

CONVERGENCE TO IND AS 16 – PROPERTY, PLANT & EQUIPMENT

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Introduction

India has principally agreed to converge to IFRS by implementing Revised Schedule VI, being the first constructive step in the journey. Let us appreciate the requirements of accounting for fixed assets, in specific under Ind AS (ie IFRS), in the light of the existing governing principles under Indian GAAP.

Ind AS 16, corresponding to International Accounting Standard (IAS), 16 governs the accounting, measurement and reporting for fixed assets. This means that it also governs the accounting for depreciation. Presently, two standards namely, AS 6 - Depreciation Accounting and AS 10 - Accounting for Fixed Assets govern the subject.

Following are the major points of differences between the two GAAPs that have wider industry impact:

- Component approach for accounting of fixed assets
- Depreciation provision
- Revaluation of fixed assets

This article brings out the major differentiating characteristics under Indian GAAP including relevant governing provisions under the Statute and Ind AS, for accounting of fixed assets on above points. We later discuss the industry impact analysis and way forward.

Existing Governing Literature in India on Fixed Assets

AS 10 – Accounting for Fixed Assets

This standard governs the treatment of capital expenditure related to acquisition and construction of fixed assets. It introduces broad categories of assets as observed in many entities. These include land, buildings, plant and machinery, vehicles, furniture and fittings, goodwill, patents, trademarks and designs. The standard requires management to apply judgment to use the aggregation rule for individually insignificant items.

It encourages an improved accounting for an item of fixed asset, where the total expenditure thereon is allocated to its component parts, provided they are in practice separable, and estimate is 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.

However, the entry in fixed asset register is made at a class of asset. For example, aircraft is capitalised as a single asset. This is because Schedule XIV prescribes a common rate for aeroplanes, aero engines, simulators, visual system and quick engine change equipment at 16.2% (WDV) and 5.6% (SLM).

Major points of differences between the two GAAPs that have wider industry impact.

In such a case, often, if the engine is replaced before it is fully depreciated, the balance WDV is charged off to Profit and Loss Account and the new engine is capitalised for being depreciated till the maximum life of its parent asset. This approach may lead to deferment of charge till the year of replacement.

Indian Companies Act, 1956

Schedule XIV plays a critical role in accounting for fixed assets under Indian GAAP, in recording of assets and depreciating it over its useful life.

Recording of assets: There are about 20 different rates of depreciation under Schedule XIV under single shift usage, which drive the allocation of cost of assets. The broad categories or class of assets include Land, Building, Plant & Machinery, Furniture & Fitting and Ships. Plant & Machinery is further subdivided into various sub-asset classes considering business specific allocations.

Consider 'mines and quarries' being one of the groups under 'Plant & Machinery' that attracts 13.91% rate of depreciation. It includes Surface and underground machinery, Head gears, Shafts, Tramways, etc. and all being depreciated at the same rate. In practical terms, all of them may have a different useful life.

Companies (Auditor's Report) Order (2003) (CARO) requires every company to maintain proper records showing full particulars, including quantitative details and situation of fixed assets under para 4.1(a). Companies maintain minimum quantitative records for fixed assets that can be physically verified on an overall basis, in order to comply with CARO.

Depreciation: Section 205(2) of the Companies Act, 1956 (Act) provides that a company can declare or pay dividend only out of its profits. The profits for this purpose are to be arrived at after providing for depreciation as per section 350. If dividend is to be declared out of the profits of any earlier year or years, it is necessary that such profits should be arrived at after providing for depreciation for the respective years.

Section 350 of the Act requires a company to provide depreciation at the rates specified in Schedule XIV of the Act for arriving at net profit of the company for the purposes of section 205(2) and section 349 of the Act. There is no direct reference to useful life in the Act, but has indirect reference to it by prescribing depreciation rates for all types of assets for depreciation under the said Schedule. The rates prescribed under Schedule XIV are minimum rates (*Circular No. 2/89, dated March 7, 1989 issued by Department of Company affairs*). These are applicable for all the companies.

Thus, entities cannot depreciate the assets at a lower rate even if the technically established useful life of the asset is more than that derived from the rates specified under Schedule XIV, if they are governed by Companies Act. (In case of electricity companies, it is the Electricity Act that governs the minimum depreciation rates). There is also no provision of revisiting the rates at every year end.

AS 6 Depreciation Accounting

Para 5 of AS 6 requires assessment of depreciation based on historical or substituted historical cost, estimated useful life and residual value. U/s. 350 read with Circular. No. 2/89 as mentioned above, companies cannot estimate a useful life longer than that prescribed under Schedule XIV.

Companies exercise their judgement of useful life

in the light of technical, commercial, accounting and legal requirements. It may periodically review the estimate and if it is considered that the original estimate of useful life of an asset requires any revision, the unamortised depreciable amount of the asset is charged to revenue over the revised remaining useful life. Companies can use a shorter useful life based on parameters stated above and disclose the fact by way of a note. However, there is no requirement to review residual value at periodic intervals.

AS 6 prescribes two methods of depreciation, namely, Straight line method (SLM) and Written down value method (WDV). The method of depreciation is applied consistently to provide comparability of the results of the operations of the enterprise from period to period.

A change from one method of providing depreciation to another is considered as a change in policy and is made only if the adoption of the new method is required by statute or for compliance with an accounting standard or for more appropriate presentation of financial statements. Change in accounting policy requires retrospective re-computation of depreciation as per the new policy i.e. new method of depreciation and adjustment in the accounts in the year of such change. Thus, the depreciation charge in subsequent years is not impacted with the change adjustment.

Ind AS 16: Property, plant and equipment (i.e. IAS 16)

Ind AS brings in a more stringent requirement to maintain component details of fixed assets, in terms of its Component Approach. Hence, it may increase the line items in fixed asset register and work of physical verification for each identifiable component.

The Standard does not prescribe the unit of measure for recognition. However, judgement is required in applying the recognition criteria to an entity's specific circumstances. It may be appropriate to aggregate individually insignificant items, such as moulds, tools and dies, and to apply the criteria to the aggregate value. We will discuss the component approach in a separate section below.

Ind AS brings in a more stringent requirement to maintain component details of fixed assets.

Under AS 16, major overhauling expenses are capitalised with the asset line item and are depreciated till the next scheduled maintenance date unlike AS 10 that requires such costs to be expensed as incurred, unless it increases the future benefits from the existing asset beyond its previously assessed standard of performance and is included in the gross book value.

Elements of cost also include an initial estimate of the **costs of dismantling** and removing the item and **restoring the site** on which it is located, the obligation for which an entity incurs either when the item is acquired or as a consequence of having used the item during a particular period for purposes other than to produce inventories during that period. The value of such provisions is done based on discounted cash flow approach and depreciated over the useful life of the asset. Any change in estimate on account of principal amount would get adjusted in the cost of asset and any change on account of discount rate would be accounted in finance cost.

The major driving factor for component approach comes from the requirement to depreciate the asset over its own useful life. Though the useful life approach exists under Indian GAAP, the Companies Act has been considered more prominent since it forms part of the Statute.

As a convergence step towards IFRS, Revised Schedule VI has been helpful in addressing the conflict between erstwhile hierarchy of application between Schedule VI and Accounting Standards, by giving an upper hand to Accounting Standards. Ministry of Corporate Affairs (MCA) has so far notified Ind ASs, for which implementation date is still to be notified. One may look forward for similar clarification or convergence of Schedule XIV and/or of section 350 of the Act, with Ind AS 16 useful life approach, so that entities can in true spirit converge to Ind AS 16.

It is practically observed that steel plants of SAIL and Tata Steel are more than 30 to 40 years old. These plants require a regular maintenance and can continue longer. Similarly, many refineries in Europe

and US are more than 30 years old as against the derived depreciation rates under Schedule XIV that work out to 18-20 years on SLM basis.

As a point of reference, British Petroleum Plc depreciates its refinery and petroleum assets over a period of upto 30 years. Corus Plc depreciates its steel making facilities upto 25 years under IFRS and Arcelor Mittal Plc has attributed upto 30 years of useful life for its plant & machinery. Both of them have a life more than what is prescribed under the Indian GAAP.

Cost also include an initial estimate of the costs of dismantling and removing the item and restoring the site.

As a reverse impact, items where the useful life under Schedule XIV is likely to be more than its actual useable life, may include electrical machinery, X-ray and electrotherapeutic apparatus and its accessories, medical, diagnostic equipments, namely, cat-scan, ultrasound machines, ECG monitors, etc. that have 20% rate under WDV method and 7.07% under SLM for depreciation. This works out to around 13 years keeping 5% residual value. The actual life of these electronic equipments could be less considering the technology advances and consequential obsolescence.

Assuming Ind AS 16 will get an upper hand in terms of accounting of Fixed assets, it may be expected that the entities could benefit from lower provision for depreciation based on more realistic estimate of useful life of the assets such as power plants, refineries, smelters, etc.

Change in method and rates of depreciation are a change in estimate with prospective application under Ind AS 16.

Another point of difference comes from para 51 and para 61 of Ind AS 16, which provide that the residual value, useful life of an asset as well as the depreciation method shall be reviewed at least at each financial year-end. Such changes are to be accounted for as a change in an

accounting estimate in accordance with Ind AS 8 Accounting Policies, Changes in Accounting Estimates and Errors. Ind AS 8 requires such changes in estimates to be accounted prospectively.

Point to note that change in method and rates of depreciation are a change in estimate with prospective application under Ind AS 16 whereas, under AS 6 it is a change in policy that needs retrospective

application.

Ind AS 16 is self contained, in the sense that it also prescribes the depreciation guidelines on fixed assets unlike the current environment where it is governed by AS 10, AS 6, Schedule XIV and Guidance notes. One may note that, exposure draft of AS 10 (Revised) issued by ICAI before notifying Ind ASs, was also in line with Ind AS 16, and included component approach and provided for calculating depreciation based on estimated useful life.

Component approach

Is component approach of assets required?

Yes, when it is significant. Ind AS 16 does not prescribe a unit measure. However, it requires that each part of an item of property, plant and equipment which has a probability of future economic benefits associated with the item will flow to the entity and the cost of the item can be measured reliably and is significant in relation to the cost of the item shall be depreciated separately. Implicitly, component approach is required under para 43 of Ind AS 16 which requires each significant part of the total asset to be depreciated separately.

How to determine components?

The determination of whether an item is significant requires a careful assessment of the facts and circumstances.

These assessments would include, at a minimum:

- i. comparison of the cost allocated to the component to the total cost of the property, plant and equipment; and
- ii. effect on depreciation expense between component approach and clubbing approach.

Following factors may broadly assist in arriving at component identification:

- **Shut down or major repairs and maintenance.** Shutdown costs are made of replacement of an item and labour cost. Thus, items that require replacement on a regular basis can be identified as separate components. For example, a furnace

may require relining after a specified number of hours of use, or aircraft interiors such as seats and galleys may require replacement several times during the life of the airframe.

- **Useful life estimates of major components at the acquisition date.** Example; it may be appropriate to depreciate separately the airframe and engines of an aircraft.
- **Technical knowhow and obsolescence** may be considered in case of information technology (IT) and electronic equipment. With respect to IT, hardware has a different useful life as compared to software.

Revaluation model

Under Ind AS 16, there are two models of accounting fixed assets, namely 'Historical Cost' model and 'Revaluation' model.

Under AS 10, revaluation of fixed assets is considered as substitution for historical costs and depreciation is calculated accordingly. However, under Ind AS, it is a separate model of accounting. **Once an entity chooses 'Revaluation model', it will be considered as its accounting policy to an entire class of property, plant and equipment.** Revaluation is required to be made with sufficient regularity to ensure that the carrying amount does not differ materially from that which would be determined using fair value at the balance sheet date.

The base fundamental of Ind AS 16 and AS 10 remain the same, i.e. revaluation does not affect the Income Statement, and valuation difference is recognised in reserves, unless the revaluation adjustment decreases the value of asset below its original cost. In such a situation, it would result in a change in profit and loss account which is indirectly an impairment of asset.

However, there is a difference in amortisation impact when it comes to Ind AS 16. The depreciation is calculated on the fair value of the asset and is amortised over the useful life by debiting profit & loss account without taking any credit from the revaluation reserve. It is pertinent to note that, under

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the present Indian GAAP, the entities plough back the reserves in income statement to the extent of additional depreciation and balance if any, at the time of disposal in line with paragraph 11 of the Guidance note as stated below; and thus the debit in profit & loss account is reduced to that extent.

"The Revaluation Reserve is not available for payment of dividends. This view is also supported by the Companies (Declaration of Dividend out of Reserves) Rules, 1975. Similarly, accumulated losses or arrears of depreciation should not be set off against Revaluation Reserve. However, the revaluation reserve can be utilised for adjustment of the additional depreciation on the increased amount due to revaluation from year to year or on the retirement of the relevant fixed assets."(Paragraph 11 from Guidance note on treatment of reserve created on revaluation of fixed assets, issued 1982)

This guidance note will not be applicable once Ind AS is implemented and thus the depreciation charge will increase for the entities that follow Revaluation approach. Additionally, the existing unutilised reserve will get transferred directly to retained earnings instead of being routed through the profit and loss account.

Note: Under Ind AS 12, deferred tax is calculated on all temporary differences. The revaluation adjustment will be considered as a temporary difference and hence the amount that will flow to equity will be net of deferred tax.

Industry Impact Analysis – Ind AS 16 Property Plant & Equipment:

Industry will be impacted due to Component Approach in Ind AS 16. Since the Schedule XIV rates are not split into various parts of heavy duty machinery, companies will have to go through a detailed exercise of breaking down its fixed asset line item into various components and assess each item's independent useful life.

Mining and Construction

Assets in Mining and Construction industry include heavy duty trucks, vehicles, dozers, excavators, loaders & unloaders, tunnelling machinery, etc. These heavy duty machineries are made up of various assembled parts which are high in value and also have a different useful life as compared to the other parts such as chassis, rollers, body,

electrical systems, etc. These items will have to be broken in to their components.

Entities will also have to estimate mine restoration liabilities and capitalise with the initial cost of the mine.

Excerpts from Mining major, Xstrata Plc's Annual Report 2011:

"Where parts of an asset have different useful lives, depreciation is calculated on each separate part. Each asset or part's estimated useful life has due regard to both its own physical life limitations and the present assessment of economically recoverable reserves of the mine property at which the item is located, and to possible future variations in those assessments. Plant & equipment have useful lives from 4-30 years."

"Provision is made for close down, restoration and environmental rehabilitation costs.. ...At the time of establishing the provision, a corresponding asset is capitalised, where it gives rise to a future benefit, and depreciated over future production from the operations to which it relates".

Commodity manufacturing Industry – Crude, Ore, Power

These industries include oil and ore refineries, smelters that are used to melt the ore, and power plants among others. These plants carry huge investments with complex designs and take years to build. They are made of various facilities that can be identified as first level components such as Water treatment, Gas tapping, Conveyors, Turbines, Rooters, Shafts, Grids, Tankages, Ovens, Casters, Moulds, Furnaces, Rolling mills, etc.. More often one component that is left out in the analysis is the Pipelines, which have material value and different useful life.

Second level components will need a detailed analysis of each identified first level component with their individually assessed useful lives. Each unit will need separate line items for identification.

Entities will need to estimate its asset retirement obligations at the time of initial capitalisation.

A Nuclear Power Plant will have to estimate its related decommissioning liabilities and capitalise with power plants.

Another impact will be on account of capital repairs that are incurred during shut down, cell realignment, etc. This will be capitalised under fixed assets and amortised till the next overhauling date.

By virtue of assessment of useful life, entities get a chance to increase the useful life for depreciating the assets to its true useful lives.

Shipping

Main parts of a ship include hull and engine. Further, hull is made up of deck, chassis, propeller,

funnel, stern and super structure. A modern ship includes a fair component of electronic and automatic control systems. Entities will have to carry out a detailed exercise and use its judgement for capitalising each component.

Dry dock expenses in shipping industry which carried out periodically will need capitalisation and amortisation.

Similar to the commodity industry, entities will get a chance to increase the useful life for depreciating the assets to its true useful lives. International peers such as B+H Ocean Carrier Plc have estimated useful life of 30 years for its vessels from the date of construction and capital improvements are amortised over a period of five years.

Major differences between AS and Ind AS on Accounting of Fixed Assets:

Ind AS 16	AS 10 & AS 6
Component approach IAS 16 mandates component accounting. Each major part of an item of property plant and equipment with a cost that is significant in relation to the total cost of the item is depreciated separately.	Component approach is present but is more of recommendatory.
Cost & Revaluation Historical cost or revalued amounts are used. Regular valuations of entire classes of assets are required when revaluation option is chosen.	Historical cost or revalued amounts are used. No specific requirements on frequency of revaluation. Revaluation for the whole class of assets is not required.
Depreciation on Revaluation Depreciation on revalued portion is debited to income statement without recouping out of revaluation reserve.	Depreciation on revalued portion may be recouped out of revaluation reserve, thus reserve reduces over the period and depreciation charge represent the original cost.
Revaluation Reserve Revaluation Reserve is directly transferred to retained earnings on derecognition.	Revaluation Reserve is transferred to Income Statement on derecognition.
Useful Life of PPE Depreciation to be calculated based on useful life.	Depreciation amount is based on useful life of the assets or Schedule XIV rates, whichever is higher.
Major overhauling or Shut down Cost Cost of major inspections and overhauls are recognised in the carrying amount of property, plant & equipment and amortised till next major maintenance date.	Costs of major repairs are expensed when incurred.
Review of Useful Life, Residual Value, Depreciation Method IAS 16 mandates review of useful life, residual value and depreciation method at each year end. It is an estimate and any change is accounted prospectively.	Depreciation method is a policy decision, which can be reviewed only if certain criteria are met. Any change is to be accounted retrospectively.

Hotel Industry

A restaurant maintains a minimum stock of silverware and dishes. Some entities treat cutlery, crockery, linen, etc, as stores and spares and group them under inventory. Any increase or decrease is accounted as consumption in profit and loss account. Moreover, Schedule XIV does not lay down any rate for depreciating such items and hence companies in India adopt inventory and consumption approach to account these items.

For a restaurant, cutlery is similar to a plant, without which it cannot operate. Under Ind AS 6, these items fall into the definition of tangible assets and hence need to be capitalised as such and depreciated based on its useful life. Considering the nature of these assets, the estimation of their useful life may involve a significant amount of judgment. The management should consider factors such as physical wear and tear, commercial obsolescence, asset management policy of an entity that may involve replacement of such assets after a specified period, etc for such assessment. John Keels Hotels Plc, depreciates its Cutlery, Crockery, Glassware & Linen in a period of three years, as per its 2010 annual report.

Way forward:

- (i) It is advisable to start updating the fixed asset records in SAP or any other ERP with major component details. This can be done by opening various sub group codes for the master asset.
- (ii) Any new capitalisation should be based on component approach assessing specific useful life of each component and then applying the aggregate rule.
- (iii) Expect changes or clarifications for section 350 or Schedule XIV or both to avoid conflict with depreciation principles under Ind AS 16.
- (iv) Assessment of useful life and residual value will have to be done by the management on a regular basis.
- (v) Estimate dismantling, decommissioning, restoration liabilities valued at discounted cash flow basis at the beginning and continue to

reassess on a regular basis.

- (vi) Entities following revaluation approach for accounting fixed assets, will be impacted more, as Ind AS 16 does not allow an entity to plough back the reserve in profit and loss account to match the additional depreciation on revaluation. Ind AS 16 will come with first time exemptions under Ind AS 101 and hence entities may decide an appropriate policy when they adopt Ind AS, for the first time.



Authority should be seen as a part of leadership, not as a way around it.

—Michael McKinney



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