

Depreciation Accounting Using Componentisation Approach



The Companies Act, 2013 got the approval from the President of India on 29th August 2013 and became the law. Section 1 of the Act came into force with immediate effect, while Section 1(3) empowered the Central Government to appoint different dates for different provisions of the Act, by notifying provisions in the official gazette. The Ministry of Corporate Affairs of the Government of India accordingly notified 98 different Sections with effect from 12th September 2013. On 26th March 2014, the Ministry notified 183 Sections, sub-Sections and remaining Schedules of the Act. These Sections came into effect from 1st April 2014 being the appointed date in notification. Section 123 of the Act that came into effect from 1st April 2014 states that dividend shall be not be declared or paid without providing depreciation as per the Schedule II of the Act. Notification No. G.S.R. 627(E) dated 29th August 2014 substituted the paragraph 4 of notes to part C of the Schedule II with the new paragraph. With this substitution, the requirement under the new para 4(a) shall be voluntary in respect of the financial year commencing on or after 1st April 2014 and shall be mandatory in respect of the financial year commencing on or after 1st April 2015. Schedule II of the Act has introduced the concept of the componentisation of asset which was not applicable under the erstwhile Schedule XIV of the Companies Act, 1956. The authors in this article discuss the technical and practical aspects of the newly-introduced concept. Read on...



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Background

During the last three decades, the Companies Act, 1956 made certain amendments with respect to the depreciation calculation that had impact on the results of companies. The Companies (Amendment) Act, 1988 introduced the Schedule XIV with retrospective effect from 2nd April 1987

and prohibited the companies from using the rates of depreciation under the Income-tax Act, 1961. Further, the Companies (Amendment) Act, 2000 permitted companies to consider the SLM method of depreciation for determination of net profit for computing managerial remuneration by amending the Section 350 of the Act. Schedule II of the Companies Act, 2013 that deals with depreciation calculation departs significantly from the erstwhile Schedule XIV of the 1956 Act and the changes introduced are:

- a) Schedule XIV of the Companies Act, 1956 mentioned SLM and WDV rates for calculating depreciation. Moreover, note 5 to Schedule XIV required companies to disclose the method of depreciation calculated by the companies. Schedule II of the Companies Act, 2013 provides useful life of the asset without specifically mentioning the method of computing depreciation. Moreover, note 3 to the Schedule II requires companies to disclose depreciation methods used. It also means that the Companies Act, 2013 recognises any other method for calculating the depreciation provided the useful life of asset does not exceeds the useful life of asset as mentioned in the Schedule II.

As Schedule II does not specifically mention the WDV rate, companies using WDV method can derive the WDV rate by using the following formula:

$\{1 - [\text{Scrap value} / \text{Original cost}]^{1/n}\}$, here n is the useful life of the asset. For instance, if the cost of asset is ₹100,000 with an estimated scrap value of ₹5,000 and having a useful life of 6 years then the WDV rate for that asset would be 39.30%.

- b) Method for calculating extra shift depreciation has undergone a change. The Companies Act, 1956 had provided separate rates for double and triple shifts of the asset, however the Companies Act, 2013 has provided for additional depreciation of 50% in case of double shift and 100% in case of triple shift.
- c) Schedule XIV of the Companies Act, 1956 required provision of depreciation at the rate of 100%, whose actual cost does not exceed ₹5,000. However, Schedule II of the Companies Act, 2013 is silent on this aspect.
- d) Schedule II of the Companies Act, 2013 has introduced the concept of componentisation

of asset for the first time in calculating the depreciation. One may feel that this concept is new to the Indian companies. However, it is not so, as its traces can be found in the accounting standard AS-10 on *Accounting for Fixed Assets*. For instance, Para 8.3 of AS-10 states: *In certain circumstances, the accounting for an item of fixed asset may be improved if the total expenditure there on is allocated to its component parts, provided they are in practice separable, and estimates are made of the useful lives of these components. For example, rather than treat an aircraft and its engines as one unit, it may be better to treat the engines as a separate unit if it is likely that their useful life is shorter than that of the aircraft as a whole.* This concept has been discussed in detail, to understand the implications and application of the same.

Componentisation of Assets

There are two schools of thought as far as the depreciation calculation is concerned. The first school suggests that the asset should be depreciated after considering the total cost of asset and its useful life. However, the second one suggests that each part of the asset may have a different useful life and the enterprise should charge depreciation on each part after considering its useful life. Schedule XIV of the Companies Act, 1956 supported the first view while Schedule II of the Companies Act, 2013 supports the latter. Note 4(a)* of Schedule II of the Companies Act, 2013 states: *Useful life specified in Part C of the Schedule is for whole of the asset and where cost of a part of the asset is significant to total cost of the asset and useful life of that part is different from the useful life of the remaining*

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— Componentisation of Assets —

*Refer Notification No. G.S.R. 627(E) dated 29th August, 2014.

Ascertaining the cost of the component may be easier in some cases, while posing difficulty in others. For instance, the cost of a monitor can be ascertained easily, while it is difficult to determine the cost of a car's engine. Moreover, the supplier may not be in a position to provide the correct cost of the component to the buyer

asset, useful life of that significant part shall be determined separately.

Thus, Note 4(a) of Schedule II requires the companies to compute depreciation after considering significant part of the asset (component of asset) and its useful life. The important terms to be noted here are *part of the asset* and *significant*. The term *part of the asset* suggests componentisation of the asset. The Companies Act, 2013 however has not defined the word *significant*. Hence it is left to the judgment of the companies to decide what constitutes significant cost of a part of the asset in relation to the total cost of the asset. However, before deciding what constitutes significant cost, a reference can be taken from other provisions of the Companies Act, 2013. For instance, explanation given to sub-Section 6 of Section 2 of the 2013 Act states: *For the purposes of this clause, 'Significant Influence' means control of at least 20% of total share capital, or of business decisions under an agreement.* Similarly, AS-23 that deals with *Accounting for Investments in Associates in Consolidated Financial Statements* also presumes 20% or more of voting power in determining the significant influence.

In view of the above, companies may consider 20% of the total cost of the asset as benchmark for determining the component. However, companies are free to consider lower than 20% as benchmark for determining the component if the nature of asset requires so.

Most of the assets are composed of various parts or components having different useful life, which may get replaced during the useful life of assets. For instance, a desktop is composed of four major components, *viz.*, CPU, monitor, keyboard and mouse, where each can be accounted for as a separate asset and can be depreciated separately depending upon their respective useful life. This can be illustrated by continuing with the earlier example. If the management feels that the life of CPU and monitor is 4 years and life of key board and mouse is

2 years, then CPU and monitor will be depreciated in 4 years and key board and mouse will be depreciated within 2 years. Of course, there are other factors that should be considered before deciding the componentisation of assets.

The purpose for componentisation of asset is:

- To recognise depreciation cost accurately;
- To derecognise the cost of replaced component; and
- To correctly measure the cost of repairs and maintenance.

Challenges in Accounting for Componentisation of Assets

Accounting according to significant component has certain challenges:

1. **Cost of significant component:** Identifying the cost of significant component is not going to be easy. For instance, if a company purchases a car and identifies chassis, body, engine and other residual parts as significant components, identifying the cost of chassis, engine, body, *etc.*, of the car is not going to be easy. Moreover, in most of the cases the company is not likely to get the cost of significant component separately on the invoice.
2. **Accounting for fixed assets:** Accounting of fixed assets would require parent and child configuration in the system.
3. **Inconsistency in accounting:** It is possible that the same class of asset may be componentised differently at different points of time. This may create inconsistency in accounting.
4. **Disagreement with auditors:** It is possible that auditors may take a different view on the componentisation of asset which may delay the finalisation process.
5. **Componentisation of opening block:** The management has to identify the assets that require componentisation of assets. Once the assets are identified, the management has to identify each component separately and assign the value to the component. The management will be required to ascertain the remaining useful life of the component and compute depreciation accordingly from the financial year 2014-15 onwards.
6. **Consolidation of financial statements:** Accounting Standard (AS) 21 *Consolidated Financial Statements* states that consolidated financial statements should be prepared

Determining the cost of components of asset in the opening block is a challenge, as most of the entities may not be having their break-up. Moreover, much guidance is not available for determining the value of components in the opening block. Hence, the cost of components can be determined on an estimated basis provided the estimates are reasonable

using uniform accounting policies. Hence the management will have to incorporate the changes in accounting for depreciation for not only to Indian companies but also to the subsidiaries incorporated outside India.

7. **Increase in processing time:** The time required to process depreciation through the system will increase significantly if the asset is divided into a number of components. Higher the number of components, higher would be the processing time. Hence, a balance should be maintained between identifying the number of components and legal compliance.

Steps Involved in Componentisation of Assets

- a) **Understanding the working of assets:** It is important to understand the working of assets. There are certain assets that require frequent repairs and maintenance while certain assets don't require it. For instance, the working of a crane would significantly differ from the working of the wind power generation plant.
- b) **Assistance from asset users:** Companies should gather component-related information from the users of asset as they can guide us in identifying the different components of the asset and its useful life. For instance, there are different varieties of crane such as wheel mounted cranes, commercial truck mounted cranes, crawler mounted cranes, overhead track mounted cranes, etc. Though the crane is used for lifting heavy objects, each crane is designed with a specific purpose and usage. Hence, it would be a good idea to take assistance from the asset users to gather component-related information.
- c) **Use of history sheets:** It may be a good idea to go through the history sheets of assets, as it captures vital information about repairs and maintenance of the assets. It can provide vital information about the replaced components in the past years.
- d) **Scrutinising repairs and maintenance account for past years:** It may not be a bad idea to scrutinise the repairs and maintenance account for the last few years. This can be used in *lieu* of history sheets of the assets.
- e) **Life of a significant component:** A significant component may have a lesser useful life than the life of the asset. The life of a component should be ascertained with the help of a technical expert.
- f) **Materiality:** A balance should be maintained between hairsplitting exercise and the legal requirement. Unnecessary hairsplitting of fixed assets should be avoided. Setting a materiality level can help in determining the extent and scope of assets to be componentised. Even Para 43 of Ind-AS16 also considers this aspect and states: *Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item shall be depreciated separately.* Thus, materiality should be considered before identifying the parts of assets.
- g) **Cost of a component:** Ascertaining the cost of a component may be easier in some cases while posing difficulty in others. For instance, the cost of a monitor can be ascertained easily while it is difficult to determine the cost of a car's engine. Moreover, the supplier may not be in a position to provide the correct cost of the component to the buyer. Hence, the companies can determine the value of a component on an estimated basis. However, the estimates used are based on reasonable basis.
- h) **Components having identical useful life:** It is possible that different components of the same asset may have similar useful life. In such case, such different components may be grouped together. Para 45 of Ind-AS16 also states: *A significant part of an item of property, plant and equipment may have a useful life and a depreciation method that are the same as the useful life and the depreciation method of another significant part of that same item. Such parts may be grouped in determining the depreciation charge.* For instance, Asset "A" is composed of four components C1, C2, C3 and C4, where the

useful life of C1 and C4 is 3 years and that of C2 and C3 is 5 years. Then C1 and C4 will be grouped together, and C2 and C3 will be grouped together and depreciation may be calculated on those grouped components.

- i) Accounting for replacement of component: Once the existing component is replaced with the new component, the replaced component is derecognised and new component is recognised in the carrying value of the asset. Para 13 of Ind-AS16 states:*Under the recognition principle in paragraph 7, an entity recognises in the carrying amount of an item of property, plant and equipment the cost of replacing part of such an item when that cost is incurred if the recognition criteria are met. The carrying amount of those parts that are replaced is derecognised in accordance with the derecognition provisions of this Standard.*

Application of the above principles is explained with the help of the following illustration: XYZ Ltd. purchases a machine for ₹10 lakh on the first day of the financial year XX01. The management of XYZ Ltd. is of the view that the machinery consists of 3 major components and uses *straight line method* of depreciation. The cost of components and their useful lives are:

Sr. No.	Particulars	Cost (₹)	useful life
1	Component-1.1	500,000	5 years
2	Component-2.1	290,000	2 years
3	Component-3.1	210,000	3 years

The calculation of yearly depreciation will be:

Component-1.1 (500,000/5) = ₹100,000

Component-2.1 (290,000/2) = ₹145,000

Component-3.1 (210,000/3) = ₹70,000

(Amount ₹)

Particulars	FY XX01	FY XX02	FY XX03
Component – 1.1 (500,000/5)	100,000	100,000	100,000
Component – 2.1 (290,000/2)	145,000	145,000	-
Component – 3.1 (210,000/3)	70,000	70,000	70,000
Depreciation charge for each year	315,000	315,000	170,000

The accounting entries in the books of XYZ Ltd. would be as follows:

Date	Particulars	Amount Debit (₹)	Amount Debit (₹)
FY XX01	Machinery (Component-1.1) A/c ...Dr	500,000	
	Machinery (Component-2.1) A/c ...Dr	290,000	
	Machinery (Component-3.1) A/c ...Dr	210,000	
	To Bank		1,000,000
FY XX01	Depreciation A/c ...Dr	315,000	
	To Provision for depreciation (Component-1.1)		100,000
	To Provision for depreciation (Component-2.1)		145,000
	To Provision for depreciation (Component-3.1)		70,000
FY XX01	Profit and loss a/c ...Dr	315,000	
	To Depreciation		315,000
FY XX02	Depreciation A/c ...Dr	315,000	
	To Provision for depreciation (Component-1.1)		100,000
	To Provision for depreciation (Component-2.1)		145,000
	To Provision for depreciation (Component-3.1)		70,000
FY XX02	Profit and loss a/c ...Dr	315,000	
	To Depreciation		315,000
FY XX03	Depreciation A/c ...Dr	170,000	

Date	Particulars	Amount Debit (₹)	Amount Debit (₹)
	To Provision for depreciation (Component-1.1)		100,000
	To Provision for depreciation (Component-3.1)		70,000
FY XX03	Profit and loss a/c ...Dr	170,000	
	To Depreciation		170,000

Let us assume that XYZ Ltd. replaces Component-2.1 by Component-2.2 for ₹310,000 in the third year. In such a scenario, the old part is derecognised and new part is recognised as a part of the asset. The accounting entries in the third year will be:

Date	Particulars	Amount Debit (₹)	Amount Debit (₹)
FY XX03	Provision for depreciation (Component-2.1)	290,000	
	To Machinery (Component-2.1)		290,000
FY XX03	Machinery (Component-2.2) A/c ...Dr	310,000	
	To Bank		310,000
FY XX03	Depreciation A/c ...Dr	325,000	
	To Provision for depreciation (Component-1.1)		100,000
	To Provision for depreciation (Component-2.2)		155,000
	To Provision for depreciation (Component-3.1)		70,000
FY XX03	Profit and loss a/c ...Dr	325,000	
	To Depreciation		325,000

- j) **Determining the value of components in opening block of assets:** Determining the cost

of components of assets in the opening block is a challenge as most of the entities may not be having their break-up. Moreover, not much guidance is available for determining the value of components in the opening block. Hence the cost of components can be determined on an estimated basis provided the estimates are reasonable. This is in line with the Para 20 of AS-5 (Revised) *Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies* which states: *As a result of the uncertainties inherent in business activities, many financial statement items cannot be measured with precision but can only be estimated. The estimation process involves judgments based on the latest information available. Estimates may be required, for example, of bad debts, inventory obsolescence or the useful lives of depreciable assets. The use of reasonable estimates is an essential part of the preparation of financial statements and does not undermine their reliability.*

While adjusting the opening balance of a block of asset, adequate care should be taken to comply with the Note 7 of Schedule II to the Companies Act, 2013 which states:

From the date this Schedule comes into effect, the carrying amount of the asset as on that date—(a) shall be depreciated over the remaining useful life of the asset as per this Schedule;

(b) after retaining the residual value, may be recognised in the opening balance of retained earnings where the remaining useful life of an asset is nil."

For the existing assets, the cost of individual component can be determined in the ratio of replacement cost of the components. For instance, XYZ Co. Ltd. purchased 30 KVA UPS system for ₹400,000/- on 1st April 2012. The company considers 5 years as the useful life of

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the UPS system and follows the *straight line method* of depreciation. On the date of acquisition, the company capitalised that without identifying the components of UPS. The company provided ₹80,000/- each towards depreciation for the financial years 2012-13 and 2013-14 respectively. In April 2014, the company carried out a review to assess whether the UPS system can be broken down into components. After conducting a thorough study, the company concluded that the UPS system can be broken down into the following parts, viz.

Sr. No.	Particulars	Useful life
1	UPS	5
2	Battery bank	3

The Company obtained a quote to ascertain the cost of battery bank and the cost of UPS having similar features as the original UPS system which is:

Sr. No.	Particulars	Amount ₹
1	UPS	265,700
2	Battery bank	198,030
		463,730

Based on the above quote, the company allocated ₹229,185 ($400,000 \times 265,700 / 463,730$) as the cost of UPS and balance ₹170,815 ($400,000 \times 198,030 / 463,730$) as the cost of battery bank. From 1st April 2014, the Company will depreciate ₹229,185 till 31st March 2017 (within 5 years from 1st April 2012) and completely depreciate battery bank before 31st March 2015 (within 3 years from 1st April 2012). Similarly, the Company will also allocate accumulated depreciation in the same proportion as the original asset:

Sr. No.	Particulars	FY 2012-13 (₹)	FY 2013-14 (₹)	Total (₹)
1	UPS	45,837	45,837	91,674
2	Battery bank	34,163	34,163	68,326
		80,000	80,000	160,000

The company will provide depreciate amounting to ₹137,511 (allocated value of UPS ₹229,185 less allocated value of accumulated depreciation ₹91,674) in next three years



while it shall provide depreciation on battery bank amounting to ₹102,489 (allocated value of battery bank ₹170,815 less allocated value of accumulated depreciation ₹68,326) in the financial year 2014-15.

If, however, the useful life of batteries is assumed to be 2 years, ₹102,489 shall be adjusted against the retained earnings as the remaining useful life of the battery bank is nil.

k) Replacement of components in earlier years:

It is possible that the components of some of the assets were replaced in earlier financial years and also have remaining useful life of the asset or component. Schedule II of the 2013 Act does not require us to capitalise such components. Moreover, companies should refrain from capitalising such expenses by following the principle of prudence.

Conclusion

A systematic approach can help in accounting for depreciation using componentisation approach. A critical review of assets having components will help the entities in complying with the requirement. Entities should try to maintain a proper balance between the legal compliance and hair splitting of assets by keeping *materiality* in mind. It will be a good idea to prepare a fixed asset accounting manual for accounting of fixed assets. It will ensure that all components are identified at the date of initial recognition and also help in maintaining the consistency in accounting of fixed asset. ■