

**United Nations**

**Corporate Guidance**

for

**International Public Sector Accounting  
Standards**

**Property, Plant and Equipment  
(excluding Infrastructure assets)**

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**Final Version**



# **Corporate Guidance to Support the Adoption of International Public Sector Accounting Standards (IPSAS) by the United Nations**

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**Corporate Guidance #10 – Property, plant and equipment excluding infrastructure assets**

This corporate guidance will cover the following topics with respect to property, plant and equipment:

- Guidelines on applying the valuation methodology to value real estate assets for opening balances: **see section 3;**
- Buildings and componentization of buildings: **see section 6.2.1.1;**
- Fair value of equipment for opening balances, including for assets where historical records have not been maintained – develop hierarchy to determine value of assets recorded in the asset register (market value, most recent purchase price, etc.). Guidance on depreciation and documentation that is needed to be retained for audit purposes: **see section 3.1.6;**
- Guidelines on costs to be capitalized, constructed, purchased, donated: **see section 6.1;**
- Guidelines on accounting for assets under construction; guidelines for construction in progress capture for IPSAS opening balances: **see section 3.1;**
- Guidelines for asset classification into IPSAS asset classes and sub-classes; Need to create a clear line of separation between what should be called "Infrastructure asset" as opposed to "Machinery and equipment" and "Buildings"; Need to determine the level of aggregation for FS (financial statement) reporting purposes and for purposes of creating a PP&E record of infrastructure asset at which level (aggregated or disaggregated) should accounting reflect this? And if at higher level of aggregation, how should this be agreed to how engineering staff think about these items (see table above)?; United Nations IPSAS team thinks that it should be a higher level of aggregation for FS reporting purposes (analogous to 10 building components that are used by Facilities / Engineering). It seems that 119 items just for infrastructure sub-asset classification might be a bit over board. Perhaps sub-classes of Infrastructure asset class could be developed, in order to simplify the approach: **see section 4;**
- Procedures for determination of assets in transit incorporating IPSAS control, depreciation and impairment: **see section 8.2;**
- Guidelines for treatment of heritage assets as part of statement of financial position assets: **see section 8.4;**
- Guidelines for determination and ongoing validations of standard cost model relating to associated costs (freight, installation, etc) to be added as a standard cost percentage: **see section 6.1.1;**
- Application of recognition threshold to equipment leases (**covered in Corporate Guidance #1 – Leasing**)
- Guidance/procedures on data capture of all relevant costs to ensure compliance with IPSAS for PP&E: **see section 6.1;**
- Guidance on how to value donated rooms: **see section 6.1.2;**
- Fair value measurement as it applies to public sector (which includes donated goods, rights to use premises, etc.): (**Right-to-use assets covered in Corporate Guidance #1 – Leasing; other information see section 6.1.2**);
- Guidance on collection of data and compilation of capital commitments – commitments for PP&E: **see section 9;**

- Guidance on how to capture the costs of self constructed assets: **see section 8.1;**
- Leasehold improvements valuation and costs to expense vs. capitalize: **see section 8.3.**
- Develop methodology - in accordance with the applicable Valuation Standards - to determine the remaining useful life of buildings at opening statement of financial position: **see section 3.1.2.**

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## 1 Introduction

IPSAS 17 *Property, Plant, and Equipment* provides the fundamental guidance surrounding the classification, recognition, measurement, and disclosure requirements of property, plant, and equipment. The following sections of this document, along with “in practice” examples, show how the Secretariat (United Nations) should apply the guidance.

The goal of this document is to present relevant property, plant, and equipment guidance in order for the United Nations to adopt and apply a comprehensive and consistent accounting treatment of property, plant, and equipment across its entities.

This corporate guidance is only applicable to PP&E owned by the United Nations. We refer to CG #1 *Leasing* regarding leasing or “right-to-use” arrangements.

## 2 Definitions

### General Terms

**Property, plant, and equipment (PP&E)** are tangible items that are:

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

Some assets are commonly described as **infrastructure assets**. There is no difference in the fundamental accounting for property, plant and equipment versus infrastructure assets, however the United Nations views infrastructure assets as a separate class of assets. These assets usually 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.

Some assets are described as **heritage assets** because of their cultural, environmental, or historical significance. Examples of heritage assets include historical buildings and monuments, archaeological sites, conservation areas and nature reserves, and works of art. Certain characteristics, including the following, are often displayed by heritage assets (although these characteristics are not exclusive to such assets):

- Their value in cultural, environmental, educational, and historical terms is unlikely to be fully reflected in a financial value based purely on a market price;
- Legal and/or statutory obligations may impose prohibitions or severe restrictions on disposal by sale;
- They are often irreplaceable and their value may increase over time, even if their physical condition deteriorates; and
- It may be difficult to estimate their useful lives, which in some cases could be several hundred years.

Public sector entities may have large holdings of heritage assets that have been acquired over many years and by various means, including purchase, donation, bequest, and sequestration. These assets are rarely held for their ability to generate cash inflows, and there may be legal or social obstacles to using them for such purposes.

A **leasehold improvement** is an alteration made to a leased premise in order to customize or upgrade it for the specific needs of the United Nations.

**Self-constructed assets** are assets that are constructed by the United Nations and contracted construction projects (i.e. built by third parties).

**Fair value** is the amount for which an asset could be exchanged between knowledgeable, willing parties in an arm's length transaction.

A **class** of property, plant and equipment means a grouping of assets of a similar nature or function in the United Nations operations that is shown as a single item for the purpose of disclosure in the financial statements.

**Carrying amount** is the amount at which an asset is recognized after deducting any accumulated depreciation and accumulated impairment losses.

**Accumulated impairment losses** are the cumulative amount of impairment losses of the property, plant, and equipment at a point in time.

### Depreciation

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

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

**Accumulated depreciation** is the cumulative depreciation of the property, plant, and equipment at a point in time.

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

The **useful life** of an item of PP&E is:

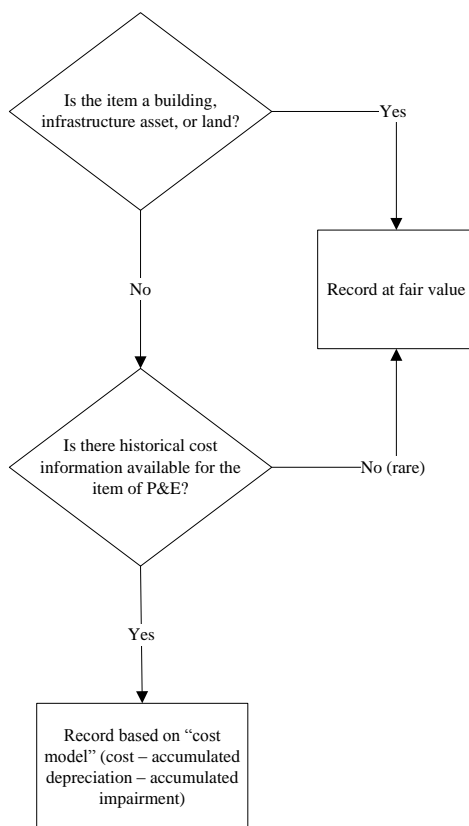
- The period over which an asset is expected to be available for use by the United Nations; or
- The number of production or similar units expected to be obtained from the asset by the United Nations.



### 3 PP&E in the opening statement of financial position

With the adoption of IPSAS the United Nations will now be required to recognize property, plant, and equipment in the financial statements. In the opening statement of financial position<sup>1</sup>, the United Nations will measure buildings, infrastructure assets, assets under construction, and any items of PP&E for which historical information is unavailable at fair value and the remaining items of property, plant, and equipment based on the “cost model” (cost minus accumulated depreciation minus accumulated impairment).

#### *Flowchart - PP&E at fair value or cost in the opening statement of financial position*

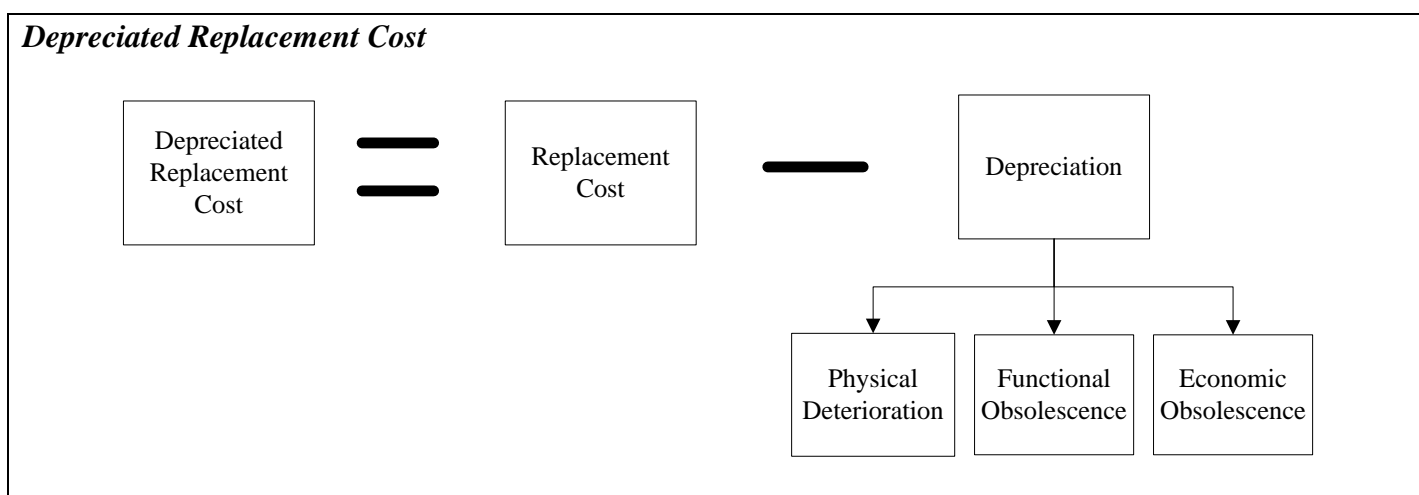


#### *3.1 PP&E measured at fair value in the opening statement of financial position*

At the date of the opening statement of financial position, the United Nations will value buildings, infrastructure assets, assets under construction, and any items of P&E for which historical cost information is unavailable at fair value. To determine the fair value, the United Nations has elected to use the **depreciated replacement cost (DRC)** methodology.

The DRC methodology determines value by subtracting depreciation from replacement cost:

<sup>1</sup> Except for cases where transitional provisions are applied.



**Replacement cost** is the cost to replace the asset with a **functionally 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.

Construction cost data can be obtained from a variety of sources such as historical data, standard published construction cost data, and independent cost estimates. Where the replacement asset is of a generic nature, it is normal and acceptable practice to use standard published construction cost data in lieu of historical data. However, due to the on-going programme of construction required by the scale of UN operations in-house, cost data exists. Replacement cost will be derived from United Nations' historical construction costs in conjunction with independent construction indices to modify for size, location, and price escalation as appropriate and with reference to standard construction cost data where necessary.

**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.

Physical deterioration **may be** applied on a straight line basis over the useful life of the asset. Functional and economic obsolescence represent additional reduction in value after physical depreciation is subtracted from replacement cost. Functional obsolescence may be subtracted from the physically depreciated replacement cost and expressed as a percentage discount from the physically depreciated value or as the capital

investment required to rectify the defect. Economic obsolescence is subtracted only after adjusting for both physical depreciation and functional obsolescence, if any, and is typically quantified as a diminution in value caused by factors that are external to the subject property and are not curable. Furthermore, economic obsolescence is often quantified by measuring the present value of the periodic loss in income or economic benefit received by the owner of the subject property caused by the occurrence of the external event. Note, generally the United Nations would not expect to have situations where economic obsolescence applies.

### 3.1.1 Buildings

Given that the majority of United Nations buildings<sup>2</sup> are located on land that is either not under United Nations ownership or has restrictions on sale or disposal and are specialized/unique in nature it is exceedingly difficult to value such assets using a traditional market approach (i.e. looking at buildings of comparable characteristics and nature). Thus, the **depreciated replacement cost** method is an appropriate methodology to value buildings in the opening statement of financial position.

The depreciated replacement cost will be applied to all buildings at the date of the opening statement of financial position, even if, for example, the building was built 40 years ago. In such an instance, the replacement cost would be the cost to replace the building in similar condition.

#### **Example – Depreciated replacement cost**

GSM: 10,000 YEAR BUILT: 1999 CURRENT AGE: 15										
ITEM DESCRIPTION	USD/SM	BUILDING REPLACEMENT COST	COMPONENT USEFUL LIFE YEARS	COMPONENT REMAINING USEFUL LIFE YEARS	PHYSICAL DEPRECIATION %	PHYSICAL DEPRECIATION VALUE	FUNCTIONAL OBSOLESCENCE %	FUNCTIONAL OBSOLESCENCE VALUE	BUILDING REPLACEMENT COST ADJUSTED FOR PHYSICAL DEPRECIATION & FUNCTIONAL OBSOLESCENCE	
1 FOUNDATIONS/BASEMENTS	\$224.85	\$ 2,248,500	50	35	30.00%	\$ 674,550	0.00%	\$ -	\$	1,573,950
2 SUPERSTRUCTURE	\$180.87	\$ 1,808,700	50	35	30.00%	\$ 542,610	0.00%	\$ -	\$	1,266,090
3 EXTERIOR CLOSURE	\$210.86	\$ 2,108,600	50	35	30.00%	\$ 632,580	0.00%	\$ -	\$	1,476,020
4 ROOFING	\$24.11	\$ 241,100	20	5	75.00%	\$ 180,825	0.00%	\$ -	\$	60,275
5 INTERIOR	\$366.46	\$ 3,664,600	25	10	60.00%	\$ 2,198,760	0.00%	\$ -	\$	1,465,840
6 CONVEYING SYSTEMS	\$23.88	\$ 238,800	25	10	60.00%	\$ -	100.00%	\$ 238,800	\$	-
7 PLUMBING	\$88.60	\$ 886,000	25	10	60.00%	\$ 531,600	0.00%	\$ -	\$	354,400
8 HVAC	\$25.80	\$ 258,000	25	10	60.00%	\$ -	100.00%	\$ 258,000	\$	-
9 FIRE PROTECTION	\$29.66	\$ 296,600	25	10	60.00%	\$ 177,960	0.00%	\$ -	\$	118,640
10 ELECTRIC	\$405.15	\$ 4,051,500	25	10	60.00%	\$ 2,430,900	0.00%	\$ -	\$	1,620,600
<b>TOTAL BUILDING COST</b>		<b>\$ 15,802,400</b>				<b>\$ 7,369,785</b>		<b>\$ 496,800</b>	<b>\$</b>	<b>7,935,815</b>

DRC Value to be used for opening balances

7,935,815

#### COLUMN HEADING

#### COMMENTS

USD/SM	FROM NOF BUILDING HISTORIC DATA
BUILDING REPLACEMENT COST	HISTORIC COMPONENT COST PER SM MULTIPLIED BY BUILDING GROSS AREA
COMPONENT USEFUL LIFE	BASED ON UN IPSAS POLICY FRAMEWORK
PHYSICAL DEPRECIATION	PERCENTAGE OF USEFUL REMAINING LIFE - BUILDING AGE DIVIDED BY USEFUL LIFE DURATION (STRAIGHT LINE BASIS)
ADJUSTED BY PHYSICAL DEPRECIATION	VALUE OF COMPONENT - COMPONENT REPLACEMENT COST MULTIPLIED BY PHYSICAL DEPRECIATION
DEPRECIATED REPLACEMENT COST (DRC)	COST TO REPLACE COMPONENTS - BUILDING REPLACEMENT COST LESS ADJUSTED BY PHYSICAL DEPRECIATION VALUE
FUNCTIONAL OBSOLESCENCE	TO BE DETERMINED BASED ON INFORMATION FROM OAH PERSONNEL

<sup>2</sup> Specific details of the DRC methodology to be applied in the UN context is provided in *Executive Summary – Real Estate Valuation Methodology for UN Secretariat*

### 3.1.2 Methodology to determine remaining useful life of buildings at opening statement of financial position

The process to determine the remaining useful life of an asset can be broken down into **three** steps.

**Step 1** - The normal useful life should first be identified based on the building class. The following normal useful lives have been identified for each building class<sup>3</sup>.

- Class A – 50 years
- Class B – 40 years
- Class C – 25 years

**Step 2** - Determine the chronological age of the building and calculate a preliminary estimate of remaining useful life by subtracting the chronological age of the building 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 from its normal useful life may not be the most appropriate indicator of a building's remaining useful life, particularly in instances where a building has received below average operating maintenance. In order for a building to continue to function over its expected normal useful life, it is anticipated that the building will receive normal levels of operating maintenance. When normal levels of operating maintenance are neglected, the effective age of the building may be greater than the chronological age. Also in instances when a building has received capital improvements such as a major renovation, the effective age of the building may be less than its chronological age. In estimating the effective age of a building 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. 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.
- Capital improvement (nature, timing, and cost associated with capital repairs) - capital expenditures are costs that are capitalized and depreciated. Such investments may extend the remaining useful life of a building by causing the analyst to conclude that the building 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 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 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.

As straight line depreciation is suggested for calculating depreciated replacement cost, which is the ratio of the effective age of the building divided by its normal useful life, it is also recommended that a limit be set

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<sup>3</sup> We refer to section 6.2.1.1 for a description of the different building classes.

on the maximum amount of depreciation as an asset that is in use should always have a positive carrying value. For example, assume a roof with 20 years normal useful life that is 20 years old. The chronological age is 20 years, therefore the remaining useful life is zero and the implied fair value using the depreciated replacement cost method is also zero. If the roof is still functional a zero fair value is not reasonable.

Using the factors described above the analysis observes that the condition of the roof is such that it needs some minor repair but with these repairs the life of the roof should be extended for another 5 years. Based on this assessment, the conclusion is that the effective age of the roof is 15 years and therefore it has a remaining useful life of 5 years, which implies depreciation of 75% (15 years / 20 years).

### *3.1.3 Donated land with “revert” stipulations*

The United Nations has legal title over land donated by donors but this title is often subject to the specific stipulation that if the United Nations decides to no longer use the land for its activities the legal ownership reverts to the donor.

Donated PP&E are measured at fair value at the acquisition date. The fair value of the land equals its nominal value in the case of “revert” stipulations. The nominal value equals one dollar in the case of a donation.

### *3.1.4 Infrastructure assets*

Please refer to CG# 6 *Infrastructure assets*.

### *3.1.5 Assets under construction*

**Assets under construction** are those assets that are not completed or available for use at the date of the opening statement of financial position. Assets under construction will be valued at fair value. Similar to buildings and infrastructure assets, the United Nations will determine fair value using **replacement cost**<sup>4</sup>.

### *3.1.6 Equipment*

Fair value can also be used in the opening statement of financial position and in subsequent reporting periods for items of plant and equipment (this section does not pertain to donated goods) where historical cost is not known (rare). The fair value of such equipment will be established using the fair value hierarchy discussed in section 6.1.2.

While details on the depreciated replacement cost approach are included in Corporate Guidance #3 *Impairment of non-cash-generating assets* and we therefore refer you to that paper, a brief overview is as follows:

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<sup>4</sup> Assets under construction are not yet subject to depreciation and thus should be measured at replacement cost, not depreciated replacement cost.

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<sup>5</sup> which are measured at fair value in the opening statement of financial position when historical cost is not known (rare). 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%.

### *3.2 PP&E measured at cost in the opening statement of financial position*

All other PP&E not booked at fair value, should be measured at cost in the opening statement of financial position. When determining the cost of an asset, **associated costs** such as freight, import duties, insurance and other should be included in the cost of the asset.

Peacekeeping operations will use 20% as an estimate of associated costs for the standard cost methodology. Non peacekeeping operations will use actual associated costs.

### *3.3 Componentization in the opening statement of financial position*

IPSAS requires that separate significant components of assets be recorded and depreciated separately, referred to as componentization. In the opening statement of financial position the United Nations will apply componentization to major owned buildings for non peacekeeping operations. Percentages for each component of a building will be applied to the entire asset value to determine the components' value for the opening statement of financial position. For example, the roof of a building is determined to account for 20% of the building. If a building's value is \$500,000 (replacement cost), then the roof would be determined to be \$100,000, and reduced for the sum of physical deterioration, functional obsolescence and economic obsolescence as of the opening statement of financial position.

## **4 Classification of PP&E**

A **class** of property, plant and equipment is a grouping of assets of a similar nature or function in the United Nations' operations that is shown as a single item for the purpose of disclosure in the financial statements. Each item within an asset **sub-class** is united by a single useful life or useful life range.

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<sup>5</sup> Including computer and IT equipment, vehicles, machinery and equipment and items of furniture and fittings.

PP&E shall be classified into classes and subclasses as detailed in the table below. The classifications and useful lives will be reviewed annually.

<b>Asset Classes</b>	<b>Asset sub class</b>
Communication and IT Equipment	IT Equipment Communications Equipment Audio Visual Equipment
Vehicles	Light Wheeled Vehicles Heavy Wheeled Vehicles and Engineering Support Vehicles Specialized Vehicles, Trailers and Attachments
Machinery and equipment	Light Engineering and Construction Equipment Heavy Engineering and Construction Equipment Printing and Publishing Equipment Water Treatment and Fuel Distribution Equipment Medical Equipment Transportation Equipment Security and Safety Equipment
Furniture and fixtures	Office Equipment Furniture Library Reference Material (incl. Books) Fixtures and Fittings
Leasehold improvements	Fixtures and Fittings (shorter of lease term /5 years) Minor Construction Works (shorter of lease term /5 years)
Infrastructure assets	Telecommunication Energy Protection Transport Waste management Water management Recreation Landscaping
Assets under construction	Buildings under construction Infrastructure assets under construction Other assets under construction
Buildings	Buildings - fixed Buildings - Temporary and Mobile
Buildings held under finance leases	Buildings - commercial finance lease Buildings - donated rights to use
Land	

With regard to guidance for distinguishing machinery and equipment and infrastructure assets from buildings, generally a building is defined as a permanent or temporary structure enclosed within exterior

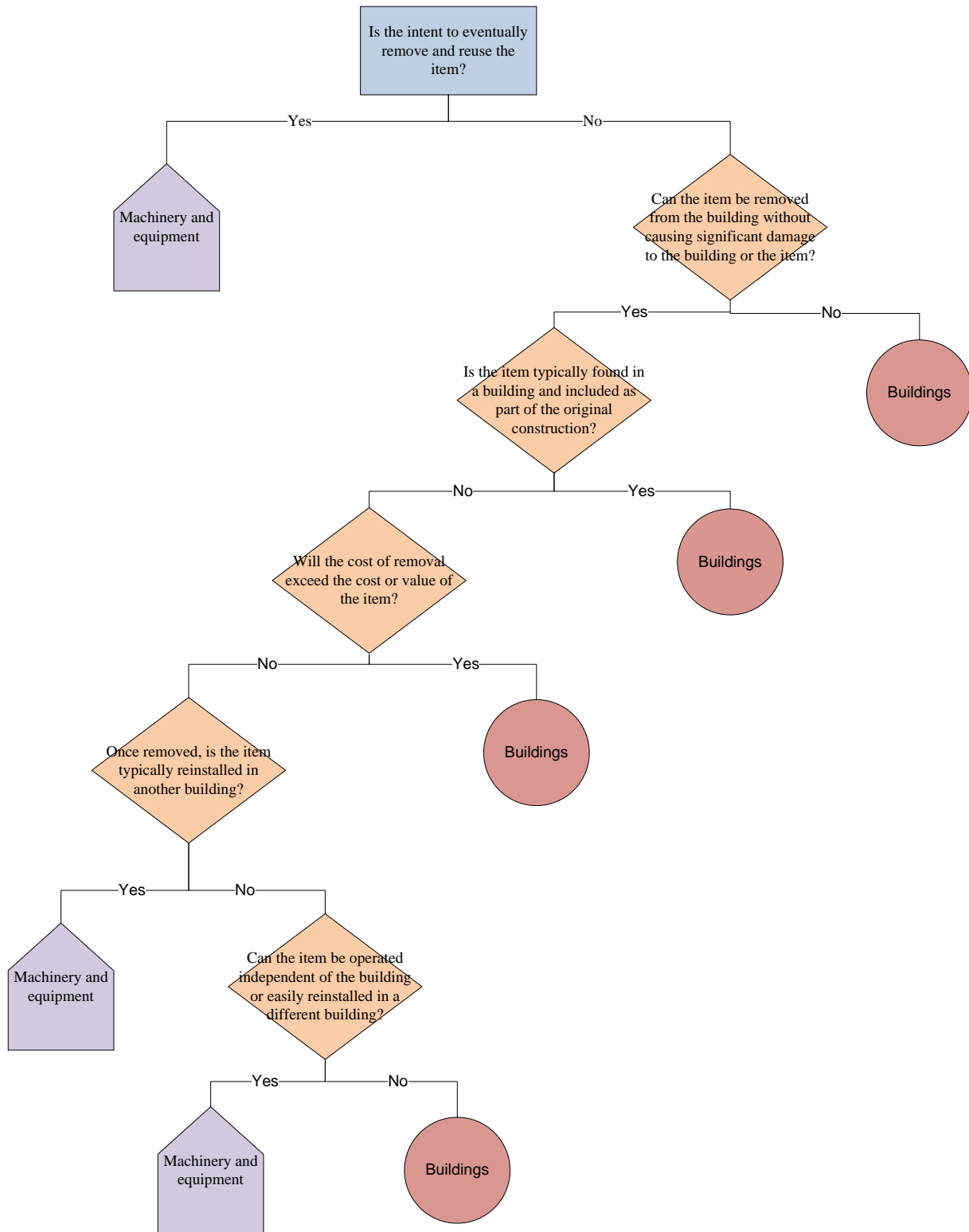
walls and a roof, and including all attached apparatus, equipment, and fixtures that cannot be removed without cutting into ceiling, floors, or walls. Additionally, the following criteria should be considered.

#### 4.1 Criteria to distinguish a building from machinery and equipment

- Upon installation of the item, is the intent to eventually remove and reuse the item? If yes, the item is machinery and equipment, if no;
- Can the item be removed from the building without causing significant damage to the building or the item? If the answer is no, the item is part of a component of the building. If yes;
- Is the item typically found in a building and typically included as part of the original construction (items such as heating and air-conditioning, plumbing fixtures, cabinetry, doors, and general purpose lighting)? If the answer is yes, the item is part of the building. If no;
- Will the cost of removal exceed the cost or value of the item? If the answer is yes, the item is part of the building. If no;
- Once removed, is the item typically reinstalled in another building? If the answer is yes, the item is machinery and equipment. If No;
- Can the item be operated independent of the building or easily reinstalled in a different building without incurring installation costs that are substantially greater than the original cost of installation. If the answer is no, the item is part of the building. If yes, the item is machinery and equipment.



**Flowchart – Building versus machinery & equipment**



***CCTV security network:***

Consideration must be given to the manner in which the item in question is typically acquired. As an example, a camera component of a CCTV security network has all of the attributes of machinery and equipment; however, if a CCTV security network is typically purchased as a complete system from a vendor who may also install the system in the building, the above questions should be considered in the context of the entire system, not an individual asset.

In the context of the CCTV security network being considered as an entire system, if the conclusion is made that the cost derived from the sum of the costs of all easily removable components, that would be identified as machinery and equipment based upon the above test, exceeds the cost of labor added to the costs related to items such as wiring that would be classified as buildings, then the CCTV security system is considered machinery and equipment.

***Datacenter:***

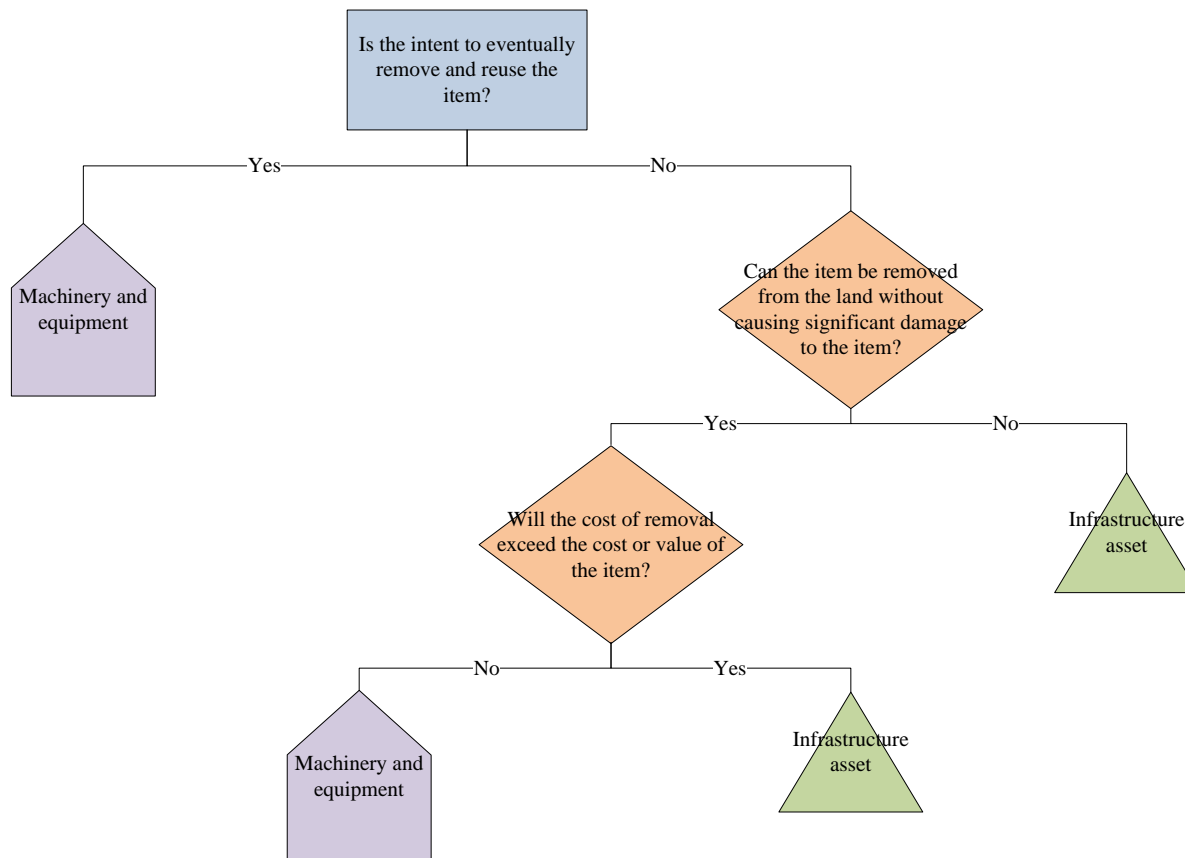
A datacenter is a building with specialized attributes that allow for the housing and operation of computer equipment. Items such as raised flooring, electrical back-up systems, specialized HVAC, and dry fire suppression systems are specifically installed to facilitate the safe and reliable operation of the computer equipment. These items are not typically found in a conventional building. Nevertheless, these items are generally not installed with the intention of removal and even if certain items can be removed with ease, they are not typically reinstalled in another building. Therefore, based on the above criteria, such items are likely to be considered part of buildings. The computer equipment (i.e. servers) and server racks, which can be easily removed, should be considered as machinery and equipment.

***4.2 Criteria to distinguish an infrastructure asset from machinery and equipment***

Parking lots, roadways, and air fields are generally considered long-lived improvements that are made to land. As none of these are installed with the intent of being removed and reinstalled elsewhere, nor are they able to be removed without significant damage to the item, based on the criteria described for a building, these items should be recognized as infrastructure assets. The following is a list of criteria that can be used in distinguishing infrastructure assets from machinery and equipment.

- Upon installation or development of the item, is the intent to eventually remove and reuse the item? If yes, the item is machinery and equipment, if no;
- Can the item be removed from the land without causing significant damage to the item? If the answer is no, the item is an infrastructure assets. If yes;
- Will the cost of removal exceed the cost or value of the item? If the answer is yes, the item is an infrastructure asset. If no, the item is machinery and equipment.

### Flowchart – Machinery & equipment versus infrastructure assets



### Example – Infrastructure assets

In each of the scenarios below, the waste water treatment system and fuel distribution system would be classified as infrastructure assets as the intent would be to not eventually remove the item. Even if in some circumstances the intent was to remove the item the cost of removal (i.e. the cost to dig out the system, clean it, transport it, and reinstall it into its new location) would exceed the cost of the item. It is important to note that the method by which the item is ordered is not relevant to how the item is classified.

#### Scenario 1 – Waste Water Treatment System

Case 1: Field Mission X is in the need of installing a Waste Water Treatment System for 200 persons; the Eng Section decides to order the system from the available System Contract (for example Euromec - PD-C0132-07); the WWTS modules (Module 1A-septic system stand-alone + Module2-lift station + Module3-containerized waste water treatment plant) arrive in the mission (PMS assigns a barcode to the system and

reports it under Galileo IMS) and the ENG staff install the WWTS as per provided installation manual including all the necessary piping lines.

Case 2: Field Mission Y is in the need of installing a Waste Water Treatment System for 800 persons; the Eng Section prepares the project requirements and sends them to Procurement to initiate the bidding exercise. The Project includes the design, provision, installation and testing of the complete system. Procurement awards the contract to Company Z. The proposed plant will have the following main modules: a gravity collection system that collects effluent from 3 sections through various lift stations and pumps it to the WWTS. The effluent is then transferred to a storage pond via a gravity line and irrigated. It is an activated sludge process consisting of the following items: aeration basin, final clarifier and chlorine contact chamber. The sludge is stabilized by aerobic digestion. The Company completes the installation and hands it over to Mission Y (No barcode and/or report done in Galileo).

#### Scenario 2 - Fuel Distribution System

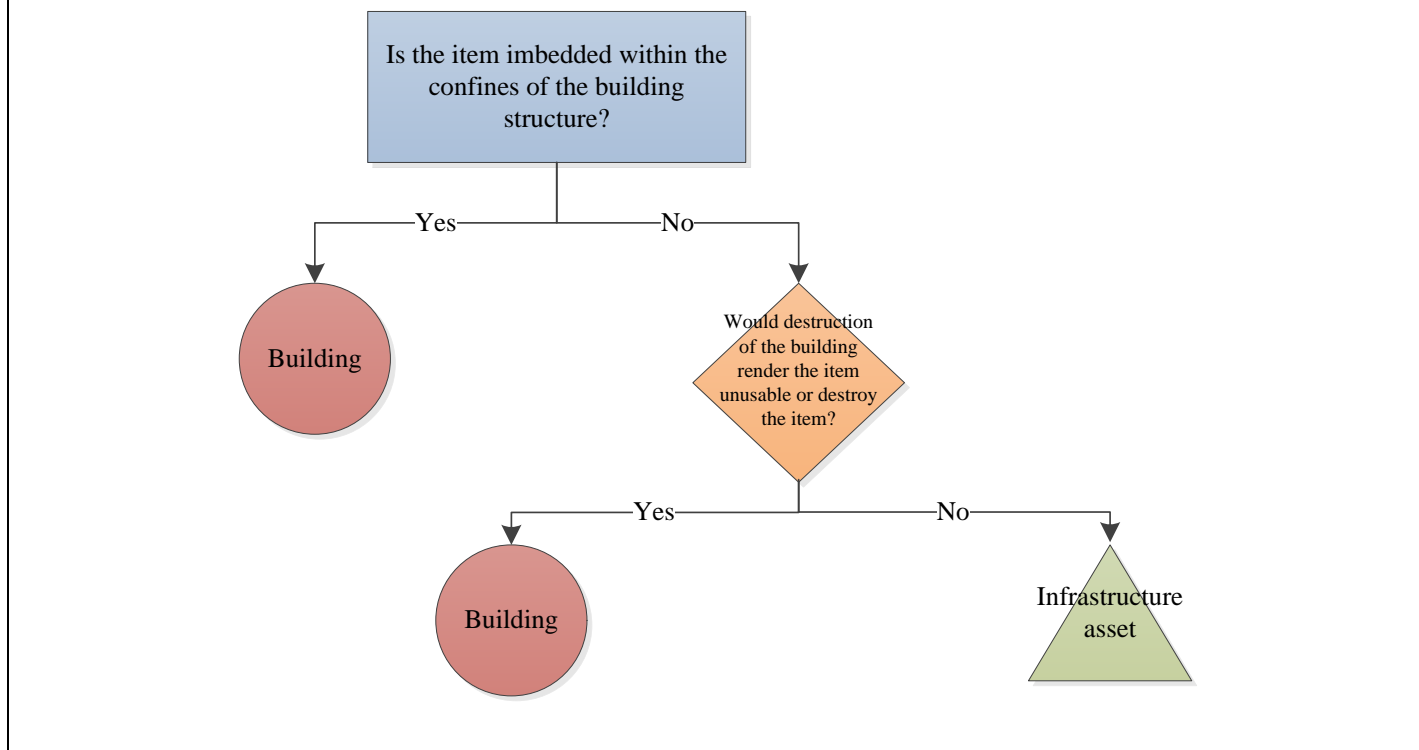
Case 1: Field Mission H is in need of installing a Fuel Distribution System; the Eng Section decides to order the system from the available System Contract (for example AMCA Hydraulic Fluid Power - PD-C0245-00); the Fuel Distribution System is composed of the following modules: fuel pumping assembly portable station (150 liters/min) and 2x1000 gallons fuel bladders. The system arrives to the mission (PMS assigns a barcode to the system and report it under Galileo IMS) and the ENG staff install it as per provided installation manual including all the necessary piping connections.

Case 2: Field Mission J is in need of installing a Fuel Distribution System; the Eng Section prepares the project requirements and sends them to Procurement to initiate the bidding exercise. The Project includes the design, provision, installation and commissioning of the complete system. Procurement awards the contract to Company W. The project requirements include the following: 2 automatic fuel distribution pumps, underground fuel tanks, oil separator system, concrete retainer basin for fuel storage and roof shed. The Company completes the installation and hands it over to Mission J (No barcode and/or report done in Galileo).

#### 4.3 Criteria to distinguish building from infrastructure assets

- Upon installation of the item, is the majority of the item imbedded within the confines of the building structure? If yes, the item is part of the building, if no
- Would destruction or demolition of the building render the item unusable or destroy the item altogether? If yes, the item is part of the building, if no, it is an infrastructure asset.

### Flowchart – Building versus infrastructure assets



By way of example, assume the item in question is communication cables that originate within the interior of a building and then run externally from one building and terminate on the interior of another. Regardless of whether the cables are either buried in the ground or strung from poles, it is assumed that it has already been determined that the cables are not machinery and equipment. If the majority of the communication cables are located outside of the buildings, the communication cables should be considered an infrastructure asset, unless it is determined that the removal or destruction of one or more of the interconnecting buildings would render the communication cables permanently unusable or would destroy them all together. Also note that if the identical communication cables are located throughout the interior of the building, the communication cables would be classified as building.

## 5 Recognition of PP&E

### 5.1 Initial recognition

**Assets** are resources:

- Controlled by the United Nations as a result of past events; and
- From which future economic benefits or service potential are expected to flow to the United Nations.

An asset shall be **recognized** as an item of PP&E under IPSAS if, and only if **all** of the following conditions are met:

- It is probable that future economic benefits or service potential associated with the item will flow to the United Nations;
- The cost or fair value of the item can be measured reliably;
- The asset has a useful life of more than one year;
- The asset meets the minimum established cost threshold of USD 5,000 or more per unit for all reporting entities other than Volume I & II; and
- For Volumes I & II, the threshold is set at USD 20,000 per unit except for the following commodity groups for which the lower threshold of USD 5,000 per unit is applicable:
  - Vehicles;
  - Prefabricated buildings;
  - Satellite communication systems;
  - Generators; and
  - Network equipment.
- For self-constructed assets, the threshold is set at USD 100,000;
- For buildings, leasehold improvements and major upgrades to land and buildings, the threshold is set at USD 100,000. Leasehold improvements are subject to transitional provisions and will not be recognized for opening balances purposes.
- No threshold should be applied to land.
- Leasehold improvements should be viewed from a project perspective. If the improvement relates to one project to be completed in stages, the threshold should be evaluated based on the aggregate value of the stages. If the leasehold improvements relate to projects that are planned for and budgeted independent of each other, then the threshold should be evaluated based on the individual amounts.

If items of property, plant, and equipment do not meet the threshold levels, they will be **expensed**.

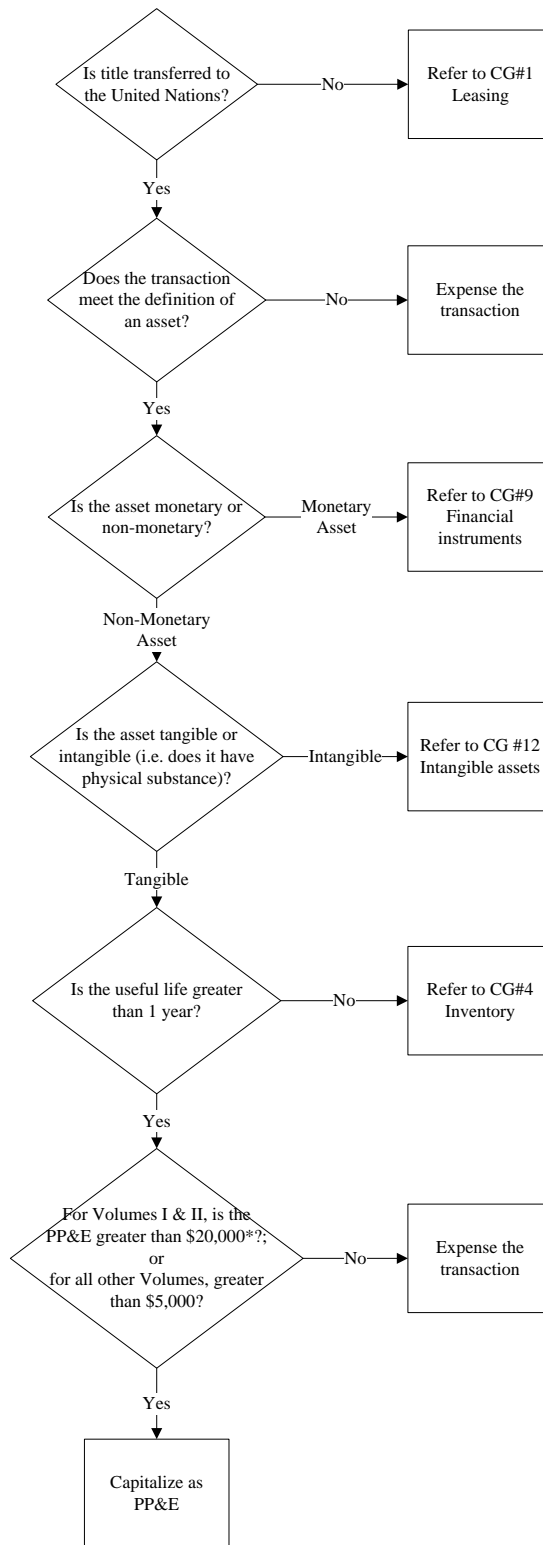
**Control** over assets arises when the United Nations can:

- Use or otherwise benefit from the asset in pursuit of its objectives; and
- Exclude or otherwise regulate the access of others to that benefit.

A significant factor when deciding whether project assets will be capitalized as PP&E in the books of the United Nations, is based on the determination of who controls these assets. Project assets are subject to transitional provisions and will not be recognized for opening balances purposes. Subsequent to transitional provisions invoked by the UN, project assets controlled by the UN and meeting capitalization threshold will be subject to capitalization. We refer to CG #5 *Funding Agreements* for further discussion regarding project assets.

The date of recognition of PP&E is determined by the applicable Incoterms for acquired PP&E if the shipment is not subject to installation by the vendor. We refer to CG #2 *The delivery principle*. When goods are shipped subject to installation by the vendor the assets are only recognized upon completion of installation. Donated assets are recognized on the acquisition date. For assets under construction, the stage of completion of the construction works should be reflected in the statement of financial position. If the asset under construction is available for use, then it should be re-classified to the correct asset class.

**Recognition of PP&E**



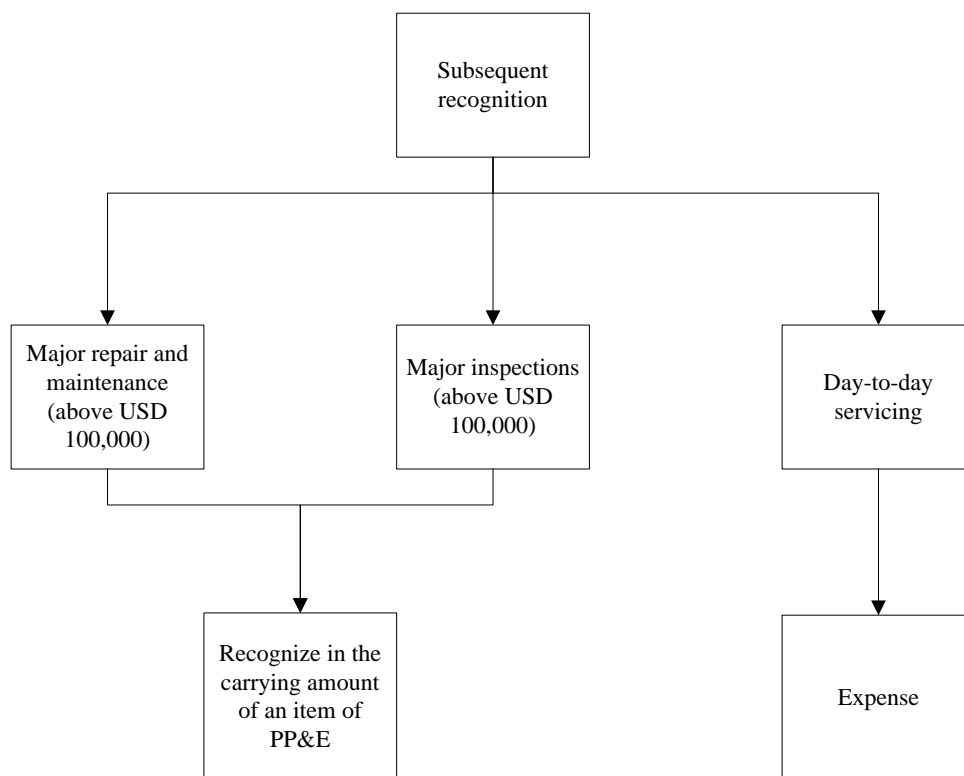
\* Includes the following commodity groups for which the lower threshold of USD 5,000 is applicable: vehicles, prefabricated buildings, satellite communication systems, generators and network equipment.



## 5.2 Subsequent recognition

The **recognition criteria** used in the subsequent recognition of property, plant, and equipment are identical to that used in initial recognition.

### *Flowchart - Subsequent recognition*



### 5.2.1 Major repair and maintenance

If the United Nations recognizes in the carrying amount of an item of property, plant, and equipment (e.g., a building) the cost of a replacement for part of the item (e.g. a repair and maintenance above USD 100,000), then it derecognizes the carrying amount of the replaced part regardless of whether the replaced part had been depreciated separately. For example, the replaced part may have been the roof which was being depreciated over 20 years, since it is a significant component of the building (see section 6.2.1.1). If it is not practicable for the United Nations to determine the carrying amount of the replaced part, it may use the cost of the replacement as an indication of what the cost of the replaced part was at the time it was acquired or constructed.

The United Nations does not recognize in the carrying amount of an item of PP&E the costs of the day-to-day servicing of the item. Day-to-day servicing generally includes repair and maintenance costs, such as the

cost of labor and consumables, and may include the cost of small parts. These costs are recognized in the statement of financial performance as incurred.

### 5.2.2 *Major inspections*

A condition of continuing to operate an item of property, plant, and equipment (for example, an aircraft) may be performing regular **major inspections** for faults regardless of whether parts of the item are replaced. When each major inspection is performed, its cost is recognized in the carrying amount of the item of property, plant, and equipment as a replacement if the recognition criteria are satisfied. Any remaining carrying amount of the cost of a previous inspection (as distinct from physical parts) is derecognized. If necessary, the estimated cost of a future similar inspection may be used as an indication of what the cost of the existing inspection component was.

#### ***Example 1 – Major inspections***

This is the first year that a UN office building requires major inspections. The inspection is done in compliance with building, plumbing, electrical, mechanical, and other specialty codes. Additionally, consulting engineers are hired to inspect and appropriately assess the structure of the building.

The inspection costs amount to \$101,000 and will be recognized in the carrying amount of the building because it meets the recognition criteria outlined in section 5.1 and is above the \$100,000 threshold. Additionally, because this is the first year that a major inspection occurred, there are no costs of previous inspections to be derecognized. The \$101,000 of inspection costs will be depreciated over the shorter of the period until the next inspection (expected to be 10 years) or the remaining life of the building.

Dr PP&E (statement of financial position)	\$101,000
Cr Payables (statement of financial position)	\$101,000

#### ***Example 2 – Major inspections***

8 years have passed and the building per example 1 above, is due for another major inspection. At this time, the inspection will cost \$110,000. The inspection cost will be recognized in the carrying amount of the building because it meets the recognition criteria outlined in section 5.1 and is above the \$100,000 threshold. The carrying amount of the previous inspection is \$20,200 and will need to be derecognized.

As a result the United Nations will derecognize \$101,000, resulting in a loss, in the statement of financial performance as an item of expense of \$20,200. The \$110,000 related to the most recent inspection will be depreciated over the shorter of the period until the next inspection or the remaining life of building.

Dr Accumulated depreciation (statement of financial position)	\$80,800	
Dr Expense (statement of financial performance)	\$20,200	
Cr PP&E (statement of financial position)		\$101,000
Dr PP&E (statement of financial position)	\$110,000	
Cr Payables (statement of financial position)		\$110,000

## 6 Measurement of PP&E

Initial measurement - Generally, after the opening statement of financial position has been determined (Day 2 accounting), all assets recognized in the financial statements of the United Nations should be measured at cost when they are first recognized, except for items donated to the United Nations (such goods should be measured at fair value) and self constructed assets (please refer to section 8.1). For details on measurement of infrastructure assets see CG# 6 *Infrastructure Assets*.

Subsequent measurement - PP&E is subsequently depreciated and could be subject to impairment.

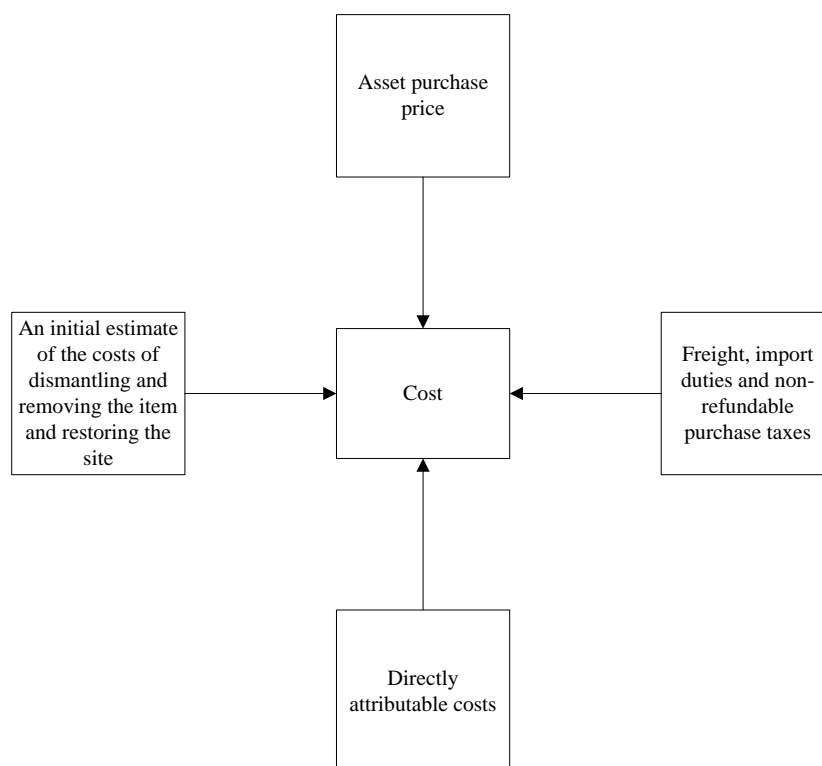
### 6.1 Initial measurement

As mentioned above, all assets are recorded at cost, when first recognized in the financial statements with the exception of donated items (which are valued at fair value) and self constructed assets (section 8.1).

#### 6.1.1 Cost measurement

When referring to the “cost” of an asset, the following items are included:

- Its **purchase price**, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates;
- **Any directly attributable costs** to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management;
- **The initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located.**

**Flowchart – Cost measurement**

When determining the cost of an asset, **associated costs** such as freight, import duties, insurance and other are determined as follows:

- Standard cost will be applicable to peacekeeping operations.
- Non-peacekeeping operations will use actual costs to account for associated costs.

For peacekeeping operations, the United Nations will use 20% for the standard cost methodology. This percentage will be updated going forward. However, actual associated costs need to be captured in order to support the applied standard cost percentage which is reviewed on a yearly basis.

**Example – Associated costs**

The United Nations recently purchased a machine at a cost of \$120,000. However, due to a delay of documents, the initial delivery and handling costs have not been billed to the United Nations. Despite the lack of complete billing, the machine is made available for use due to the urgent nature of the request.

The **total cost** of the machine consists of the following:

- (1) Asset purchase price = \$120,000;
- (2) Import duties and non-refundable purchase taxes; and

(3) Initial estimate of the costs of dismantling and removing the item.

Since this is a non-peacekeeping acquisition, the **associated costs**, which are the costs outside of the asset purchase price, should be captured once the delayed billing documents are received, although the asset will be placed in service before then.

#### 6.1.1.1 *Purchase price*

**Purchase price** is the price paid, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates.

#### 6.1.1.2 *Directly attributable costs*

Examples of **directly attributable costs** are:

- Costs of employee benefits (as defined in IPSAS 25, *Employee Benefits*) arising directly from the construction or acquisition of the item of property, plant, and equipment;
- Costs of site preparation;
- Initial delivery and handling costs;
- Installation and assembly costs;
- Costs of testing whether the asset is functioning properly; and
- Professional fees.

#### 6.1.1.3 *Dismantling and removal costs*

**Dismantling and removal costs** include the initial costs of dismantling and removing the item and restoring the site on which it is located, the obligation for which the United Nations may incur when the item is acquired. The dismantling or removal costs may be estimated by taking the estimated future cost of restoring the site to its previous condition or based on the UN's historical experience restoring similar items. We refer to CG# 7 Provisions for the recognition criteria of provisions.

#### 6.1.1.4 *Costs not capitalized as part of an asset*

Examples of costs that are not included in the measurement of an item of property, plant, and equipment are:

- Costs of conducting business in a new location (including costs of staff training);

IPSAS 17 does not permit capitalization of training costs as they are operating costs rather than directly attributable to an item of PP&E. This is because as operatives may leave at a short notice, their training costs would not meet the definition of an asset and, therefore, may not be capitalized, since the future economic benefits/service potential is not controlled by the United Nations.

- Administration and other general overhead costs;

Only the costs that are directly attributable to the item of PP&E, and not the general operating costs may be capitalized. This is different from IPSAS 12 which specifies that the cost of inventories include costs of conversion. Costs of conversion include a systematic allocation of fixed and variable production overheads. Fixed production overheads are indirect costs of production and include depreciation and maintenance of factory buildings and equipment and the cost of factor (but not office) management and administration.

It is not permitted to capitalize in PP&E the general overheads where such costs would have been incurred whether the asset was constructed or not. As a general rule in such situations only incremental costs that would have been avoided had the asset not been constructed can really be directly and conclusively attributed to bringing the asset to its working condition. For example, the cost of a temporary office on the site of development, that would have been incurred but for the project, should be capitalized because it is both an incremental and a direct cost that is attributable to bringing the asset to the condition necessary for it to operate in the manner intended by management.

- Day-to-day servicing of the item of property, plant, and equipment;
- Costs of relocating or reorganizing part or all of the United Nation's operations;
- Internal mark-ups (i.e. margin increases within the same reporting entity if this applies); and
- Cost of abnormal amounts of wasted material, labor, or other resources.

#### 6.1.2 Donated goods – Fair value measurement

With regard to measuring the fair value of donated machinery and equipment, the following procedures are recommended in **descending** order of best practice:

- The analyst should attempt to obtain a market price for similar asset;
- If market prices are not practically available, the analyst should reference recent acquisition costs for recent similar item;
- If prices cannot be obtained from the market or internal purchasing data, the analyst should solicit an indication of value or cost from donor. In this instance, the analyst needs to assess the reasonableness of the data provided and if deemed reasonable, use the provided value or cost as a representation of fair value;
- If none of the above methods can be relied upon, an alternative procedure to determine the best value to assign to machinery and equipment needs to be identified. For example, inquire from other agencies with similar experience in valuing such in kind items donated to them and retain such inquiries as alternative proof of documentation for audit; and
- Lastly, if the machinery and equipment in question is thought to have significant values, solicit the services of a third party - a valuation expert.

***Example – Donated room***

In instances where a room is donated to the United Nations, the United Nations shall value the room at fair value. However, items should be fair valued using the value of an item the United Nations would replace the donated goods by (e.g. a table designed with unique artwork from the donating country) would be replaced by a “normal” office table). Artwork or other cultural items in the room should be classified as heritage assets and, therefore, should not be recognized.

***6.2 Subsequent measurement***

PP&E is subsequently depreciated and could be subject to impairment.

***6.2.1 Depreciation***

The depreciable amount of an asset is allocated on a straight line basis over its useful life (see section 6.2.1.2).

In accordance with IPSAS Policy Framework and as agreed with the BoA, that depreciation of an asset **begins** when the UN has obtained control over the asset in accordance with Incoterms. The UN will depreciate the asset as of the 1<sup>st</sup> day of the month the control over the asset is obtained by the UN.

Depreciation of an asset **ceases** when the asset is fully depreciated or derecognized as stipulated in the Standard.

**Example 1– Depreciation Applied on straight line basis**

A vehicle is purchased for \$124,000. The vehicle is available for service at the beginning of 2010. Its useful life is estimated to be 6 years. Its residual value is estimated to be \$0. The depreciation method to be used is straight-line. At the end of its useful life, it is donated to a local non-governmental organization (NGO).

Asset Record: PP&E - Vehicles			
<b>Acquisition Date</b>		2 January, 2010	
<b>Acquisition Cost</b>		124,000	
<b>Useful Life (years)</b>		6	
<b>Residual Value</b>		0	
<b>Depreciation Method</b>		SL	
<b>Annual Depreciation</b>		20,667	
<b>Depreciation Charged</b>	2010	20,667	<b>End of Year Carrying Amount:</b> 103,333
	2011	20,667	82,667
	2012	20,667	62,000
	2013	20,667	41,333
	2014	20,667	20,667
	2015	20,667	-
<b>Impairments:</b>			
<b>Disposal:</b>	2016	0	<b>Given to Agency XYZ</b>



**Example 2– Depreciation - Applied on straight line basis (middle of the year)**

Equipment is purchased for \$110,000. The control of the asset is obtained by the UN in accordance with Incoterms on July 20, 2010. Its useful life is estimated to be 10 years and its residual value to be \$0. The depreciation method to be used is straight-line. At the end of its useful life, it is donated to a local non-governmental organization (NGO).

Depreciation of the equipment begins when UN gains control over it (i.e. July 20, 2010). As illustrated below, depreciation is charged on an annual basis and commences in the **month** of the transfer of control to the UN.

Asset Record: Infrastructure assets			
<b>Acquisition Date</b>	20 July, 2010		
<b>Acquisition Cost (USD)</b>	110,000		
<b>Useful Life (years)</b>	10		
<b>Residual Value (USD)</b>	0		
<b>Depreciation Method</b>	SL		
<b>Annual Depreciation (USD)</b>	11,000		
<b>Depreciation Charged:</b>	2010	5,500	<b>End of Year Carrying Amount:</b> 104,500
	2011	11,000	93,500
	2012	11,000	82,500
	2013	11,000	71,500
	2014	11,000	60,500
	2015	11,000	49,500
	2016	11,000	38,500
	2017	11,000	27,500
	2018	11,000	16,500
	2019	11,000	5,500
	2020	5,500	-
<b>Impairments:</b>			
<b>Disposal:</b>	2020	0	<b>Given to Agency XYZ</b>

**Example 3– Depreciation- Charged when an asset is ready for use**

The United Nations constructs a machine for its own use. Construction is completed on 1 November 20X6 but the United Nations does not begin using the machine until 1 March 20X7.

The United Nations should begin charging depreciation from the date the machine is ready for use, that is 1 November 20X6. The fact that the machine was not used for a period after it was ready to be used is not relevant in considering when to begin charging depreciation.

### 6.2.1.1 Componentization of buildings

Each part of an item of PPE with a cost that is significant in relation to the total cost of the item is depreciated separately (except where one significant part has a useful life and a depreciation method that is the same as those of another part of that same item of PPE).

A PP&E item comprising of significant **components** with different useful lives will be depreciated separately. Componentization will apply to major owned buildings in which major systems such as the HVAC, elevators, and electrical systems have useful lives shorter than the building itself.

Componentization will not be applied in peacekeeping operations. The offices will assume the Class A, B, and C system (refer to below) to estimate the buildings' useful lives.

#### 6.2.1.1.1 Administrative buildings<sup>6</sup>

Component	Sub-component	Useful Life
Exterior	1. Foundations & Basements	50/40/25*
	2. Superstructure	50/40/25*
	3. Exterior Closure	50/40/25*
Roofing	4. Roofing	20
Interior	5. Interior construction, staircases & interior finishes	20
	Services	6. Conveying systems
7. Plumbing		25
8. HVAC		25
9. Fire protection		25
10. Electrical & low-voltage systems		25

\* Please refer to building classes below for a detailed description of class A (50 years), class B (40 years), and class C (25 years) buildings

<sup>6</sup> Specific useful lives will be applied for administrative buildings when application of the standard useful lives would result in non-compliance with IPSAS.

Component	Sub-component	Explanation
Exterior	1. Foundations & Basements	Foundation; slab to grade; basement excavation; basement walls
	2. Superstructure	Floor construction; roof construction
	3. Exterior Closure	Exterior walls; exterior windows & doors
Roofing	4. Roofing	Roof coverings; roof openings
Interior	5. Interior construction, staircases & interior finishes	Partitions; interior doors; stair construction; stair finishes; wall finishes; floor finishes; ceiling finishes
Services	6. Conveying systems	Elevators; escalators
	7. Plumbing	Plumbing fixtures; water distribution; sanitary waste; drainage
	8. HVAC	Heat generating systems; cooling generating systems; distribution systems; control and instrumentation
	9. Fire protection	Sprinkler systems; stand-pipe & hose systems; fire protection systems
	10. Electrical & low-voltage systems	Service & distribution; lighting & branch wiring; special electric systems; fire protection electric systems; audio-visual systems; security systems; communications & IT systems

Building classes are defined as follows:

Class	Frame	Floor	Roof	Walls
A	Structural steel columns and beams, fireproofed with masonry, concrete, plaster, or other incombustible material	Concrete or concrete on steel deck, fireproofed	Formed concrete, precast slabs, concrete or gypsum on steel deck, fireproofed	Load-bearing masonry or stone, non-bearing curtain walls, masonry, concrete, metal and glass panels, stone
B	Reinforced concrete columns and beams <or> Masonry or concrete load-bearing walls with or without pilasters; masonry or concrete walls with steel, wood or concrete frame; fire-resistant construction	Concrete or concrete on steel deck, fireproofed	Formed concrete, precast slabs, concrete or gypsum on steel deck, fireproofed <or> Wood or steel joists with wood or steel deck; concrete plank	Nonbearing curtain walls, masonry, concrete, metal and glass panels, stone
C	Wood or steel studs in bearing wall, wood frame, primarily combustible construction	Wood or steel floor joists or concrete slab on grade	Wood or steel joists with wood or steel deck	Almost any material except masonry or concrete; generally combustible construction

6.2.1.1.2 Warehouses<sup>7</sup>

Component	Sub-component	Useful Life
Exterior	1. Foundations & Basements	50/40/25*
	2. Superstructure	50/40/25*
	3. Exterior Closure	50/40/25*
Roofing	4. Roofing	20
Services	5. Conveying systems	25
	6. Plumbing	25
	7. HVAC	25
	8. Fire protection	25
	9. Electrical & low-voltage systems	25

\* Please refer to building classes above for a detailed description of class A (50 years), class B (40 years), and class C (25 years) buildings

Component	Sub-component	Useful Life
Exterior	1. Foundations & Basements	Foundation; slab to grade; basement excavation; basement walls
	2. Superstructure	Floor construction; roof construction
	3. Exterior Closure	Exterior walls; exterior windows & doors
Roofing	4. Roofing	Roof coverings; roof openings
Services	5. Conveying systems	Elevators; escalators
	6. Plumbing	Plumbing fixtures; water distribution; sanitary waste; drainage
	7. HVAC	Heat generating systems; cooling generating systems; distribution systems; control and instrumentation
	8. Fire protection	Sprinkler systems; stand-pipe & hose systems; fire protection systems
	9. Electrical & low-voltage systems	Service & distribution; lighting & branch wiring; special electric systems; fire protection electric systems; audio-visual systems; security systems; communications & IT systems

6.2.1.2 Useful life overview

Depreciation should be taken on a straight line basis over the useful life of the asset. Please find below an overview of applicable useful lives:

<sup>7</sup> Specific useful lives will be applied for warehouses when application of the standard useful lives would result in non-compliance with IPSAS.

Asset Classes	Asset sub class	Estimated Useful Life (In Years)
Communication and IT Equipment	IT Equipment	4
	Communications Equipment	7
	Audio Visual Equipment	7
Vehicles	Light Wheeled Vehicles	6
	Heavy Wheeled Vehicles and Engineering Support Vehicles	12
	Specialized Vehicles, Trailers and Attachments	Set*(6-12 year range)
Machinery and equipment	Light Engineering and Construction Equipment	5
	Heavy Engineering and Construction Equipment	12
	Printing and Publishing Equipment	20
	Water Treatment and Fuel Distribution Equipment	7
	Medical Equipment	5
	Transportation Equipment	7
	Security and Safety Equipment	5
Furniture and fixtures	Office Equipment	4
	Furniture	10
	Library Reference Material (incl. Books)	3
	Fixtures and Fittings	7
Leasehold improvements	Fixtures and Fittings (shorter of lease term/5 years)	5
	Minor Construction Works (shorter of lease term/5 years)	5
Infrastructure assets	Telecommunication	Set * (up to 50 years)
	Energy	
	Protection	
	Transport	
	Waste management	
	Water management	
	Recreation	
	Landscaping	
Assets under construction	Buildings under construction	No depreciation
	Infrastructure assets under construction	
	Other assets under construction	
Buildings	Buildings - Fixed	See section 6.2.1.1
	Buildings - Temporary and Mobile	7
Buildings held under finance leases	Buildings - commercial finance lease	Lower of term of arrangement or useful life of buildings
	Buildings - donated rights to use	
Land		No depreciation

Set\* – Specific useful lives and residual values will be applied for high cost and/or specialized items of PP&E when application of the standard useful life for the class would result in non-compliance with IPSAS.

The residual value is deemed to be zero unless at the end of the asset's useful life the residual value is likely to be significant.

The useful life of an asset should be reviewed at least at each annual reporting date and modified if deemed necessary.

***Example – Change in estimate of useful life***

The United Nations purchased an asset on 1 January 20X0 for \$100,000 and the asset had a useful life of 10 years and a residual value of zero. The United Nations has charged depreciation using the straight-line method of \$10,000 per year. On 1 January 20X4, when the asset's net book value is \$60,000, the United Nations reviews the estimated useful life and decides that the asset will probably be useful for a further 4 years and, therefore, the useful life is revised to 8 years. The Organization should amend the annual depreciation to charge the undepreciated cost (namely, \$60,000) over the revised remaining useful life of four years. Consequently, it should charge depreciation for the next 4 years at \$15,000 per year.

**6.2.2 Impairment**

**Impairment** of an asset occurs when the recoverable amount of that asset is no longer representative of the carrying value in the financial statements. Specifically, when the recoverable amount of the asset is less than the carrying value, the United Nations should record an impairment loss. Refer to Corporate Guidance Paper #3 – Impairment for thorough guidance on this issue.

**7 Derecognition**

Property, plant, and equipment should be derecognized from the statement of financial position upon disposal of the asset. Upon disposal a gain or loss, representing the difference between the carrying amount of an asset and the proceeds from disposal of an asset, if any, should be recognized in the statement of financial performance as an item of revenue or expense.

There are various ways an asset may be disposed of. It may be due to the sale, transfer, or donation of the asset.

***Example – Disposal***

A machine was purchased for \$118,000. The machine was available for service at the beginning of 2010. Its useful life was estimated to be 10 years. Its residual value is estimated to be \$0. The depreciation method to be used is straight-line. At the end of its useful life, it is disposed of. There will be no gain or loss on disposal because the machine has been fully depreciated over its useful life. Below is the accounting treatment upon de-recognition.

Dr Accumulated depreciation (statement of financial position)	\$118,000
Cr Machine (statement of financial position)	\$118,000

## 8 Specific topics

### 8.1 Initial measurement of self-constructed assets

The United Nations may construct some of their assets (e.g. buildings), either by use of their own resources, by contracting out the project or through a combination of these or similar approaches (referred to as self constructed asset). The cost of a **self-constructed asset** is determined using the same principles as for an acquired asset.

After the opening statement of financial position, all assets, subsequently recognized in the statement of financial position, should be measured at cost. However, due to system limitations with regards to capturing all self-constructed asset costs, the United Nations has determined it appropriate to apply two approaches to valuing self-constructed assets in the years following the opening statement of financial position. These two approaches will be in effect until the United Nations has fully transitioned onto Umoja. Until then, peacekeeping will use the replacement cost methodology to measure self-constructed assets and non-peacekeeping will measure self-constructed assets using the cost methodology.

#### 8.1.1 Replacement Costs

Replacement cost can be calculated by collecting construction cost data, utilizing in-house cost data (if it exists), or using external cost estimators.

Replacement cost data has been derived for the opening statement of financial position, though replacement cost was adjusted downward to reflect the effects of depreciation on the asset. In a pre-Umoja environment the United Nations will use replacement cost data compiled for purposes of the opening statement of financial position, modified for factors, such as inflation, size, location, etc... to determine replacement cost for a particular self-constructed asset. Alternatively, if there is no similar self-constructed asset in the opening statement of financial position or it is determined replacement cost should be reassessed the United Nations will calculate replacement cost for a particular self-constructed asset.

#### 8.1.2 Cost

The cost of a self-constructed asset comprises **any costs directly attributable** to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. IPSAS 17 allows capitalization of costs to take place only in respect of the period in which the activities necessary to bring the asset to location and condition necessary for it to be capable of operating in the manner intended by management are being undertaken. Thus capitalization should cease when substantially all of the activities necessary to get the asset “available for use” are complete, even if the asset has not yet been brought into use. “Available for use” means when the physical construction of the asset is complete even though routine administrative work might still continue.

Examples of directly attributable costs are:

- 1) Costs of employee benefits<sup>8</sup> arising directly from the construction of the item of property, plant, and equipment;

IPSAS 17 is clear that only those directly attributable labor costs (employee benefits) that relate to the time spent by employees on constructing the specific asset should be capitalized. If a site engineer spends thirty percent of his time on a particular development project, then only thirty percent of his employee cost should be capitalized as part of the PP&E's cost. An appropriate time sheet system is essential in capturing the necessary data.

Employee benefits are defined in IPSAS 25 as all forms of consideration given by the United Nations in exchange for service rendered by employees. The types of benefit include:

- Short-term employee benefits;
- Post-employment benefits;
- Other long term benefits;
- Termination benefits.

- 2) Direct material costs;
- 3) Costs of site preparation;
- 4) Initial delivery and handling costs;
- 5) Installation and assembly costs;
- 6) Costs of testing whether the asset is functioning properly; and
- 7) Professional fees.

Professional fees should only be capitalized as part of the cost of an asset when they relate directly to the construction of the asset. Therefore, costs of aborted plans should not be capitalized.

## 8.2 Assets in transit

**Assets in transit** are those assets that are controlled by the United Nations based on the applicable Incoterms but have not yet been delivered to their final destination in which they will be fully used for their intended purpose. Note that assets in transit will be subject to depreciation when UN gains control over them in accordance with IPSAS Policy Framework and in accordance with agreement reached with BoA.

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<sup>8</sup> We refer to CG #8 Employee benefits for a detailed discussion of employee benefits.



***Example – Assets in transit***

The United Nations purchases an asset. The asset is in the process of being transported to the United Nations. It was agreed upon previously by both parties to apply Incoterms, Ex Works (meaning that a seller has the goods ready for collection at his premises (works, factory, warehouse, plant) on the date agreed upon). In this case the buyer (UN) is fully responsible for all onward transportation and all costs arising after the seller makes the goods available to the United Nations.

Based on Incoterms, the United Nations controls the asset, but has not yet received the machine for its intended purpose. This machine qualifies as an **asset in transit**. The depreciation will commence in the month the control over the machine per Incoterms is obtained by the UN.

We refer to CG #2 *The delivery principle* for a detailed discussion of Incoterms.

Impairment of assets in transit occurs in accordance with Corporate Guidance #3 *Impairment*.

**8.3 Leasehold improvements**

**Leasehold improvements** are improvements made to a piece of land or building that is leased (i.e. not owned by the United Nations).

Leasehold improvements to land and buildings are valued at cost and recognized as assets based on the threshold of USD 100,000. They shall be pre-designated as capital improvement projects. Internal labor costs incurred during upgrades and improvements will be capitalized where significant and specific to the project and can be discerned as part of the particular asset.

Leasehold improvements must be depreciated over the remaining lease term or 5 years, whichever is shorter. The term of the lease includes any options, where there is a reasonable expectation at the commencement of the lease that the option will be exercised.

**8.4 Heritage assets**

Some assets are described as **heritage assets** because of their cultural, environmental, or historical significance. Examples of heritage assets include historical buildings and monuments, archaeological sites, conservation areas and nature reserves, and works of art. Certain characteristics, including the following, are often displayed by heritage assets (although these characteristics are not exclusive to such assets):

- Their value in cultural, environmental, educational, and historical terms is unlikely to be fully reflected in a financial value based purely on a market price;
- Legal and/or statutory obligations may impose prohibitions or severe restrictions on disposal by sale;

- They are often irreplaceable and their value may increase over time, even if their physical condition deteriorates; and
- It may be difficult to estimate their useful lives, which in some cases could be several hundred years.

The United Nations has decided to not account for its heritage assets, such assets are not recognized as part of PP&E. However, the United Nations has decided to include a high level description of significant heritage assets in the notes to the financial statements.

## 9 Disclosure requirements

IPSAS 17 *Property, Plant, and Equipment* requires several **disclosures** in the footnotes of the financial statements. These include:

- Indication of the method of measurement (e.g. historical cost) and the depreciation method used;
- Any contractual and capital commitments and restriction on titles. A number of United Nations-owned properties have servitudes, e.g. transferrable restrictions on use, that bar the construction of any buildings; such servitudes normally have no accounting impact under IPSAS but where significant will be disclosed in the notes to the IPSAS financial statements in the spirit of full disclosure;
- The nature and effect of a change in an accounting estimate and impairment calculations (if any);
- Heritage assets (see section 8.4 of this paper).

The financial statements shall disclose, for **each class** of property, plant, and equipment recognized in the financial statements:

- The measurement bases used for determining the gross carrying amount;
- The depreciation methods used;
- The useful lives used;
- The gross carrying amount and the accumulated depreciation (aggregated with accumulated impairment losses) at the beginning and end of the period; and
- A reconciliation of the carrying amount at the beginning and end of the period showing:
  - Additions;
  - Disposals;
  - Impairment losses recognized in the statement of financial performance in accordance with IPSAS 21;
  - Impairment losses reversed in the statement of financial performance in accordance with IPSAS 21;
  - Depreciation; and
  - Other changes.

**Example – Movement schedule**

	Communication and IT equipment	Vehicles	Machinery and equipment	Furniture and fixtures	Leashold improvements	Infrastructure assets	Assets under construction	Buildings	Buildings held under finance leases	Land	Total
<b>At 1 January 20X1</b>											
Cost or valuation											
Accumulated depreciation											
<b>Net book amount</b>											
<b>Year ended 31 December 20X1</b>											
Opening net book amount											
Additions											
Disposals											
Depreciation charge											
<b>Closing net book amount</b>											
<b>At 31 December 20X1</b>											
Cost or valuation											
Accumulated depreciation											
<b>Net book amount</b>											
<b>Year ended 31 December 20X2</b>											
Opening net book amount											
Additions											
Disposals											
Transfers											
Depreciation charge											
<b>Closing net book amount</b>											
<b>At 31 December 20X2</b>											
Cost or valuation											
Accumulated depreciation											
<b>Net book amount</b>											

The financial statements shall also disclose for **each class** of property, plant, and equipment recognized in the financial statements:

- The existence and amounts of restrictions on title, and property, plant, and equipment pledged as securities for liabilities;
- The amount of expenditures recognized in the carrying amount of an item of property, plant, and equipment in the course of its construction (i.e. construction costs);
- The amount of contractual commitments for the acquisition of property, plant, and equipment; and
- If it is not disclosed separately on the face of the statement of financial performance, the amount of compensation from third parties for items of property, plant, and equipment that were impaired, lost or given up that is included in statement of financial performance.

**Capital commitments** are future capital expenditures that the United Nations has committed to spend on long-term assets. In other words, the United Nations has launched a purchase order but transfer of ownership has not yet occurred. The United Nations should disclose capital commitments as required by IPSAS, for further details see paper #11, the materiality paper.

In order to collect and compile the necessary data to accurately disclose, the United Nations should look to the “unliquidated obligations” (UNSAS) regarding PP&E. The “unliquidated obligation” is recognized under UNSAS when a purchase order is launched.

The “unliquidated obligations” (purchase orders launched) that do not qualify for liability recognition under IPSAS (we refer to CG #2 *The delivery principle*) plus the amounts per contracts signed which have not yet been raised as unliquidated obligations (i.e. the amounts would be related to future year’s funding but have already been approved and signed in the contract with the vendor by the United Nations) should be disclosed as capital commitments under IPSAS. These are the amounts for PP&E that have not been delivered in accordance with Incoterms but already contractually represent the United Nations’ commitment to purchase.

## **10 Case Study 1**

The case study involves a hypothetical 10,000sm building at the United Nations Office at Nairobi (UNON), constructed on 1 January 1999, that is valued on **1 January 2014** (i.e. the building is 15 years old) at fair value by applying the depreciated replacement cost methodology.

The facilities managers have determined based on a physical assessment, the remaining useful lives of the components. Given the building is 15 years old, it has depreciated on a straight-line basis over those years, as no capital improvements have been made during this period.

A screenshot of the scenario is shown below:

GSM: 10,000  
 YEAR BUILT: 1999  
 CURRENT AGE: 15

ITEM DESCRIPTION	USD/SM	BUILDING REPLACEMENT COST	COMPONENT USEFUL LIFE YEARS	COMPONENT REMAINING USEFUL LIFE YEARS	PHYSICAL DEPRECIATION %	PHYSICAL DEPRECIATION VALUE	FUNCTIONAL OBSOLESCENCE %	FUNCTIONAL OBSOLESCENCE VALUE	BUILDING REPLACEMENT COST ADJUSTED FOR PHYSICAL DEPRECIATION & FUNCTIONAL OBSOLESCENCE
1 FOUNDATIONS/BASEMENTS	\$224.85	\$ 2,248,500	50	35	30.00%	\$ 674,550	0.00%	\$ -	\$ 1,573,950
2 SUPERSTRUCTURE	\$180.87	\$ 1,808,700	50	35	30.00%	\$ 542,610	0.00%	\$ -	\$ 1,266,090
3 EXTERIOR CLOSURE	\$210.86	\$ 2,108,600	50	35	30.00%	\$ 632,580	0.00%	\$ -	\$ 1,476,020
4 ROOFING	\$24.11	\$ 241,100	20	5	75.00%	\$ 180,825	0.00%	\$ -	\$ 60,275
5 INTERIOR	\$366.46	\$ 3,664,600	25	10	60.00%	\$ 2,198,760	0.00%	\$ -	\$ 1,465,840
6 CONVEYING SYSTEMS	\$23.88	\$ 238,800	25	10	60.00%		100.00%	\$ 238,800	\$ -
7 PLUMBING	\$88.60	\$ 886,000	25	10	60.00%	\$ 531,600	0.00%	\$ -	\$ 354,400
8 HVAC	\$25.80	\$ 258,000	25	10	60.00%		100.00%	\$ 258,000	\$ -
9 FIRE PROTECTION	\$29.66	\$ 296,600	25	10	60.00%	\$ 177,960	0.00%	\$ -	\$ 118,640
10 ELECTRIC	\$405.15	\$ 4,051,500	25	10	60.00%	\$ 2,430,900	0.00%	\$ -	\$ 1,620,600
<b>TOTAL BUILDING COST</b>		<b>\$ 15,802,400</b>				<b>\$ 7,369,785</b>		<b>\$ 496,800</b>	<b>\$ 7,935,815</b>

**DRC Value to be used for opening balances 7,935,815**

**COLUMN HEADING**

**COMMENTS**

USD/SM	FROM NOF BUILDING HISTORIC DATA
BUILDING REPLACEMENT COST	HISTORIC COMPONENT COST PER SM MULTIPLIED BY BUILDING GROSS AREA
COMPONENT USEFUL LIFE	BASED ON UN IPSAS POLICY FRAMEWORK
PHYSICAL DEPRECIATION	PERCENTAGE OF USEFUL REMAINING LIFE - BUILDING AGE DIVIDED BY USEFUL LIFE DURATION (STRAIGHT LINE BASIS)
ADJUSTED BY PHYSICAL DEPRECIATION	VALUE OF COMPONENT - COMPONENT REPLACEMENT COST MULTIPLIED BY PHYSICAL DEPRECIATION
DEPRECIATED REPLACEMENT COST (DRC)	COST TO REPLACE COMPONENTS - BUILDING REPLACEMENT COST LESS ADJUSTED BY PHYSICAL DEPRECIATION VALUE
FUNCTIONAL OBSOLESCENCE	TO BE DETERMINED BASED ON INFORMATION FROM OAH PERSONNEL

Note: Depreciation components (i.e. physical deterioration, functional obsolescence, and economic obsolescence) will be consolidated in one column for field missions

***Journal entry – Record building fair value for opening statement of financial position, using DRC<sup>9</sup>***

Dr	Property, plant, and equipment (statement of financial position)	\$7,935, 815
Cr	Accumulated surplus or deficit (statement of financial position)	\$7,935, 815

Assume that it is now **2019** and thus, the building is now 20 years old. There was a fire in part of the building in 2019, resulting in an impairment event. This decreased the value of several components and also decreased their remaining useful lives. A screenshot of the scenario is shown below:

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<sup>9</sup> For further information on how to record please see CG #18 Net assets.

GSM: 10,000  
 YEAR BUILT: 1999  
 CURRENT AGE: 20

ITEM DESCRIPTION	USD/SM VALUE USD/SM	BUILDING VALUE USD	COMPONENT USEFUL LIFE YEARS	COMPONENT REMAINING USEFUL LIFE YEARS	PHYSICAL DEPRECIATION %	PHYSICAL DEPRECIATION VALUE	IPSAS Cost	IPSAS Accumulated Depreciation	Net Book Value as of 31/12/2018	IMPAIRMENT EVENT 1/1/2019	Carrying amount as of 1/1/2019 after impairment
1 FOUNDATIONS/BASEMENTS	\$224.85	\$ 2,248,500	50	30	40.00%	\$ 899,400	\$ 1,573,950	\$ 224,850	\$ 1,349,100		\$ 1,349,100
2 SUPERSTRUCTURE	\$180.87	\$ 1,808,700	50	30	40.00%	\$ 723,480	\$ 1,266,090	\$ 180,870	\$ 1,085,220		\$ 1,085,220
3 EXTERIOR CLOSURE	\$210.86	\$ 2,108,600	50	30	40.00%	\$ 843,440	\$ 1,476,020	\$ 210,860	\$ 1,265,160	\$ 50,000	\$ 1,215,160
4 ROOFING	\$24.11	\$ 241,100	20	0	100.00%	\$ 241,100	\$ 60,275	\$ 60,275	\$ -	\$ -	\$ -
5 INTERIOR	\$366.46	\$ 3,664,600	25	5	80.00%	\$ 2,931,680	\$ 1,465,840	\$ 732,920	\$ 732,920	\$ -	\$ 732,920
6 CONVEYING SYSTEMS	\$23.88	\$ 238,800	25	0	100.00%	\$ 238,800	\$ -	\$ -	\$ -		\$ -
7 PLUMBING	\$88.60	\$ 886,000	25	5	80.00%	\$ 708,800	\$ 354,400	\$ 177,200	\$ 177,200		\$ 177,200
8 HVAC	\$25.80	\$ 258,000	25	0	100.00%	\$ 258,000	\$ -	\$ -	\$ -		\$ -
9 FIRE PROTECTION	\$29.66	\$ 296,600	25	5	80.00%	\$ 237,280	\$ 118,640	\$ 59,320	\$ 59,320		\$ 59,320
10 ELECTRIC	\$405.15	\$ 4,051,500	25	5	80.00%	\$ 3,241,200	\$ 1,620,600	\$ 810,300	\$ 810,300	\$ 50,000	\$ 760,300
<b>TOTAL BUILDING COST</b>		<b>\$ 15,802,400</b>				<b>\$ 10,323,180</b>	<b>\$ 7,935,815</b>	<b>\$ 2,456,595</b>	<b>\$ 5,479,220</b>	<b>\$ 100,000</b>	<b>\$ 5,379,220</b>

**COLUMN HEADING**

**COMMENTS**

USD/SM	FROM NOF BUILDING HISTORIC DATA
BUILDING REPLACEMENT COST	HISTORIC COMPONENT COST PER SM MULTIPLIED BY BUILDING GROSS AREA
COMPONENT USEFUL LIFE	BASED ON UN IPSAS POLICY FRAMEWORK
PHYSICAL DEPRECIATION	PERCENTAGE OF USEFUL REMAINING LIFE - BUILDING AGE DIVIDED BY USEFUL LIFE DURATION (STRAIGHT LINE BASIS)
ADJUSTED BY PHYSICAL DEPRECIATION	VALUE OF COMPONENT - COMPONENT REPLACEMENT COST MULTIPLIED BY PHYSICAL DEPRECIATION
IMPAIRMENT	VALUE OF IMPAIRMENT EVENT SUCH AS DAMAGE, OR FUNCTIONAL OBSOLECENSE
BUILDING VALUE	BUILDING REPLACEMENT COST LESS ADJUSTED BY PHYSICAL DEPRECIATION AND IMPAIRMENT VALUE

***Journal entry – Record impairment loss***

Dr	Impairment expense (statement of financial performance)	\$100,000
Cr	PP&E accumulated impairment (statement of financial position)	\$100,000

Using the same UNON test scenario building, assume that it is now **2024** and thus, the building is now 25 years old. A capital project has been undertaken in the building, namely the interior retrofit of one wing of the building, to accommodate a new tenant. Several building components were modernized, increasing their value and increasing their remaining useful lives (serviceability). A screenshot of the scenario is shown below:



GSM: 10,000  
 YEAR BUILT: 1999  
 CURRENT AGE: 25

	a	b	c	d	e	f	g	h						
		a*GSM		c-current age or c*e	current age/c	a*e		a-(+g)	IPSAS Cost prior to renovation	Renovation costs in 2024	IPSAS Cost adjusted for renovation	IPSAS Accumulated Depreciation prior to renovation (rolled to 31/12/2024)	IPSAS Accumulated Depreciation 31/12/2024 including renovation	Net Book Value as of 31/12/2024
ITEM DESCRIPTION	USD/SM Opening Balance 2014	USD/SM Cost 2024	BUILDING REPLACEMENT COST	COMPONENT USEFUL LIFE YEARS	COMPONENT REMAINING USEFUL LIFE YEARS	PHYSICAL DEPRECIATION %	PHYSICAL DEPRECIATION VALUE	IMPAIRMENT	BUILDING VALUE ADJUSTED FOR PHYSICAL DEPRECIATION & IMPAIRMENT: AFTER CAPITAL IMPROVEMENT					
1 FOUNDATIONS/BASEMENTS	\$224.85		\$ 2,248,500	50	25.0	50.00%	\$ 1,124,250	\$	1,124,250	\$	1,573,950	\$	494,670	\$ 1,079,280
2 SUPERSTRUCTURE	\$180.87		\$ 1,808,700	50	25.0	50.00%	\$ 904,350	\$	904,350	\$	1,266,090	\$	397,914	\$ 868,176
3 EXTERIOR CLOSURE	\$210.86		\$ 2,108,600	50	25.0	50.00%	\$ 1,054,300	\$	1,054,300	\$	1,476,020	\$	463,892	\$ 1,012,128
4 ROOFING	\$24.11		\$ 241,100	20	(5.0)	100.00%	\$ 241,100	\$	-	\$	60,275	\$	60,275	\$ -
5 INTERIOR		\$424.83	\$ 2,124,138	25	20.0	0.00%	\$ -	\$ -	2,124,138	\$	1,465,840	\$	1,465,840	\$ 106,207
6 CONVEYING SYSTEMS		\$27.68	\$ 138,417	25	23.0	0.00%	\$ -	\$ -	138,417	\$	138,417	\$	-	\$ 6,018
7 PLUMBING		\$102.71	\$ 513,558	25	23.0	0.00%	\$ -	\$ -	513,558	\$	354,400	\$	354,400	\$ 22,329
8 HVAC		\$29.91	\$ 149,546	25	23.0	0.00%	\$ -	\$ -	149,546	\$	149,546	\$	-	\$ 6,502
9 FIRE PROTECTION		\$34.38	\$ 171,920	25	23.0	0.00%	\$ -	\$ -	171,920	\$	118,640	\$	118,640	\$ 7,475
10 ELECTRIC		\$469.68	\$ 2,348,399	25	23.0	0.00%	\$ -	\$ -	2,348,399	\$	2,348,399	\$	1,620,600	\$ 102,104
<b>TOTAL BUILDING COST</b>			\$ 11,852,880				\$ 3,324,000	\$	8,528,880	\$	7,935,815	\$	4,976,231	\$ 1,667,386

**COLUMN HEADING**

**COMMENTS**

USD/SM OPENING BALANCE	FROM NOF BUILDING HISTORIC DATA
USD/SM COST	EVENTUALLY WILL BE RECORDED AT ACTUAL COST; FOR THIS EXERCISE, ASSUME 3% COMPOUND CONSTRUCTION ESCALATION FROM OPENING BALANCE
BUILDING REPLACEMENT COST	HISTORIC COMPONENT COST PER SM MULTIPLIED BY BUILDING GROSS AREA
COMPONENT USEFUL LIFE	BASED ON UN IPSAS POLICY FRAMEWORK
PHYSICAL DEPRECIATION	PERCENTAGE OF USEFUL REMAINING LIFE - BUILDING AGE DIVIDED BY USEFUL LIFE DURATION (STRAIGHT LINE BASIS)
ADJUSTED BY PHYSICAL DEPRECIATION	VALUE OF COMPONENT - COMPONENT REPLACEMENT COST MULTIPLIED BY PHYSICAL DEPRECIATION
BUILDING VALUE	BUILDING REPLACEMENT COST LESS ADJUSTED BY PHYSICAL DEPRECIATION VALUE PLUS VALUE OF CAPITAL IMPROVEMENT

***Journal entry – Increase in building value from capital improvements as per 1 January 2024***

To derecognize “old” components:

Dr	Accumulated depreciation (statement of financial position)	\$3,559,480
Cr	Property, plant, and equipment (statement of financial position)	\$3,559,480

To recognize “new” components:

Dr	Property, plant, and equipment (statement of financial position)	\$5,445,980
Cr	Cash/accounts payable (statement of financial position)	\$5,445,980

***Journal entry – One year of depreciation of “new” components as per 31 December 2024***

Dr	Depreciation expense (statement of financial performance)	\$250,635
Cr	Accumulated depreciation (statement of financial position)	\$250,635

## 11 Case Study 2

### Scenario 1

There are instances in field missions when a part from a capitalized prefabricated (prefab) module is used to replace a part in another capitalized prefab. For example, one wall of a prefab is removed and subsequently replaced with a new wall, taken from another prefab.

#### ***Example – A part (i.e. a wall) of a prefab is replaced***

In peacekeeping mission X, Prefab A is in need of a new wall. A wall from Prefab B is used to replace the wall in Prefab A. Prefab B has a carrying value of \$3,000.

Prefab B now possesses 3 walls and must be impaired as it can no longer serve a functional purpose. Additionally, as the costs of a particular wall are not tracked and the unit of accounting is the prefab as a whole, the cost of the wall is immaterial to the financial statements as a whole and no accounting entry will be made to account for Prefab A's new wall or disposal of Prefab A's old wall.

The journal entry to record the impairment of Prefab B is:

Dr Impairment Loss (statement of financial performance)	\$3,000
Cr Accumulated impairment loss (statement of financial position)	\$3,000

Upon replacement, the useful life of Prefab A should be reassessed and the remaining carrying value of Prefab A, should be depreciated over the reassessed useful life. To assess remaining useful life, qualitative assessment factors should be considered (for example, maintenance history, capital improvements, and location specific factors).

### Scenario 2

A common scenario in field missions is when prefabricated (prefab) modules or containerized units are merged or staked together to form a single large building. The prefabs/container units were procured at different times and have unique bar code references.

To account for this situation, the United Nations is proposing the use of “composite” buildings; however, these units are dismantled individually and assembled in a different location frequently potentially making the treatment of the values and calculation of useful lives difficult.

To account for these composite units, the United Nations should evaluate the remaining useful life of the composite unit and depreciate the remaining carrying value of all parts of the composite unit over the reassessed useful life.

***Example – Composite buildings***

In peacekeeping mission Z, Prefab A and Prefab B are combined to form a large hall. Prefab A was depreciated beginning in 20X1 over a 7 year useful life. Prefab B was depreciated beginning in 20X2 over a 7 year useful life. Upon combination in 20X3, it was assessed that the composite building would have a useful life of 6 years. Therefore, the remaining carrying value of all parts of the large hall should be depreciated over the reassessed useful life, or 6 years.

There is no journal entry at the time the prefabs are combined; however, depreciation will be accounted for on a going forward basis as:

Dr Depreciation expense (statement of financial performance)

Cr Accumulated depreciation (statement of financial position)

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