constraints on disposal.

Examples of infrastructure assets include road networks, sewer systems, water and power supply systems, and communication networks.

Rather than making an assessment of the remaining useful life as for buildings and infrastructure assets it is recommended that the concept of a depreciation floor is implemented for plant and equipment assets.\(^17\) Under this concept, regardless of the chronological age of the asset, depreciation will be limited to a range of 70% to 90%. Typically large high cost assets with long useful lives such as construction equipment will have a depreciation floor of 70% whereas lower cost assets or electronics with relatively short useful lives will have a depreciation floor of 90%. For example, consider a light wheeled vehicle that has an expected useful life of 7 years that is still in service 8 years after it was first placed in service, it is unreasonable to conclude that the vehicle has zero value. For this particular asset we assume\(^18\) a depreciation floor of 80%. Assume that that the replacement cost new of the light wheeled vehicle is $30,000, using this depreciation floor, the depreciated replacement cost of the light wheeled vehicle is $6,000 ($30,000 x (1 - 0.80) = $6,000).

### 7.1.2 Methodology to Determine Remaining Useful Life of Buildings and Infrastructure Assets

The process to determine the remaining useful life of buildings and infrastructure assets can be broken down into three steps.

---

\(^{17}\) Including computer and IT equipment, vehicles, machinery and equipment and items of furniture and fittings

\(^{18}\) Please note that suggestions on depreciation floors are included in the template for impairment assessments. These suggestions are subject to confirmation by the United Nations.
Step 1 - The normal useful life should first be identified based on the type of infrastructure asset or the classification of the building\(^{19}\).

Step 2 - Determine the chronological age of the infrastructure assets or building and calculate a preliminary estimate of remaining useful life by subtracting the chronological age of the asset from the appropriate normal useful life. The preliminary estimate of remaining useful life should then be assessed to determine if this preliminary estimate of remaining useful life is reasonable.

In some instances, simply subtracting the chronological age of a building or infrastructure asset from its normal useful life may not be the most appropriate indicator a buildings remaining useful life, particularly in instances where the asset has received below average operating maintenance. In order for a building or infrastructure asset to continue to function over its expected normal useful life, it is anticipated that the asset will receive normal levels of operating maintenance. When normal levels of operating maintenance are neglected, the effective age of the asset may be greater than the chronological age. Also in instances when a building or infrastructure asset receives better than normal levels of maintenance, the effective age of the asset may be less than its chronological age. In estimating the effective age of a building or infrastructure asset the following factors should be considered:

- **Maintenance history** (non-capitalized repair and maintenance) - normal repairs and maintenance should be viewed as the maintenance necessary to achieve the original useful life of the building or infrastructure asset. These expenses typically do not extend the useful life, rather lack of such expenses may cause the effective age of the building to be older than the chronological age.
- **Improvement** (nature, timing, and cost associate with repairs) - certain investments may extend the remaining useful life of a building or infrastructure asset causing the analyst to conclude that the asset has an effective age that is less than the chronological age of the building.
- **Location specific factors** that have an impact on the assessment of the remaining useful life of the building or infrastructure asset should also be considered. This would include examples such as mild or harsh climates, or unique circumstances such as damage caused by unanticipated events. Such factors may lead to the conclusion that a building or infrastructure asset has an effective age that is less than or greater than its chronological age.

Step 3 - Adjust the preliminary remaining useful life estimate based on the chronological age calculation and the assessment of the factors noted above.

The above concepts are incorporated in a functional Excel model titled Depreciated Replacement Cost Workbook.

7.2 Compensation for impairment

In many cases, the United Nations will be compensated by third parties for any impairment of its property, plant and equipment / intangible assets. Most likely this compensation will be in the form of insurance coverage.

As the impairment will often trigger such a third party compensation, one might assume that the compensation should be incorporated in the impairment assessment. However, for accounting purposes,

\(^{19}\) We refer to Corporate Guidance #10 Property, plant and equipment for additional information
these two events, the impairment and the compensation are considered to be completely separate economic events and should therefore be accounted for independent from each other:

- An impairment assessment is conducted and accounted for in line with the guidance included in this paper, ignoring any potential compensation;
- Any compensation from third parties for items of property, plant, and equipment or intangible assets that were impaired, is included in the statement of financial performance when it becomes receivable.

### 7.3 Impairment of cash-generating versus non-cash-generating assets

Next to IPSAS 21, there is IPSAS 26 *Impairment of Cash-Generating Assets*, which deals with impairments of assets that generate a commercial return.

Considering the overall mission statement of the United Nations, the impairment testing for PP&E will be performed under IPSAS 21 as explained in this paper, although limited assets could have characteristics of cash-generating assets (e.g. printing press).
8 WORKFLOW CHANGES RELATED TO IPSAS IMPLEMENTATION

As mentioned in the introduction to this paper, the workflow details discussed in this section focus on items of property, plant and equipment. Specifics on the workflows around impairment of intangible assets are included in Corporate Guidance #12 Intangible assets.

Across the United Nations, the identification and recognition of an impairment of property, plant and equipment can be divided into three different processes:

- The recognition of impairments throughout the year triggered by certain events;
- A check of certain assets as part of the physical verification process; and
- An annual strategic assessment of high-level impairment indications.

As noted in Section 3, the United Nations must annually test for impairment all individual items of communications and IT equipment, vehicles, machinery and equipment and furniture and fittings with a net book value, as at the year-end reporting date, of more than $25,000, and on land, buildings and infrastructure assets with a net book value of more than $500,000 as at that date.

Irrelevant of how a potential impairment event is established, whether throughout the year following an event or at the end of the year following the physical verification or annual strategic assessment, the process of completing the impairment review, calculating any impairment and reflecting it in the property management and financial records is identical for all scenarios and is only covered once.

An overview of the entire process is provided below and described in detail afterwards.

---

20 While the steps provided in this section specify the procedures for impairment procedures, they are also applicable to the assessment of any impairment reversals.
*1: Throughout the year, the procedures described above should be followed for all impairments. However, in rare cases, there might not be enough time to go through the above steps while making sure that all impairments are reflected in the annual financial statements. In such rare situations, it is therefore possible that the Director of Mission Support (DMS) / Director of Administration (DOA) approves impairments to be
reflected in the financial statements, before the review by the appropriate boards have been completed. Please note that the entire review procedure will still be followed through.

*2: As shown in the above flowchart, certain review thresholds are in place regarding total impairments (“write-offs”), whereas no thresholds are in place for partial impairments (“write-downs”). While this raises the risk of significant write-downs going undetected, the approach is acceptable as the Controller has the ability to send any write-down to the headquarters property survey board (HPSB) for review if considered necessary.

8.1 Identifying an impairment event

8.1.1 ONGOING / EVENT DRIVEN IMPAIRMENT

In the case of an impairment event throughout the year as described above in section 3, which reduces the carrying value of an asset beyond the normal reduction of carrying value recognized as part of depreciation, the responsible Property Management Officer shall initiate the impairment review.

This process involves:

- A file is opened for each case and cases are numbered to assure they can be uniquely identified in the future.
- Within each file, detailed information for each case is provided, including:
  - Asset description;
  - Original cost and carrying value (original cost – accumulated depreciation – accumulated impairment) at date of impairment;
  - Description of damage, especially whether damage results in a total impairment or a reduction in value;
  - If event led to reduction in value, initial estimate as to how much the reduction in value is;
  - Description of event that led to impairment.

The information included in the file should be compiled by Property Management Officer assisted by finance department representative, if needed.

In addition to the compilation of the above information, a detailed impairment assessment is performed as described in 8.2.

8.1.2 ASSESSMENT AS PART OF THE PHYSICAL VERIFICATION

On a regular basis, a thorough physical verification of all asset items is conducted by United Nations staff. While the main objective of this review is to assure that all assets reported on the asset system are still in place and being used, the individuals conducting the verification will also assess whether any specific assets need to be assessed for impairment.
Consequently, as part of the physical verification, the individuals performing the assessment review the asset for any significant damage or other issues that reduces the service potential of the asset and consequently requires an impairment assessment.

To streamline the process, it was decided that this assessment will only be performed for such PP&E with carrying values exceeding the following thresholds:

<table>
<thead>
<tr>
<th>Asset class</th>
<th>Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer and IT equipment, vehicles, machinery and equipment, furniture and fittings</td>
<td>&gt;$25,000</td>
</tr>
<tr>
<td>Land, buildings and infrastructure assets</td>
<td>&gt;$500,000</td>
</tr>
</tbody>
</table>

Similarly to the process described above, detailed information will be gathered on all those assets where an impairment assessment is considered necessary.

In addition, a detailed assessment is performed as described in 8.2.

### 8.1.3 Annual Strategic Assessment for Impairment

At each reporting date, a representative group of individuals from property management and finance meets to assess whether a potential impairment exists due to any strategic decisions taken. While most impairments are processed throughout the year resulting from events, one aim of this annual review is to assure that any decisions taken that might affect future operations are also taken into consideration.\(^{21}\)

Consequently, during the meeting, the operations as a whole will be reviewed for any indications of impairment. The focus will be on strategic decisions or high-level changes that will impact the operations as a whole. Examples of such events include: Decision to abandon certain locations, changes in the terms and conditions originally established for a location, bulk impairment of all computers due to technology advancement, etc.

If, following this review, the group concludes that an impairment might exist, details are collected on the relevant assets and compiled in a file as described under 8.1.1.

In addition, a detailed assessment is performed as described in 8.2.

### 8.2 Performing detailed impairment assessment

As explained above, a detailed impairment assessment requires the comparison of the asset’s carrying value before the impairment with the asset’s recoverable service amount. The recoverable service amount in return is defined as the higher of the assets value in use and fair value less costs to sell.

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\(^{21}\) For Headquarters, the group will include individuals from the Office of Central Support Services (OCSS), the Department of Field Services (DFS) and the finance department and will receive input from senior management. For any other reporting entity (e.g. ITC, UNODC, UNHAPITAT, UNEP, etc.), the assessment will be completed at the level of their headquarters and the representative group will include individuals from property management and finance with input from senior management.
Consequently, for all those assets, for which an impairment event occurred, the recoverable service amount has to be established.

This calculation is done by the Property Management Officer, which has most of the required information available and which will liaise with the local finance team to obtain any missing information such as the up-to-date carrying amount before the impairment.

When establishing the asset’s recoverable service amount, i.e. the higher of the asset’s fair value less costs to sell and its value in use, one should not calculate both amounts right away. First, the one that is easier to establish should be calculated. If this amount is higher than the carrying amount of the asset no additional calculation is required. Only if the amount calculated first is lower than the asset’s carrying value, the other amount should be calculated.

Specifics on how to calculate the relevant amounts are included above (section 4).

Following the detailed review and calculation of the asset’s recoverable service amount, all information gathered and calculated is collated in the asset’s file mentioned above.

Those assets where the recoverable amount is higher than the carrying value are not impaired and no information is therefore provided to any review boards. Instead the useful life is reassessed by the Property Management Officer together with the users of the asset and the property management system / fixed asset register is updated accordingly.

### 8.3 Review and approval of impairment

While all assets that have a recoverable service amount less than the asset’s carrying amount require impairment, the review and approval process of all impairments depends on the type of impairment: whether it’s a total impairment (write-off) or whether it is a partial impairment (write-down).

#### 8.3.1 TOTAL IMPAIRMENT (WRITE-OFF)

Depending on the carrying value of the impaired asset pre impairment, the information on the impairment is reviewed by the HPSB, the local property survey board (LPSB) or the Board of Survey (BoS).

The thresholds are as follows (based on the carrying value of the impaired asset pre-impairment):

<table>
<thead>
<tr>
<th>Asset class</th>
<th>Reviewed by BoS</th>
<th>Reviewed by LPSB</th>
<th>Additional reviewed by HPSB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer and IT equipment, vehicles, machinery</td>
<td>&lt;$3,000</td>
<td>&gt; $3,000</td>
<td>&gt;$25,000</td>
</tr>
<tr>
<td>and equipment, furniture and fittings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land, buildings and</td>
<td>&lt;$100,000</td>
<td>&gt;$100,000</td>
<td>&gt;$500,000</td>
</tr>
</tbody>
</table>
The information provided to the LPSB and HPSB should include the file prepared for each asset described under 8.1.1 and a recommendation by the local property manager / certifying officer regarding the treatment of the asset.

### 8.3.1.1 Board of Survey

Any assets that have a carrying value of less than $3,000 ($100,000 for land, buildings and infrastructure assets) that are impaired, do not need to go through review by LPSB or HPSB. Instead their treatment is decided by the Board of Survey. Following review by the Board of Survey and approval by the DMS, the asset information is updated on the property management system / fixed asset register as described below.

### 8.3.1.2 LPSB

The LPSB reviews the information provided for each impaired asset and will provide its recommendation in terms of next steps to the DMS / DOA, who will approve the appropriate action in line with the LPSB’s recommendation.

To assure timely review of impairments and timely reflection of such in the financial records, the LPSB meets on a monthly basis.

Please note that certain cases covered by the LPSB will also be forwarded to the HPSB.

The applicable thresholds are as follows (based on the carrying value of the impaired asset pre-impairment):

<table>
<thead>
<tr>
<th>Asset class</th>
<th>Reviewed by LPSB</th>
<th>Additional reviewed by HPSB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer and IT equipment, vehicles, machinery and equipment, furniture and fittings</td>
<td>&gt; $3,000</td>
<td>&gt;$25,000</td>
</tr>
<tr>
<td>Land, buildings and infrastructure assets</td>
<td>&gt;$100,000</td>
<td>&gt;$500,000</td>
</tr>
</tbody>
</table>

### 8.3.1.3 HPSB

As mentioned above, certain cases reviewed by the LPSB are also reviewed by the HPSB.

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22 In offices, where no Board of Survey is in place, the review of any impairments falling within these threshold limits would be completed by the DMS / DOA.

23 In the case of Volume I & II reporting entities, HPSB refers to UNHQ HPSB. For other reporting entities, their headquarters office would be considered HPSB for purposes of this paper. Further information can be found in the delegation of authority.
The HPSB reviews the information provided for each impaired asset and will provide its recommendation in terms of next steps to the DMS / DOA, who will approve the appropriate action in line with the HPSB’s recommendation.

To assure timely review of impairments and timey reflection of such in the financial records, the HPSB meets on an ad-hoc basis as needed.

### 8.3.2 Partial Impairment (Write-down)

If, based on the detailed impairment assessment, an asset is only partially impaired, all information on the impairment is reviewed by the Board of Survey and approved by the DMS / DOA. Following approval, the property management records / asset register is updated.

While, generally, all write-downs are assessed and reviewed locally, significant cases can also be forwarded to the Controller for additional review.

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24 While HPSB review is generally only required if the carrying value of the impaired asset is above the thresholds included in this paper, the DOA or DMS can also submit any other total or partial impairment cases to the HPSB for review, if considered necessary.
8.4 Recording an impairment

Following approval, detailed information on all impairments is provided to the local property management and local finance team to assure they are aware of the impact on the financial statements.

The local property management team will record the impairment in the system to assure that all asset records including the fixed asset register is updated. Specifically, the property management team will update the system to show whether the asset is fully impaired, or how much it should be written down, if the impairment is partial.

This update to the asset records will automatically follow through the system and update the financial records as needed. Any entries made in the financial system will be reviewed by the local finance team using the information received.

Besides updating the asset records, a person tasked with the fixed assets accountant role also prepares a PP&E roll-forward table on a regular basis, which details all asset transactions throughout the year including impairments. To assure the information included is accurate, the table is reviewed and discussed with the local finance team.

In addition to reflecting the impairment on the property management system / fixed asset register, the local property management will also review the useful life of each impaired asset and amend it where necessary.
9 CASE STUDY: EARTHQUAKE IN CHILE

In February 2010, Santiago de Chile was hit by a major earthquake. The Economic Commission for Latin America and the Caribbean (ECLAC) is based in Santiago and its offices were damaged during the earthquake. The scenario is used as an example for an impairment review.

All details and figures are made up for illustrative purposes.

9.1 Identification of potential impairment event

As mentioned above, IPSAS does not require entities to conduct an impairment assessment for each of its assets, but instead requires the assessment when an indication for impairment exists.

One of the examples provided of an indication of impairment is physical damage to an asset and as the 2010 earthquake caused significant damages to ECLAC’s building number 1, an indication of an impairment exists.

Consequently, a full impairment assessment should be done for building number 1.

9.2 Impairment assessment

As discussed in detail above, during an impairment assessment, an asset’s carrying value before the impairment is compared to the asset’s recoverable service amount.

Consequently, those two amounts need to be established.

9.2.1 Carrying amount

When originally capitalizing the building, the building was split into components to assure each part of the asset is depreciated according to its appropriate useful life. The main components of the building are: Exterior, Roofing, Interior and Services.

The carrying amounts (cost – accumulated depreciation – accumulated impairment) under each of the components of the building before the impairment were as follows:

<table>
<thead>
<tr>
<th></th>
<th>Original cost</th>
<th>Total useful life</th>
<th>Remaining useful life</th>
<th>Carrying amount before impairment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exterior</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Windows</td>
<td>$10,000,000</td>
<td>50</td>
<td>20</td>
<td>$4,000,000</td>
</tr>
</tbody>
</table>

Please note that the component approach is for illustrative purposes only. We refer to the PP&E Corporate Guidance paper for a detailed discussion of the component approach at the United Nations.
### 9.2.2 Recoverable Service Amount

As explained above, an asset’s recoverable service amount is the higher of its fair value less costs to sell and its value in use. With regards to the building in Chile, the process of establishing the values in use was considered to be more straightforward and they were therefore established first.

#### 9.2.2.1 Calculate value in use

In order to support the United Nations with its calculation of an asset’s value in use, IPSAS 21 provides three methods to calculate value in use:

- Depreciated replacement cost approach;
- Restoration cost approach;
- Service units approach.

As described above, the different approaches should be used depending on the underlying reasons for an impairment and as the reason for the potential impairment in Chile is damage to the asset, the restoration cost approach is the most appropriate approach to use in this scenario.

When establishing value in use using this approach, one needs to go through the following steps:

- Cost to replace the asset;
- Establish depreciated replacement cost;
- Assess cost to repair asset to pre-impairment service levels;
- Confirm value in use.

**Costs to replace the asset**

The United Nations needs to make an estimate of the current cost of a new asset that would replace the current assets’ level of service. The estimate of the current cost can be based on calculations to replace or to reproduce the current assets.

With regards to the building in Chile, this assessment is done in 3 parts:

1. **Assets damaged that will be repaired to pre-impairment functionality**
For those assets that are damaged and that will be repaired to pre-impairment functionality, the United Nations uses the cost originally established for the assets when purchased and capitalized as a starting point and will adjust them for inflation since acquisition\(^\text{26}\).

2) **Assets damaged that will be repaired to better than pre-impaired functionality**

For those assets that cannot be repaired to pre-impairment levels, but whose performance will be significantly improved, the United Nations uses the cost it would incur if purchasing the assets new.

3) **Assets damaged that cannot be repaired, but are replaced**

Similarly to assets that can only be repaired to better than pre-impairment functionality, the cost for assets that cannot be repaired to pre-impairment levels, but that need to be replaced, the United Nations uses the cost it would incur if purchasing the assets new.

\(^{26}\) Please note that upon first recognition in the IPSAS opening balance sheet, the cost of a building will be established by reference to the asset’s fair value. Specifically, the United Nations will use the depreciated replacement cost to establish the opening balance sheet amount. If an impairment assessment needs to be conducted for such an asset, the information gathered as part of the initial analysis for opening balance sheet purposes should be used as the starting point for the impairment assessment. For more information, please refer to Corporate Guidance # 10 Property, plant and equipment.
With regards to building 1 in Chile, the specifics are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Additional information</th>
<th>Details on establishing cost to replace asset</th>
<th>Cost to replace or reproduce asset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exterior</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Windows</td>
<td>Repairable to pre-impaired functionality</td>
<td>Original cost adjusted for inflation</td>
<td>$15,000,000</td>
</tr>
<tr>
<td>Roofing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roof</td>
<td>Repairable to pre-impaired functionality</td>
<td>Original cost adjusted for inflation</td>
<td>$10,000,000</td>
</tr>
<tr>
<td>Interior</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cafeteria</td>
<td>Not repairable, to be replaced</td>
<td>Cost of new asset</td>
<td>$8,000,000</td>
</tr>
<tr>
<td>Services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air-conditioning</td>
<td>Repairable to better than pre-impaired functionality</td>
<td>Cost of new asset</td>
<td>$5,000,000</td>
</tr>
<tr>
<td>Total</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>$38,000,000</td>
</tr>
</tbody>
</table>

*Established depreciated replacement cost*

Once the cost to replace or reproduce an asset is known, one needs to calculate the asset’s depreciated replacement cost.

In order to establish an asset’s depreciated replacement cost, information on useful life and age of the existing asset is needed.

For purposes of this example, the useful lives of the different components of the building are presumed to be as follows:

<table>
<thead>
<tr>
<th></th>
<th>Useful lives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exterior</td>
<td></td>
</tr>
<tr>
<td>Windows</td>
<td>50</td>
</tr>
<tr>
<td>Roofing</td>
<td></td>
</tr>
<tr>
<td>Roof</td>
<td>20</td>
</tr>
<tr>
<td>Interior</td>
<td></td>
</tr>
<tr>
<td>Cafeteria</td>
<td>20</td>
</tr>
<tr>
<td>Services</td>
<td></td>
</tr>
<tr>
<td>Air-conditioning</td>
<td>25</td>
</tr>
</tbody>
</table>

The cost established to replace the relevant assets should therefore be depreciated in line with the above summary.
### Case study: Earthquake in Chile

<table>
<thead>
<tr>
<th></th>
<th>Original useful life</th>
<th>Remaining useful life</th>
<th>Calculation of depreciated replacement cost</th>
<th>Depreciated replacement cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exterior</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Windows</td>
<td>50</td>
<td>20</td>
<td>(=$15,000,000-)(\frac{15,000,000}{50\times30})</td>
<td>$6,000,000</td>
</tr>
<tr>
<td>Roofing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roof</td>
<td>20</td>
<td>10</td>
<td>(=$10,000,000-)(\frac{10,000,000}{20\times10})</td>
<td>$5,000,000</td>
</tr>
<tr>
<td><strong>Interior</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cafeteria</td>
<td>20</td>
<td>10</td>
<td>(=$8,000,000-)(\frac{8,000,000}{20\times10})</td>
<td>$4,000,000</td>
</tr>
<tr>
<td>Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air-conditioning</td>
<td>25</td>
<td>20</td>
<td>(=$5,000,000-)(\frac{5,000,000}{25\times5})</td>
<td>$4,000,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>$19,000,000</td>
</tr>
</tbody>
</table>

**Assess cost to repair assets to pre-impairment service levels**

Under the restoration cost approach, the cost to repair an asset to pre-impairment service levels is deducted from the asset’s depreciated replacement cost.

The cost to repair each of the assets to pre-impairment levels therefore needs to be established:
### Costs to repair asset

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exterior</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Windows</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roofing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roof</td>
<td>$3,500,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Interior</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cafeteria</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air-conditioning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

**Value in use**

The next and final step in this case study is to establish the assets’ values in use. In order to do so under the restoration cost approach, one needs to deduct the costs to repair the assets to pre-impairment levels from the depreciated replacement cost amounts established above.

Combining all of the above information, the following summary can be established:

<table>
<thead>
<tr>
<th></th>
<th>Carrying value pre impairment</th>
<th>Cost to replace asset</th>
<th>Depreciated replacement cost</th>
<th>Repair costs</th>
<th>Value in use</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exterior</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Windows</td>
<td>$4,000,000</td>
<td>$15,000,000</td>
<td>$6,000,000</td>
<td>$3,500,000</td>
<td>$2,500,000</td>
</tr>
<tr>
<td>Roof</td>
<td>$4,000,000</td>
<td>$10,000,000</td>
<td>$5,000,000</td>
<td>$3,000,000</td>
<td>$2,000,000</td>
</tr>
<tr>
<td><strong>Interior</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cafeteria</td>
<td>$3,000,000</td>
<td>$8,000,000</td>
<td>$4,000,000</td>
<td>$8,000,000</td>
<td>$-^20</td>
</tr>
<tr>
<td>Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air-conditioning</td>
<td>$3,200,000</td>
<td>$5,000,000</td>
<td>$4,000,000</td>
<td>$1,500,000</td>
<td>$2,500,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$14,200,000</td>
<td>$38,000,000</td>
<td>$19,000,000</td>
<td>$16,000,000</td>
<td>$7,000,000</td>
</tr>
</tbody>
</table>

As the assets’ values in use are less than the assets’ carrying amounts, the impairment assessment is not completed here, but the fair values less costs to sell also need to be established.

---

27 Please note that for purposes of conducting an impairment assessment, repair costs do not need to be capitalized. The information is simply gathered as input to the calculation made. Information on when and how to capitalize repair costs can be found in Corporate Guidance paper # 10 Property, plant and equipment.

28 As implied above, the cafeteria cannot be repaired to pre-impairment levels, but needs to be replaced. The total costs that would be incurred to replace the cafeteria should be included. As per above, cost to replace cafeteria is $8,000,000.

29 As mentioned, the air-conditioning cannot be repaired to pre-impairment amounts. However, as the cost of a more functional unit has been included in the cost assessment, total costs incurred to repair the asset to that level should be included.

30 Please note that in case the repair costs exceed the depreciated replacement cost of an asset, the value in use is nil.
9.2.2.2 Calculate fair value less costs to sell

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

While IPSAS 21 does not provide detailed guidance on how to estimate or calculate the fair value less costs to sell, it instead provides a hierarchy of the preferred sources of the amount.

1) Price in a binding sale agreement;
2) Market price for an asset traded in an active market;
3) Amount obtainable from the disposal of the asset.

As the compound is a unique building and as the United Nations is not in a position to sell the property, 1) and 2) are not considered to be sensible options.

Therefore, the fair value less costs to sell will be established using option 3: amount obtainable from the disposal of the assets.

Based on recent transactions in Chile, management believes the following amounts are achievable, when selling the individual assets:

<table>
<thead>
<tr>
<th>Potential disposal value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exterior</td>
</tr>
<tr>
<td>Windows</td>
</tr>
<tr>
<td>Roofing</td>
</tr>
<tr>
<td>Roof</td>
</tr>
<tr>
<td>Interior</td>
</tr>
<tr>
<td>Cafeteria</td>
</tr>
<tr>
<td>Services</td>
</tr>
<tr>
<td>Air-conditioning</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Once the assets’ fair values less costs to sell and values in use have been established, the recoverable service amount can be calculated:

<table>
<thead>
<tr>
<th>Value in use</th>
<th>Fair value less costs to sell</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exterior</td>
<td></td>
</tr>
<tr>
<td>Windows</td>
<td>$2,500,000</td>
</tr>
<tr>
<td>Roofing</td>
<td></td>
</tr>
<tr>
<td>Roof</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>Interior</td>
<td></td>
</tr>
<tr>
<td>Cafeteria</td>
<td>$-</td>
</tr>
</tbody>
</table>
As the total value in use is higher than the total fair value less costs to sell, the values in use will be compared to the assets’ carrying amounts in order to measure the impairment amount.

### 9.2.3 Measure Impairment Loss

In order to calculate the impairment loss, one needs to compare the assets’ carrying amounts and their recoverable service amounts:

<table>
<thead>
<tr>
<th></th>
<th>Carrying amount pre impairment</th>
<th>Recoverable service amount (=value in use)</th>
<th>Impairment amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exterior</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Windows</td>
<td>$4,000,000</td>
<td>$2,500,000</td>
<td>$1,500,000</td>
</tr>
<tr>
<td>Roofing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roof</td>
<td>$4,000,000</td>
<td>$2,000,000</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>Interior</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cafeteria</td>
<td>$3,000,000</td>
<td>$-</td>
<td>$3,000,000</td>
</tr>
<tr>
<td>Services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air-conditioning</td>
<td>$3,200,000</td>
<td>$2,500,000</td>
<td>$700,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$14,200,000</strong></td>
<td><strong>$7,000,000</strong></td>
<td><strong>$7,200,000</strong></td>
</tr>
</tbody>
</table>

### 9.2.4 Reflection of Impairment Losses in Financial Records

Once any impairment has been calculated as per above, it needs to be reflected in the financial records of the United Nations.

The double-entry for all these impairments is as follows:

- **Dr** Impairment expense (Statement of financial performance) $7,200,000
- **Cr** PP&E accumulated impairment (Statement of financial position) $7,200,000

Following the impairment, the carrying value of each asset is as follows:

<table>
<thead>
<tr>
<th></th>
<th>Carrying amount pre impairment</th>
<th>Impairment amount</th>
<th>Carrying amount post impairment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exterior</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Windows</td>
<td>$4,000,000</td>
<td>$1,500,000</td>
<td>$2,500,000</td>
</tr>
<tr>
<td>Roofing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Initial Value</td>
<td>Current Value</td>
<td>Impairment</td>
</tr>
<tr>
<td>----------------</td>
<td>---------------</td>
<td>---------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Roof</td>
<td>$4,000,000</td>
<td>$2,000,000</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>Cafeteria</td>
<td>$3,000,000</td>
<td>$3,000,000</td>
<td>$-</td>
</tr>
<tr>
<td>Air-conditioning</td>
<td>$3,200,000</td>
<td>$700,000</td>
<td>$2,500,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$14,200,000</strong></td>
<td><strong>$7,200,000</strong></td>
<td><strong>$7,000,000</strong></td>
</tr>
</tbody>
</table>

### 9.2.5 Review of Useful Life

Following the impairment of the various assets as summarized above, an assessment should be made, whether any of the useful lives of the assets need to be amended.