



ଓଡ଼ିଶା ଜଳ ବିଦ୍ୟୁତ୍ ନିଗମ ଲିମିଟେଡ୍ ODISHA

NEW OPPORTUNITIES

(ଓଡ଼ିଶା ସରକାରଙ୍କ ଏକ ଉପକ୍ରମ)

ଓଡ଼ିଶା ରାଜ୍ୟ ଆରକ୍ଷା ଗୃହନିର୍ମାଣ ଏବଂ ସମାଜକର୍ମ ନିଗମ ଭବନ, ବାଣାବିହାର ଛକ, ଜନପଥ, ଭୁବନେଶ୍ୱର-୨୨

ଫୋନ: ୯୧-୦୬୭୪-୨୫୪୨୯୮୩, ୨୫୪୨୮୦୨, ୨୫୪୫୫୨୬, ୨୫୪୨୮୨୬, ଫ୍ୟାକ୍: ୨୫୪୨୧୦୨

ODISHA HYDRO POWER CORPORATION LTD.

(A GOVT. OF ODISHA UNDERTAKING)

CIN: U40101OR1995SGC003963

REGD. OFFICE : ODISHA STATE POLICE HOUSING & WELFARE CORPORATION BUILDING, VANIVIHAR CHOUK, JANPATH, BHUBANESWAR-751 022

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By Fax/ Email

File No.: OHPC – OERC – 06/2018 – 290 (WE) Dt. 07.01.2019

To

The Secretary
Odisha Electricity Regulatory Commission,
Bidyut Niyamak Bhawan,
Plot No.-4; Chunokoli, Shailashree Vihar,
Chandrasekharpur, Bhubaneswar- 751021.

Sub: Submission of information on the queries raised relating to the ARR & Tariff application of OHPC for the year 2019-20 (Case No. 69/ 2018).

Ref: Lr. No. 1776 Dtd.27.12.2018 of the Secretary, OERC.

Sir,

Please find enclosed herewith the compliance to the queries relating to the ARR & Tariff application of OHPC for the year 2019-20 in Case No. 69/ 2018. As per the directions, the copy of this compliance is forwarded to the persons who have purchased the ARR application of OHPC for the FY2019-20. This is for your kind information and necessary action please.

Encl: Compliance Note along with Annexure-I to IV.

Yours faithfully,

Director(Finance)

Memo No. 291 (WE) Dt. 07.01.2019.

Copy along with enclosures forwarded to the person/organization for information & necessary action.

- 1) The Director (Commercial), M/s. GRIDCO Ltd., Bhoi Nagar, Janpath, BBSR – 22.
- 2) Shri R. P. Mahapatra, Retd. Chief Engineer & Member (Gen. OSEB), Plot No. 775 (Pl.), Lane-3, Jayadev Vihar, Bhubaneswar – 751013.
- 3) Swain & Sons Power Tech Pvt. Ltd.; K-8, 82, Kalinga Nagar, Ghatikia; Bhubaneswar-751003. E.mail-bcswain@pwrtech.com.

Encl.: As above.

CC:

Director(Finance)

- 1) P.S. to C.M.D. for kind information of the Chairman-cum-Managing Director, OHPC Ltd., Bhubaneswar.
- 2) Dir (Operation), OHPC Ltd for information.

**COMPLIANCE TO THE QUERIES OF SECRETARY, OERC ON ANNUAL REVENUE
REQUIREMENT OF OHPC FOR FY 2019-20**

Reference letter No.1776 dated 27.12.2018 of the Secretary, OERC.

Query No.1: *Month wise cash flow statement (Revenue items only) for FY 2017-18 and FY 2018-19(actual upto November, 2018) may be furnished.*

OHPC COMPLIANCE: The month wise cash flow statement (Revenue items only) for FY 2017-18 and FY 2018-19(actual upto November, 2018) is furnished as Annexure-I.

Query No.2:- *The reservoir level of OHPC power stations as on 20.12.2018 vis-à-vis 20.12.2017 to be furnished along with actual generation up to November, 2018 and anticipated generation up to March, 2019.*

OHPC COMPLIANCE: The Reservoir Level of OHPC Power Stations as on 31.12.18 vis-à-vis on 31.12.17 is given below:

Table-1

Sl. No.	Reservoirs	As on 31.12.2018	As on 31.12.2017
1.	Rengali	117.81 mtr.	122.68 mtr
2.	Kolab	855.11 mtr.	853.79 mtr.
3.	Balimela	1507.90 ft.	1479.20 ft.
4.	Hirakud	625.04 ft.	626.97 ft.
5.	Indravati	638.65 mtr.	635.90 mtr.

The actual generation of different Power Stations under OHPC from 01.04.2018 up to 31.12.2018 and anticipated generation up to 31.03.2019 for the FY 2018-19 prepared on the basis of the availability of water, irrigation requirement and peak load requirement of power in co-ordination with DoE, DoWR, GRIDCO and SLDC is furnished below.

Table-2

Sl. No.	Name of the power stations	Actual generation from 01.04.17 up to 31.12.18 (in MU)	Anticipated generation from 01.01.19 to 31.03.19 based on DoWR & DoE Schedule (in MU)	Total Anticipated generation for the FY 2018-19 based on DoWR & DoE Schedule (in MU)
1.	RHEP	691.2302	86.40	777.6302
2.	UKHEP	715.5229	216.00	931.5229
3.	BHEP	1408.3014	540.00	1948.3014
4.	HHEP	336.766	54.36	391.126
5.	CHEP	132.5497	32.76	165.3097
6.	UIHEP	1668.0801	502.80	2170.8801
Total		4952.4503	1432.32	6384.7703

Query No.3:- *Audited Balance Sheet of OHPC for the FY 2017-18 may be furnished.*

OHPC COMPLIANCE: Audited Balance Sheet of OHPC for the FY 2017-18 is furnished as Annexure-II.

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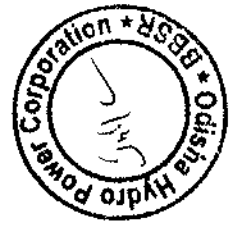
Query No.4:- *The relevant portion of Ind-AS related to its applicability to OHPC may be furnished.*

OHPC COMPLIANCE: The relevant portion of Ind-AS related to its applicability to OHPC is furnished as Annexure-III.

Query NO.5:- *The impact of Ind-AS notification dated 16.02.2015 of Ministry of Corporate Affairs on various components of Annual Fixed Cost for the year FY2019-20 may be furnished.*

OHPC COMPLIANCE: The impact of Ind-AS notification dated 16.02.2015 of Ministry of Corporate Affairs on various components of Annual Fixed Cost for the year FY2019-20 OHPC is furnished as Annexure-IV.


Director(Finance)
OHPC,Ltd



OODISHA HYDRO POWER CORPORATION LIMITED
CASH FLOW STATEMENT FOR THE FY 2017-18

Sl. No.	Cash Inflow	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Total
1	Opening Balance	1119.45	1152.52	1168.57	1185.03	1207.32	1243.26	1212.95	1234.96	1275.01	1302.93	1328.75	1361.55	1119.45
	(i) Receipts from Sale of Power	32.12	29.16	39.97	40.86	44.77	41.03	46.89	51.39	51.17	45.62	30.23	25.51	478.73
	(ii) Reimbursement from GRIDCO	8.07	14.51	2.09	0.05	7.10	0.05	1.40	1.01	0.12	1.02	0.69	0.33	12.87
	(iii) Other income including interest on Term Deposit	7.94	14.51	2.09	0.23	0.69	19.33	5.34	11.15	20.84	24.24	23.27	41.45	171.23
	(iv) Received from GRIDCO on Machkund A/C		0.76		1.98					8.14			2.34	21.17
	(v) Other Loan		20.00				2.00							22.00
	(vi) Equity from Government for GEDCO							19.00						19.00
	Total Cash Inflow	1167.58	1217.53	1211.15	1228.16	1259.89	1305.67	1285.52	1298.52	1365.28	1373.81	1382.95	1431.19	1844.45
2	Cash Outflow													
	(i) Repair & Maintenance including Dam Maintenance	0.88	3.20	3.21	0.82	1.86	8.00	4.68	7.36	6.14	1.97	3.80	1.89	43.82
	(ii) Establishment Expenditure	14.18	13.56	14.81	14.49	14.77	19.68	12.94	12.80	10.88	9.64	11.63	13.41	162.80
	(iii) Payment towards terminal liability		0.11	0.10	2.86		25.00	33.00	3.35					64.42
	(iv) Payment of Income Tax			8.00			25.03			21.47			16.06	70.57
	(v) Payment of APGENCO		12.02		2.67					8.10			2.34	25.14
	(vi) Payment towards construction of Shakti Bhawan.		0.07										10.00	10.07
	(vii) Short Term loan to JV/Associates	20.00				15.00					27.26			35.00
	(viii) Payment of Dividend										5.65			5.55
	(ix) Payment of Dividend Tax													30.23
	(x) Repayment of Bank Loan/ Govt. Loan/Other Loan									2.18	0.20	2.92	11.19	16.49
	(xi) RM & U of HHEP									3.57	0.28	3.04	0.23	7.12
	(xii) RM & U of CHEP										0.15		0.21	0.36
	(xiii) RM & U of BHEP													
	Total Cash Outflow	15.06	48.96	26.12	20.84	16.63	92.72	50.63	23.51	52.35	45.05	21.40	85.57	498.83
	Closing Balance	1152.52	1168.57	1185.03	1207.32	1243.26	1212.95	1234.96	1275.01	1302.93	1328.75	1361.55	1345.63	1345.63

NOTE:
Cash and cash equivalent as per cash flow statement as on 31.03.2018
Add: FD maturity period more than 12 months as per Note-7
Add: FD maturity period having 3 to 12 months as per Note-12
TOTAL as on 31.03.2018

Sl. No.	Cash Inflow	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Total	Rs. (Cr)
1	Opening Balance	1345.63	1332.28	1355.10	1371.10	1395.07	1457.46	1338.33	1342.68	1345.63	1345.63	15.18
	(i) Receipts from Sale of Power	28.78	27.15	34.39	38.62	83.40	0.29	31.00	47.79	291.42	291.42	387.62
	(ii) Reimbursement from GRIDCO	0.71	0.18	0.92	10.62	1.15	0.91	0.58	1.37	16.43	16.43	
	(iii) Other Income including interest on Term Deposit	5.71	2.31	9.92	2.51	2.60	14.30	8.11	4.02	49.49	49.49	
	(iv) Received from GRIDCO on Machkund A/C	2.41		1.08						3.49	3.49	
	(v) Other Loan / Grant PSDF		2.24							2.24	2.24	
	Total Cash Inflow	1383.24	1364.14	1401.41	1422.85	1482.22	1472.96	1376.01	1395.86	1708.69	1708.69	
2	Cash Outflow											
	(i) Repair & Maintenance including Dam Maintenance	26.37	0.92	1.13	2.57	1.95	1.63	0.93	1.22	36.72	36.72	
	(ii) Establishment Expenditure	16.43	8.13	18.13	16.28	14.65	15.82	29.15	33.58	152.17	152.17	
	(iii) Payment towards terminal liability						97.17			97.17	97.17	
	(iv) Payment of Income Tax			6.71			18.93			25.64	25.64	
	(v) Payment of APGENCO	2.41			1.08					3.49	3.49	
	(vi) RM & U of HHEP	5.75		3.71	5.22	6.94	0.59	2.30	0.85	25.36	25.36	
	(vii) RM & U of CHEP			0.37	2.40	1.22	2.50	0.66	1.50	8.65	8.65	
	(viii) RM & U of BHEP				0.23			0.29		0.52	0.52	
	(ix) Payment against PSDF Grant			0.26						0.26	0.26	
	Total Cash Outflow	50.97	9.05	30.31	27.78	24.76	136.63	33.33	37.14	349.97	349.97	
	Closing Balance	1332.28	1355.10	1371.10	1395.07	1457.46	1336.33	1342.68	1358.72	1358.72	1358.72	

Annexure-II

Query No.3

The audited balance sheet for the FY 2017-18 has already been furnished vide Page No.131 to 197 of the list of Annexure to the Tariff Application of OHPC for the FY 2019-20.



Query No.4

The IND-AS Notification dtd.16.02.2015 of Ministry of Corporate Affairs has already been submitted in the Tariff Application of OHPC for the FY 2018-19. However as required the relevant portion of the IND-AS applicable to OHPC is enclosed for your kind reference.



Indian Accounting Standard (Ind AS) 2

Inventories

(This Indian Accounting Standard includes paragraphs set in bold type and plain type, which have equal authority. Paragraphs in bold italic type indicate the main principles.)

Objective

- 1 The objective of this Standard is to prescribe the accounting treatment for inventories. A primary issue in accounting for inventories is the amount of cost to be recognised as an asset and carried forward until the related revenues are recognised. This Standard deals with the determination of cost and its subsequent recognition as an expense, including any write-down to net realisable value. It also provides guidance on the cost formulas that are used to assign costs to inventories.

Scope

- 2 This Standard applies to all inventories, except:
- (a) [Refer Appendix 1]
 - (b) financial instruments (Ind AS 32, *Financial Instruments: Presentation* and Ind AS 109, *Financial Instruments and*); and
 - (c) biological assets (ie living animals or plants) related to agricultural activity and agricultural produce at the point of harvest (See Ind AS 41, *Agriculture*).
- 3 This Standard does not apply to the measurement of inventories held by:
- (a) producers of agricultural and forest products, agricultural produce after harvest, and minerals and mineral products, to the extent that they are measured at net realisable value in accordance with well-established practices in those industries. When such inventories are measured at net realisable value, changes in that value are recognised in profit or loss in the period of the change.
 - (b) commodity broker-traders who measure their inventories at fair value less costs to sell. When such inventories are measured at fair value less costs to sell, changes in fair value less costs to sell are recognised in profit or loss in the period of the change.

- 4 The inventories referred to in paragraph 3(a) are measured at net realisable value at certain stages of production. This occurs, for example, when agricultural crops have been harvested or minerals have been extracted and sale is assured under a forward contract or a government guarantee, or when an active market exists and there is a negligible risk of failure to sell. These inventories are excluded from only the measurement requirements of this Standard.
- 5 Broker-traders are those who buy or sell commodities for others or on their own account. The inventories referred to in paragraph 3(b) are principally acquired with the purpose of selling in the near future and generating a profit from fluctuations in price or broker-traders' margin. When these inventories are measured at fair value less costs to sell, they are excluded from only the measurement requirements of this Standard.

Definitions

- 6 **The following terms are used in this Standard with the meanings specified:**

Inventories are assets:

- (a) **held for sale in the ordinary course of business;**
- (b) **in the process of production for such sale; or**
- (c) **in the form of materials or supplies to be consumed in the production process or in the rendering of services.**

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. (See Ind AS 113, *Fair Value Measurement*.)

- 7 Net realisable value refers to the net amount that an entity expects to realise from the sale of inventory in the ordinary course of business. Fair value reflects the price at which an orderly transaction to sell the same inventory in the principal (or most advantageous) market for that inventory would take place between market participants at the measurement date. The former is an entity-specific value; the latter is not. Net realisable value for inventories may not equal fair value less costs to sell.
- 8 Inventories encompass goods purchased and held for resale including, for example, merchandise purchased by a retailer and held for resale, or land and

other property held for resale. Inventories also encompass finished goods produced, or work in progress being produced, by the entity and include materials and supplies awaiting use in the production process.) Costs incurred to fulfil a contract with a customer that do not give rise to inventories (or assets within the scope of another Standard) are accounted for in accordance with Ind AS 115, *Revenue from Contracts with Customers*.

Measurement of inventories

9 Inventories shall be measured at the lower of cost and net realisable value.

Cost of inventories

10 The cost of inventories shall comprise all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

Costs of purchase

11 The costs of purchase of inventories comprise the purchase price, import duties and other taxes (other than those subsequently recoverable by the entity from the taxing authorities), and transport, handling and other costs directly attributable to the acquisition of finished goods, materials and services. Trade discounts, rebates and other similar items are deducted in determining the costs of purchase.

Costs of conversion

12 The costs of conversion of inventories include costs directly related to the units of production, such as direct labour. They also include a systematic allocation of fixed and variable production overheads that are incurred in converting materials into finished goods. Fixed production overheads are those indirect costs of production that remain relatively constant regardless of the volume of production, such as depreciation and maintenance of factory buildings and equipment, and the cost of factory management and administration. Variable production overheads are those indirect costs of production that vary directly, or nearly directly, with the volume of production, such as indirect materials and indirect labour.

13 The allocation of fixed production overheads to the costs of conversion is based on the normal capacity of the production facilities. Normal capacity is the production expected to be achieved on average over a number of periods or seasons under normal circumstances, taking into account the loss of capacity resulting from planned maintenance. The actual level of production may be used if it approximates normal capacity. The amount of fixed overhead allocated to each unit of production is not increased as a consequence of low production or idle plant. Unallocated overheads are recognised as an expense in the period in which they are incurred. In periods of abnormally high production, the amount of fixed overhead allocated to each unit of production

is decreased so that inventories are not measured above cost. Variable production overheads are allocated to each unit of production on the basis of the actual use of the production facilities.

- 14 A production process may result in more than one product being produced simultaneously. This is the case, for example, when joint products are produced or when there is a main product and a by-product. When the costs of conversion of each product are not separately identifiable, they are allocated between the products on a rational and consistent basis. The allocation may be based, for example, on the relative sales value of each product either at the stage in the production process when the products become separately identifiable, or at the completion of production. Most by-products, by their nature, are immaterial. When this is the case, they are often measured at net realisable value and this value is deducted from the cost of the main product. As a result, the carrying amount of the main product is not materially different from its cost.

Other costs

- 15 Other costs are included in the cost of inventories only to the extent that they are incurred in bringing the inventories to their present location and condition. For example, it may be appropriate to include non-production overheads or the costs of designing products for specific customers in the cost of inventories.
- 16 Examples of costs excluded from the cost of inventories and recognised as expenses in the period in which they are incurred are:
- (a) abnormal amounts of wasted materials, labour or other production costs;
 - (b) storage costs, unless those costs are necessary in the production process before a further production stage;
 - (c) administrative overheads that do not contribute to bringing inventories to their present location and condition; and
 - (d) selling costs.
- 17 Ind AS 23, *Borrowing Costs*, identifies limited circumstances where borrowing costs are included in the cost of inventories.
- 18 An entity may purchase inventories on deferred settlement terms. When the arrangement effectively contains a financing element, that element, for example a difference between the purchase price for normal credit terms and the amount paid, is recognised as interest expense over the period of the financing.

Cost of inventories of a service provider

19 [Refer Appendix I]

Cost of agricultural produce harvested from biological assets

- 20 In accordance with Ind AS 41, *Agriculture*, inventories comprising agricultural produce that an entity has harvested from its biological assets are measured on initial recognition at their fair value less costs to sell at the point of harvest. This is the cost of the inventories at that date for application of this Standard.

Techniques for the measurement of cost

- 21 Techniques for the measurement of the cost of inventories, such as the standard cost method or the retail method, may be used for convenience if the results approximate cost. Standard costs take into account normal levels of materials and supplies, labour, efficiency and capacity utilisation. They are regularly reviewed and, if necessary, revised in the light of current conditions.
- 22 The retail method is often used in the retail industry for measuring inventories of large numbers of rapidly changing items with similar margins for which it is impracticable to use other costing methods. The cost of the inventory is determined by reducing the sales value of the inventory by the appropriate percentage gross margin. The percentage used takes into consideration inventory that has been marked down to below its original selling price. An average percentage for each retail department is often used.

Cost Formulas

- 23 The cost of inventories of items that are not ordinarily interchangeable and goods or services produced and segregated for specific projects shall be assigned by using specific identification of their individual costs.
- 24 Specific identification of cost means that specific costs are attributed to identified items of inventory. This is the appropriate treatment for items that are segregated for a specific project, regardless of whether they have been bought or produced. However, specific identification of costs is inappropriate when there are large numbers of items of inventory that are ordinarily interchangeable. In such circumstances, the method of selecting those items that remain in inventories could be used to obtain predetermined effects on profit or loss.
- 25 **The cost of inventories, other than those dealt with in paragraph 23, shall be assigned by using the first-in, first-out (FIFO) or weighted average cost formula. An entity shall use the same cost formula for all inventories having a similar nature and use to the entity. For inventories with a different nature or use, different cost formulas may be justified.**
- 26 For example, inventories used in one operating segment may have a use to the entity different from the same type of inventories used in another operating segment. However, a difference in geographical location of inventories (or in

the respective tax rules), by itself, is not sufficient to justify the use of different cost formulas.

- 27 The FIFO formula assumes that the items of inventory that were purchased or produced first are sold first, and consequently the items remaining in inventory at the end of the period are those most recently purchased or produced. Under the weighted average cost formula, the cost of each item is determined from the weighted average of the cost of similar items at the beginning of a period and the cost of similar items purchased or produced during the period. The average may be calculated on a periodic basis, or as each additional shipment is received, depending upon the circumstances of the entity.

Net realisable value

- 28 The cost of inventories may not be recoverable if those inventories are damaged, if they have become wholly or partially obsolete, or if their selling prices have declined. The cost of inventories may also not be recoverable if the estimated costs of completion or the estimated costs to be incurred to make the sale have increased. The practice of writing inventories down below cost to net realisable value is consistent with the view that assets should not be carried in excess of amounts expected to be realised from their sale or use.
- 29 Inventories are usually written down to net realisable value item by item. In some circumstances, however, it may be appropriate to group similar or related items. This may be the case with items of inventory relating to the same product line that have similar purposes or end uses, are produced and marketed in the same geographical area, and cannot be practicably evaluated separately from other items in that product line. It is not appropriate to write inventories down on the basis of a classification of inventory, for example, finished goods, or all the inventories in a particular operating segment.
- 30 Estimates of net realisable value are based on the most reliable evidence available at the time the estimates are made, of the amount the inventories are expected to realise. These estimates take into consideration fluctuations of price or cost directly relating to events occurring after the end of the period to the extent that such events confirm conditions existing at the end of the period.
- 31 Estimates of net realisable value also take into consideration the purpose for which the inventory is held. For example, the net realisable value of the quantity of inventory held to satisfy firm sales or service contracts is based on the contract price. If the sales contracts are for less than the inventory quantities held, the net realisable value of the excess is based on general selling prices. Provisions may arise from firm sales contracts in excess of inventory quantities held or from firm purchase contracts. Such provisions are dealt with under Ind AS 37, *Provisions, Contingent Liabilities and Contingent Assets*.
- 32 Materials and other supplies held for use in the production of inventories are not written down below cost if the finished products in which they will be

incorporated are expected to be sold at or above cost. However, when a decline in the price of materials indicates that the cost of the finished products exceeds net realisable value, the materials are written down to net realisable value. In such circumstances, the replacement cost of the materials may be the best available measure of their net realisable value.

- 33 A new assessment is made of net realisable value in each subsequent period. When the circumstances that previously caused inventories to be written down below cost no longer exist or when there is clear evidence of an increase in net realisable value because of changed economic circumstances, the amount of the write-down is reversed (ie the reversal is limited to the amount of the original write-down) so that the new carrying amount is the lower of the cost and the revised net realisable value. This occurs, for example, when an item of inventory that is carried at net realisable value, because its selling price has declined, is still on hand in a subsequent period and its selling price has increased.

Recognition as an expense

- 34 When inventories are sold, the carrying amount of those inventories shall be recognised as an expense in the period in which the related revenue is recognised. The amount of any write-down of inventories to net realisable value and all losses of inventories shall be recognised as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories, arising from an increase in net realisable value, shall be recognised as a reduction in the amount of inventories recognised as an expense in the period in which the reversal occurs.
- 35 Some inventories may be allocated to other asset accounts, for example, inventory used as a component of self-constructed property, plant or equipment. Inventories allocated to another asset in this way are recognised as an expense during the useful life of that asset.

Disclosure

- 36 The financial statements shall disclose:
- (a) the accounting policies adopted in measuring inventories, including the cost formula used;
 - (b) the total carrying amount of inventories and the carrying amount in classifications appropriate to the entity;
 - (c) the carrying amount of inventories carried at fair value less costs to sell;

- (d) the amount of inventories recognised as an expense during the period;
- (e) the amount of any write-down of inventories recognised as an expense in the period in accordance with paragraph 34;
- (f) the amount of any reversal of any write-down that is recognised as a reduction in the amount of inventories recognised as expense in the period in accordance with paragraph 34;
- (g) the circumstances or events that led to the reversal of a write-down of inventories in accordance with paragraph 34; and
- (h) the carrying amount of inventories pledged as security for liabilities.

37 Information about the carrying amounts held in different classifications of inventories and the extent of the changes in these assets is useful to financial statement users. Common classifications of inventories are merchandise, production supplies, materials, work in progress and finished goods.

38 [Refer Appendix 1]

39 An entity adopts a format for profit or loss that results in amounts being disclosed other than the cost of inventories recognised as an expense during the period. Under this format, the entity presents an analysis of expenses using a classification based on the nature of expenses. In this case, the entity discloses the costs recognised as an expense for raw materials and consumables, labour costs and other costs together with the amount of the net change in inventories for the period.

Appendix A

References to matters contained in other Indian Accounting Standards

This Appendix is an integral part of the Ind AS.

This appendix lists the appendix which is a part of another Indian Accounting Standard and makes reference to Ind AS 2, *Inventories*.

- 1 Appendix A, *Intangible Assets-Web site Costs*, contained in Ind AS 38, *Intangible Assets*.
- 2 Appendix B, *Stripping Costs in the Production Phase of a Surface Mine*, contained in Ind AS 16, *Property, Plant and Equipment*.

Appendix 1

Note: This Appendix is not a part of the Indian Accounting Standard. The purpose of this Appendix is only to bring out the major differences, if any, between Indian Accounting Standard (Ind AS) 2 and the corresponding International Accounting Standard (IAS) 2, Inventories, issued by the International Accounting Standards Board.

Comparison with IAS 2, *Inventories*

- 1 Paragraph 38 of IAS 2 dealing with recognition of inventories as an expense based on function-wise classification, has been deleted keeping in view the fact that option provided in IAS 1 to present an analysis of expenses recognised in profit or loss using a classification based on their function within the entity has been removed and Ind AS 1 requires only nature-wise classification of expenses. However, in order to maintain consistency with paragraph numbers of IAS 2, the paragraph number is retained in Ind AS 2.
- 2 Following paragraph numbers appear as 'Deleted' in IAS 2. In order to maintain consistency with paragraph numbers of IAS 2, the paragraph numbers are retained in Ind AS 2:
 - (i) Paragraph 2(a)
 - (ii) Paragraph 19.

Indian Accounting Standard (Ind AS) 16

Property, Plant and Equipment

(This Indian Accounting Standard includes paragraphs set in bold type and plain type, which have equal authority. Paragraphs in bold type indicate the main principles.)

Objective

- 1 The objective of this Standard is to prescribe the accounting treatment for property, plant and equipment so that users of the financial statements can discern information about an entity's investment in its property, plant and equipment and the changes in such investment. The principal issues in accounting for property, plant and equipment are the recognition of the assets, the determination of their carrying amounts and the depreciation charges and impairment losses to be recognised in relation to them.

Scope

- 2 **This Standard shall be applied in accounting for property, plant and equipment except when another Standard requires or permits a different accounting treatment.**
- 3 This Standard does not apply to:
- (a) property, plant and equipment classified as held for sale in accordance with Ind AS 105, *Non-current Assets Held for Sale and Discontinued Operations*.
 - (b) biological assets related to agricultural activity other than bearer plants (See Ind AS 41, *Agriculture*). This Standard applies to bearer plants but it does not apply to the produce on bearer plants.
 - (c) the recognition and measurement of exploration and evaluation assets (see Ind AS 106, *Exploration for and Evaluation of Mineral Resources*).
 - (d) mineral rights and mineral reserves such as oil, natural gas and similar non-regenerative resources.

However, this Standard applies to property, plant and equipment used to develop or maintain the assets described in (b)–(d).

- 4 Other Indian Accounting Standards may require recognition of an item of property, plant and equipment based on an approach different from that in this Standard. For example, Ind AS 17, *Leases*, requires an entity to evaluate its recognition of an item of leased property, plant and equipment on the basis of the transfer of risks and rewards. However, in such cases other aspects of the accounting treatment for these assets, including depreciation, are prescribed by this Standard.
- 5 An entity accounting for investment property in accordance with Ind AS 40, *Investment Property*, shall use the cost model in this Standard.

Definitions

- 6 The following terms are used in this Standard with the meanings specified:

A bearer plant is a living plant that:

- (a) is used in the production or supply of agricultural produce;
- (b) is expected to bear produce for more than one period; and
- (c) has a remote likelihood of being sold as agricultural produce, except for incidental scrap sales.

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

*Cost is the amount of cash or cash equivalents paid or the fair value of the other consideration given to acquire an asset at the time of its acquisition or construction or, where applicable, the amount attributed to that asset when initially recognised in accordance with the specific requirements of other Indian Accounting Standards, eg Ind AS 102, *Share-based Payment*.*

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

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

Entity-specific value is the present value of the cash flows an entity expects to arise from the continuing use of an asset and from its disposal at the end of its useful life or expects to incur when settling a liability.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. (See Ind AS 113, *Fair Value Measurement*.)

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

Property, plant and equipment are tangible items that:

- (a) are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes; and
- (b) are expected to be used during more than one period.

Recoverable amount is the higher of an asset's fair value less costs to sell and its value in use.

The *residual value* of an asset is the estimated amount that an entity 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.

Useful life is:

- (a) the period over which an asset is expected to be available for use by an entity; or
- (b) the number of production or similar units expected to be obtained from the asset by an entity.

Recognition

- 7 The cost of an item of property, plant and equipment shall be recognised as an asset if, and only if:
- (a) it is probable that future economic benefits associated with the item will flow to the entity; and
 - (b) the cost of the item can be measured reliably.
- 8 . Items such as spare parts, stand-by equipment and servicing equipment are recognised in accordance with this Ind AS when they meet the definition of property, plant and equipment. Otherwise, such items are classified as inventory.

- 9 This Standard does not prescribe the unit of measure for recognition, ie what constitutes an item of property, plant and equipment. Thus, 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.
- 10 An entity evaluates under this recognition principle all its property, plant and equipment costs at the time they are incurred. These costs include costs incurred initially to acquire or construct an item of property, plant and equipment and costs incurred subsequently to add to, replace part of, or service it.

Initial costs

- 11 Items of property, plant and equipment may be acquired for safety or environmental reasons. The acquisition of such property, plant and equipment, although not directly increasing the future economic benefits of any particular existing item of property, plant and equipment, may be necessary for an entity to obtain the future economic benefits from its other assets. Such items of property, plant and equipment qualify for recognition as assets because they enable an entity to derive future economic benefits from related assets in excess of what could be derived had those items not been acquired. For example, a chemical manufacturer may install new chemical handling processes to comply with environmental requirements for the production and storage of dangerous chemicals; related plant enhancements are recognised as an asset because without them the entity is unable to manufacture and sell chemicals. However, the resulting carrying amount of such an asset and related assets is reviewed for impairment in accordance with Ind AS 36, *Impairment of Assets*.

Subsequent costs

- 12 Under the recognition principle in paragraph 7, an entity does not recognise in the carrying amount of an item of property, plant and equipment the costs of the day-to-day servicing of the item. Rather, these costs are recognised in profit or loss as incurred. Costs of day-to-day servicing are primarily the costs of labour and consumables, and may include the cost of small parts. The purpose of these expenditures is often described as for the 'repairs and maintenance' of the item of property, plant and equipment.
- 13 Parts of some items of property, plant and equipment may require replacement at regular intervals. 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. Items of property, plant and equipment may also be acquired to make a less frequently recurring replacement, such as replacing the interior walls of a building, or to make a nonrecurring replacement. 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 (see paragraphs 67–72).

- 14 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 recognised 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 the previous inspection (as distinct from physical parts) is derecognised. This occurs regardless of whether the cost of the previous inspection was identified in the transaction in which the item was acquired or constructed. 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 when the item was acquired or constructed.

Measurement at recognition

- 15 An item of property, plant and equipment that qualifies for recognition as an asset shall be measured at its cost.

Elements of cost

- 16 The cost of an item of property, plant and equipment comprises:
- (a) its purchase price, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates.
 - (b) 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.
 - (c) the 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.
- 17 Examples of directly attributable costs are:

- (a) costs of employee benefits (as defined in Ind AS 19, *Employee Benefits*) arising directly from the construction or acquisition of the item of property, plant and equipment;
 - (b) costs of site preparation;
 - (c) initial delivery and handling costs;
 - (d) installation and assembly costs;
 - (e) costs of testing whether the asset is functioning properly, after deducting the net proceeds from selling any items produced while bringing the asset to that location and condition (such as samples produced when testing equipment); and
 - (f) professional fees.
- 18 An entity applies Ind AS 2, *Inventories*, to the costs of obligations for dismantling, removing and restoring the site on which an item is located that are incurred during a particular period as a consequence of having used the item to produce inventories during that period. The obligations for costs accounted for in accordance with Ind AS 2 or Ind AS 16 are recognised and measured in accordance with Ind AS 37, *Provisions, Contingent Liabilities and Contingent Assets*.
- 19 Examples of costs that are not costs of an item of property, plant and equipment are:
- (a) costs of opening a new facility;
 - (b) costs of introducing a new product or service (including costs of advertising and promotional activities);
 - (c) costs of conducting business in a new location or with a new class of customer (including costs of staff training); and
 - (d) administration and other general overhead costs.
- 20 Recognition of costs in the carrying amount of an item of property, plant and equipment ceases when the item is in the location and condition necessary for it to be capable of operating in the manner intended by management. Therefore, costs incurred in using or redeploying an item are not included in the carrying amount of that item. For example, the following costs are not included in the carrying amount of an item of property, plant and equipment:

- (a) costs incurred while an item capable of operating in the manner intended by management has yet to be brought into use or is operated at less than full capacity;
 - (b) initial operating losses, such as those incurred while demand for the item's output builds up; and
 - (c) costs of relocating or reorganising part or all of an entity's operations.
- 21 Some operations occur in connection with the construction or development of an item of property, plant and equipment, but are not necessary to bring the item to the location and condition necessary for it to be capable of operating in the manner intended by management. These incidental operations may occur before or during the construction or development activities. For example, income may be earned through using a building site as a car park until construction starts. Because incidental operations are not necessary to bring an item to the location and condition necessary for it to be capable of operating in the manner intended by management, the income and related expenses of incidental operations are recognised in profit or loss and included in their respective classifications of income and expense.
- 22 The cost of a self-constructed asset is determined using the same principles as for an acquired asset. If an entity makes similar assets for sale in the normal course of business, the cost of the asset is usually the same as the cost of constructing an asset for sale (see Ind AS 2). Therefore, any internal profits are eliminated in arriving at such costs. Similarly, the cost of abnormal amounts of wasted material, labour, or other resources incurred in self-constructing an asset is not included in the cost of the asset. Ind AS 23, *Borrowing Costs*, establishes criteria for the recognition of interest as a component of the carrying amount of a self-constructed item of property, plant and equipment.
- 22A Bearer plants are accounted for in the same way as self-constructed items of property, plant and equipment before they are in the location and condition necessary to be capable of operating in the manner intended by management. Consequently, references to 'construction' in this Standard should be read as covering activities that are necessary to cultivate the bearer plants before they are in the location and condition necessary to be capable of operating in the manner intended by management.

Measurement of cost

- 23 The cost of an item of property, plant and equipment is the cash price equivalent at the recognition date. If payment is deferred beyond normal credit terms, the

difference between the cash price equivalent and the total payment is recognised as interest over the period of credit unless such interest is capitalised in accordance with Ind AS 23.

- 24 One or more items of property, plant and equipment may be acquired in exchange for a non-monetary asset or assets, or a combination of monetary and non-monetary assets. The following discussion refers simply to an exchange of one non-monetary asset for another, but it also applies to all exchanges described in the preceding sentence. The cost of such an item of property, plant and equipment is measured at fair value unless (a) the exchange transaction lacks commercial substance or (b) the fair value of neither the asset received nor the asset given up is reliably measurable. The acquired item is measured in this way even if an entity cannot immediately derecognise the asset given up. If the acquired item is not measured at fair value, its cost is measured at the carrying amount of the asset given up.
- 25 An entity determines whether an exchange transaction has commercial substance by considering the extent to which its future cash flows are expected to change as a result of the transaction. An exchange transaction has commercial substance if:
- (a) the configuration (risk, timing and amount) of the cash flows of the asset received differs from the configuration of the cash flows of the asset transferred; or
 - (b) the entity-specific value of the portion of the entity's operations affected by the transaction changes as a result of the exchange; and
 - (c) the difference in (a) or (b) is significant relative to the fair value of the assets exchanged.

For the purpose of determining whether an exchange transaction has commercial substance, the entity-specific value of the portion of the entity's operations affected by the transaction shall reflect post-tax cash flows. The result of these analyses may be clear without an entity having to perform detailed calculations.

- 26 The fair value of an asset is reliably measurable if (a) the variability in the range of reasonable fair value measurements is not significant for that asset or (b) the probabilities of the various estimates within the range can be reasonably assessed and used when measuring fair value. If an entity is able to measure reliably the fair value of either the asset received or the asset given up, then the fair value of the asset given up is used to measure the cost of the asset received unless the fair value of the asset received is more clearly evident.
- 27 The cost of an item of property, plant and equipment held by a lessee under a finance lease is determined in accordance with Ind AS 17.

28 [Refer Appendix I].

Measurement after recognition

29 An entity shall choose either the cost model in paragraph 30 or the revaluation model in paragraph 31 as its accounting policy and shall apply that policy to an entire class of property, plant and equipment.

Cost model

30 After recognition as an asset, an item of property, plant and equipment shall be carried at its cost less any accumulated depreciation and any accumulated impairment losses.

Revaluation model

31 After recognition as an asset, an item of property, plant and equipment whose fair value can be measured reliably shall be carried at a revalued amount, being its fair value at the date of the revaluation less any subsequent accumulated depreciation and subsequent accumulated impairment losses. Revaluations shall 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 end of the reporting period.

32 [Refer Appendix I].

33 [Refer Appendix I].

34 The frequency of revaluations depends upon the changes in fair values of the items of property, plant and equipment being revalued. When the fair value of a revalued asset differs materially from its carrying amount, a further revaluation is required. Some items of property, plant and equipment experience significant and volatile changes in fair value, thus necessitating annual revaluation. Such frequent revaluations are unnecessary for items of property, plant and equipment with only insignificant changes in fair value. Instead, it may be necessary to revalue the item only every three or five years.

35 When an item of property, plant and equipment is revalued, the carrying amount of that asset is adjusted to the revalued amount. At the date of the revaluation, the asset is treated in one of the following ways:

- (a) the gross carrying amount is adjusted in a manner that is consistent with the revaluation of the carrying amount of the asset. For example, the gross carrying amount may be restated by reference to observable market data or it may be restated proportionately to the change in the carrying amount. The accumulated depreciation at the date of the revaluation is adjusted to equal the difference between the gross carrying amount and the carrying amount of the asset after taking into account accumulated impairment losses; or
- (b) the accumulated depreciation is eliminated against the gross carrying amount of the asset.

The amount of the adjustment of accumulated depreciation forms part of the increase or decrease in carrying amount that is accounted for in accordance with paragraphs 39 and 40.

36 If an item of property, plant and equipment is revalued, the entire class of property, plant and equipment to which that asset belongs shall be revalued.

37 A class of property, plant and equipment is a grouping of assets of a similar nature and use in an entity's operations. The following are examples of separate classes:

- (a) land;
- (b) land and buildings;
- (c) machinery;
- (d) ships;
- (e) aircraft;
- (f) motor vehicles;
- (g) furniture and fixtures;
- (h) office equipment; and
- (i) bearer plants.

38 The items within a class of property, plant and equipment are revalued simultaneously to avoid selective revaluation of assets and the reporting of amounts in the financial statements that are a mixture of costs and values as at different dates. However, a class of assets may be revalued on a rolling basis provided revaluation of the class of assets is completed within a short period and provided the revaluations are kept up to date.

- 39 If an asset's carrying amount is increased as a result of a revaluation, the increase shall be recognised in other comprehensive income and accumulated in equity under the heading of revaluation surplus. However, the increase shall be recognised in profit or loss to the extent that it reverses a revaluation decrease of the same asset previously recognised in profit or loss.
- 40 If an asset's carrying amount is decreased as a result of a revaluation, the decrease shall be recognised in profit or loss. However, the decrease shall be recognised in other comprehensive income to the extent of any credit balance existing in the revaluation surplus in respect of that asset. The decrease recognised in other comprehensive income reduces the amount accumulated in equity under the heading of revaluation surplus.
- 41 The revaluation surplus included in equity in respect of an item of property, plant and equipment may be transferred directly to retained earnings when the asset is derecognised. This may involve transferring the whole of the surplus when the asset is retired or disposed of. However, some of the surplus may be transferred as the asset is used by an entity. In such a case, the amount of the surplus transferred would be the difference between depreciation based on the revalued carrying amount of the asset and depreciation based on the asset's original cost. Transfers from revaluation surplus to retained earnings are not made through profit or loss.
- 42 The effects of taxes on income, if any, resulting from the revaluation of property, plant and equipment are recognised and disclosed in accordance with Ind AS 12, *Income Taxes*.

Depreciation

- 43 **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.**
- 44 An entity allocates the amount initially recognised in respect of an item of property, plant and equipment to its significant parts and depreciates separately each such part. For example, it may be appropriate to depreciate separately the airframe and engines of an aircraft, whether owned or subject to a finance lease. Similarly, if an entity acquires property, plant and equipment subject to an operating lease in which it is the lessor, it may be appropriate to depreciate separately amounts reflected in the cost of that item that are attributable to favourable or unfavourable lease terms relative to market terms.
- 45 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.

- 46 To the extent that an entity depreciates separately some parts of an item of property, plant and equipment, it also depreciates separately the remainder of the item. The remainder consists of the parts of the item that are individually not significant. If an entity has varying expectations for these parts, approximation techniques may be necessary to depreciate the remainder in a manner that faithfully represents the consumption pattern and/or useful life of its parts.
- 47 An entity may choose to depreciate separately the parts of an item that do not have a cost that is significant in relation to the total cost of the item.
- 48 **The depreciation charge for each period shall be recognised in profit or loss unless it is included in the carrying amount of another asset.**
- 49 The depreciation charge for a period is usually recognised in profit or loss. However, sometimes, the future economic benefits embodied in an asset are absorbed in producing other assets. In this case, the depreciation charge constitutes part of the cost of the other asset and is included in its carrying amount. For example, the depreciation of manufacturing plant and equipment is included in the costs of conversion of inventories (see Ind AS 2). Similarly, depreciation of property, plant and equipment used for development activities may be included in the cost of an intangible asset recognised in accordance with Ind AS 38, *Intangible Assets*.

Depreciable amount and depreciation period

- 50 **The depreciable amount of an asset shall be allocated on a systematic basis over its useful life.**
- 51 **The residual value and the useful life of an asset shall be reviewed at least at each financial year-end and, if expectations differ from previous estimates, the change(s) shall be accounted for as a change in an accounting estimate in accordance with Ind AS 8, *Accounting Policies, Changes in Accounting Estimates and Errors*.**
- 52 Depreciation is recognised even if the fair value of the asset exceeds its carrying amount, as long as the asset's residual value does not exceed its carrying amount. Repair and maintenance of an asset do not negate the need to depreciate it.
- 53 The depreciable amount of an asset is determined after deducting its residual value. In practice, the residual value of an asset is often insignificant and therefore immaterial in the calculation of the depreciable amount.
- 54 The residual value of an asset may increase to an amount equal to or greater than the asset's carrying amount. If it does, the asset's depreciation charge is zero

unless and until its residual value subsequently decreases to an amount below the asset's carrying amount.

- 55 Depreciation of an asset begins when it is available for use, ie when it is in the location and condition necessary for it to be capable of operating in the manner intended by management. Depreciation of an asset ceases at the earlier of the date that the asset is classified as held for sale (or included in a disposal group that is classified as held for sale) in accordance with Ind AS 105 and the date that the asset is derecognised. Therefore, depreciation does not cease when the asset becomes idle or is retired from active use unless the asset is fully depreciated. However, under usage methods of depreciation the depreciation charge can be zero while there is no production.
- 56 The future economic benefits embodied in an asset are consumed by an entity principally through its use. However, other factors, such as technical or commercial obsolescence and wear and tear while an asset remains idle, often result in the diminution of the economic benefits that might have been obtained from the asset. Consequently, all the following factors are considered in determining the useful life of an asset:
- (a) expected usage of the asset. Usage is assessed by reference to the asset's expected capacity or physical output.
 - (b) expected physical wear and tear, which depends on operational factors such as the number of shifts for which the asset is to be used and the repair and maintenance programme, and the care and maintenance of the asset while idle.
 - (c) technical or commercial obsolescence arising from changes or improvements in production, or from a change in the market demand for the product or service output of the asset. Expected future reductions in the selling price of an item that was produced using an asset could indicate the expectation of technical or commercial obsolescence of the asset, which, in turn, might reflect a reduction of the future economic benefits embodied in the asset.
 - (d) legal or similar limits on the use of the asset, such as the expiry dates of related leases.
- 57 The useful life of an asset is defined in terms of the asset's expected utility to the entity. The asset management policy of the entity may involve the disposal of assets after a specified time or after consumption of a specified proportion of the future economic benefits embodied in the asset. Therefore, the useful life of an asset may be shorter than its economic life. The estimation of the useful life of the asset is a matter of judgement based on the experience of the entity with similar assets.

- 58 Land and buildings are separable assets and are accounted for separately, even when they are acquired together. With some exceptions, such as quarries and sites used for landfill, land has an unlimited useful life and therefore is not depreciated. Buildings have a limited useful life and therefore are depreciable assets. An increase in the value of the land on which a building stands does not affect the determination of the depreciable amount of the building.
- 59 If the cost of land includes the costs of site dismantlement, removal and restoration, that portion of the land asset is depreciated over the period of benefits obtained by incurring those costs. In some cases, the land itself may have a limited useful life, in which case it is depreciated in a manner that reflects the benefits to be derived from it.

Depreciation method

- 60 **The depreciation method used shall reflect the pattern in which the asset's future economic benefits are expected to be consumed by the entity.**
- 61 **The depreciation method applied to an asset shall be reviewed at least at each financial year-end and, if there has been a significant change in the expected pattern of consumption of the future economic benefits embodied in the asset, the method shall be changed to reflect the changed pattern. Such a change shall be accounted for as a change in an accounting estimate in accordance with Ind AS 8.**
- 62 A variety of depreciation methods can be used to allocate the depreciable amount of an asset on a systematic basis over its useful life. These methods include the straight-line method, the diminishing balance method and the units of production method. Straight-line depreciation results in a constant charge over the useful life if the asset's residual value does not change. The diminishing balance method results in a decreasing charge over the useful life. The units of production method results in a charge based on the expected use or output. The entity selects the method that most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset. That method is applied consistently from period to period unless there is a change in the expected pattern of consumption of those future economic benefits.
- 62A A depreciation method that is based on revenue that is generated by an activity that includes the use of an asset is not appropriate. The revenue generated by an activity that includes the use of an asset generally reflects factors other than the consumption of the economic benefits of the asset. For example, revenue is affected by other inputs and processes, selling activities and changes in sales volumes and prices. The price component of revenue may be affected by inflation, which has no bearing upon the way in which an asset is consumed.

Impairment

63 To determine whether an item of property, plant and equipment is impaired, an entity applies Ind AS 36, *Impairment of Assets*. That Standard explains how an entity reviews the carrying amount of its assets, how it determines the recoverable amount of an asset, and when it recognises, or reverses the recognition of, an impairment loss.

64 [Refer Appendix I]

Compensation for impairment

65 **Compensation from third parties for items of property, plant and equipment that were impaired, lost or given up shall be included in profit or loss when the compensation becomes receivable.**

66 Impairments or losses of items of property, plant and equipment, related claims for or payments of compensation from third parties and any subsequent purchase or construction of replacement assets are separate economic events and are accounted for separately as follows:

- (a) impairments of items of property, plant and equipment are recognised in accordance with Ind AS 36;
- (b) derecognition of items of property, plant and equipment retired or disposed of is determined in accordance with this Standard;
- (c) compensation from third parties for items of property, plant and equipment that were impaired, lost or given up is included in determining profit or loss when it becomes receivable; and
- (d) the cost of items of property, plant and equipment restored, purchased or constructed as replacements is determined in accordance with this Standard.

Derecognition

67 **The carrying amount of an item of property, plant and equipment shall be derecognised:**

- (a) on disposal; or
- (b) when no future economic benefits are expected from its use or disposal.

- 68 The gain or loss arising from the derecognition of an item of property, plant and equipment shall be included in profit or loss when the item is derecognised (unless Ind AS 17 requires otherwise on a sale and leaseback). Gains shall not be classified as revenue.
- 68A However, an entity that, in the course of its ordinary activities, routinely sells items of property, plant and equipment that it has held for rental to others shall transfer such assets to inventories at their carrying amount when they cease to be rented and become held for sale. The proceeds from the sale of such assets shall be recognised as revenue in accordance with Ind AS 115, *Revenue from Contracts with Customers*. Ind AS 105 does not apply when assets that are held for sale in the ordinary course of business are transferred to inventories.
- 69 The disposal of an item of property, plant and equipment may occur in a variety of ways (eg by sale, by entering into a finance lease or by donation). The date of disposal of an item of property, plant and equipment is the date the recipient obtains control of that item in accordance with the requirements for determining when a performance obligation is satisfied in Ind AS 115. Ind AS 17 applies to disposal by a sale and leaseback.
- 70 If, 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 a replacement for part of the item, then it derecognises the carrying amount of the replaced part regardless of whether the replaced part had been depreciated separately. If it is not practicable for an entity 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.
- 71 **The gain or loss arising from the derecognition of an item of property, plant and equipment shall be determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item.**
- 72 The amount of consideration to be included in the gain or loss arising from the derecognition of an item of property, plant and equipment is determined in accordance with the requirements for determining the transaction price in paragraphs 47–72 of Ind AS 115. Subsequent changes to the estimated amount of the consideration included in the gain or loss shall be accounted for in accordance with the requirements for changes in the transaction price in Ind AS 115.

Disclosure

- 73 The financial statements shall disclose, for each class of property, plant and equipment:
- (a) the measurement bases used for determining the gross carrying amount;

- (b) the depreciation methods used;
- (c) the useful lives or the depreciation rates used;
- (d) the gross carrying amount and the accumulated depreciation (aggregated with accumulated impairment losses) at the beginning and end of the period; and
- (e) a reconciliation of the carrying amount at the beginning and end of the period showing:
 - (i) additions;
 - (ii) assets classified as held for sale or included in a disposal group classified as held for sale in accordance with Ind AS 105 and other disposals;
 - (iii) acquisitions through business combinations;
 - (iv) increases or decreases resulting from revaluations under paragraphs 31, 39 and 40 and from impairment losses recognised or reversed in other comprehensive income in accordance with Ind AS 36;
 - (v) impairment losses recognised in profit or loss in accordance with Ind AS 36;
 - (vi) impairment losses reversed in profit or loss in accordance with Ind AS 36;
 - (vii) depreciation;
 - (viii) the net exchange differences arising on the translation of the financial statements from the functional currency into a different presentation currency, including the translation of a foreign operation into the presentation currency of the reporting entity; and
 - (ix) other changes.

74 The financial statements shall also disclose:

- (a) the existence and amounts of restrictions on title, and property, plant and equipment pledged as security for liabilities;
- (b) the amount of expenditures recognised in the carrying amount of an item of property, plant and equipment in the course of its construction;

- (c) the amount of contractual commitments for the acquisition of property, plant and equipment; and
 - (d) if it is not disclosed separately in the statement of profit and loss, 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 profit or loss.
- 75 Selection of the depreciation method and estimation of the useful life of assets are matters of judgement. Therefore, disclosure of the methods adopted and the estimated useful lives or depreciation rates provides users of financial statements with information that allows them to review the policies selected by management and enables comparisons to be made with other entities. For similar reasons, it is necessary to disclose:
- (a) depreciation, whether recognised in profit or loss or as a part of the cost of other assets, during a period; and
 - (b) accumulated depreciation at the end of the period.
- 76 In accordance with Ind AS 8 an entity discloses the nature and effect of a change in an accounting estimate that has an effect in the current period or is expected to have an effect in subsequent periods. For property, plant and equipment, such disclosure may arise from changes in estimates with respect to:
- (a) residual values;
 - (b) the estimated costs of dismantling, removing or restoring items of property, plant and equipment;
 - (c) useful lives; and
 - (d) depreciation methods.
- 77 If items of property, plant and equipment are stated at revalued amounts, the following shall be disclosed in addition to the disclosures required by Ind AS 113:
- (a) the effective date of the revaluation;
 - (b) whether an independent valuer was involved;
 - (c) [Refer Appendix 1]

- (d) [Refer Appendix I]
 - (e) for each revalued class of property, plant and equipment, the carrying amount that would have been recognised had the assets been carried under the cost model; and
 - (f) the revaluation surplus, indicating the change for the period and any restrictions on the distribution of the balance to shareholders.
- 78 In accordance with Ind AS 36 an entity discloses information on impaired property, plant and equipment in addition to the information required by paragraph 73(e)(iv)–(vi).
- 79 Users of financial statements may also find the following information relevant to their needs:
- (a) the carrying amount of temporarily idle property, plant and equipment;
 - (b) the gross carrying amount of any fully depreciated property, plant and equipment that is still in use;
 - (c) the carrying amount of property, plant and equipment retired from active use and not classified as held for sale in accordance with Ind AS 105; and
 - (d) when the cost model is used, the fair value of property, plant and equipment when this is materially different from the carrying amount.

Therefore, entities are encouraged to disclose these amounts.

Appendix A

Changes in Existing Decommissioning, Restoration and Similar Liabilities

This Appendix is an integral part of the Ind AS.

Background

- 1 Many entities have obligations to dismantle, remove and restore items of property, plant and equipment. In this Appendix such obligations are referred to as 'decommissioning, restoration and similar liabilities'. Under Ind AS 16, the cost of an item of property, plant and equipment includes the 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. Ind AS 37 contains requirements on how to measure decommissioning, restoration and similar liabilities. This Appendix provides guidance on how to account for the effect of changes in the measurement of existing decommissioning, restoration and similar liabilities.

Scope

- 2 This Appendix applies to changes in the measurement of any existing decommissioning, restoration or similar liability that is both:
 - (a) recognised as part of the cost of an item of property, plant and equipment in accordance with Ind AS 16; and
 - (b) recognised as a liability in accordance with Ind AS 37.

For example, a decommissioning, restoration or similar liability may exist for decommissioning a plant, rehabilitating environmental damage in extractive industries, or removing equipment.

Issue

- 3 This Appendix addresses how the effect of the following events that change the measurement of an existing decommissioning, restoration or similar liability should be accounted for:

- (a) a change in the estimated outflow of resources embodying economic benefits (eg cash flows) required to settle the obligation;
- (b) a change in the current market-based discount rate as defined in paragraph 47 of Ind AS 37 (this includes changes in the time value of money and the risks specific to the liability); and
- (c) an increase that reflects the passage of time (also referred to as the unwinding of the discount).

Accounting Principles

- 4 Changes in the measurement of an existing decommissioning, restoration and similar liability that result from changes in the estimated timing or amount of the outflow of resources embodying economic benefits required to settle the obligation, or a change in the discount rate, shall be accounted for in accordance with paragraphs 5–7 below.
- 5 If the related asset is measured using the cost model:
 - (a) subject to (b), changes in the liability shall be added to, or deducted from, the cost of the related asset in the current period.
 - (b) the amount deducted from the cost of the asset shall not exceed its carrying amount. If a decrease in the liability exceeds the carrying amount of the asset, the excess shall be recognised immediately in profit or loss.
 - (c) if the adjustment results in an addition to the cost of an asset, the entity shall consider whether this is an indication that the new carrying amount of the asset may not be fully recoverable. If it is such an indication, the entity shall test the asset for impairment by estimating its recoverable amount, and shall account for any impairment loss, in accordance with Ind AS 36.
- 6 If the related asset is measured using the revaluation model:
 - (a) changes in the liability alter the revaluation surplus or deficit previously recognised on that asset, so that:
 - (i) a decrease in the liability shall (subject to (b)) be recognised in other comprehensive income and increase the revaluation surplus within equity, except that it shall be recognised in profit or loss to the extent that it reverses a revaluation deficit on the asset that was previously recognised in profit or loss;

- (ii) an increase in the liability shall be recognised in profit or loss, except that it shall be recognised in other comprehensive income and reduce the revaluation surplus within equity to the extent of any credit balance existing in the revaluation surplus in respect of that asset.
 - (b) in the event that a decrease in the liability exceeds the carrying amount that would have been recognised had the asset been carried under the cost model, the excess shall be recognised immediately in profit or loss.
 - (c) a change in the liability is an indication that the asset may have to be revalued in order to ensure that the carrying amount does not differ materially from that which would be determined using fair value at the end of the reporting period. Any such revaluation shall be taken into account in determining the amounts to be recognised in profit or loss or in other comprehensive income under (a). If a revaluation is necessary, all assets of that class shall be revalued.
 - (d) Ind AS 1 requires disclosure in the statement of profit and loss of each component of other comprehensive income or expense. In complying with this requirement, the change in the revaluation surplus arising from a change in the liability shall be separately identified and disclosed as such.
- 7 The adjusted depreciable amount of the asset is depreciated over its useful life. Therefore, once the related asset has reached the end of its useful life, all subsequent changes in the liability shall be recognised in profit or loss as they occur. This applies under both the cost model and the revaluation model.
- 8 The periodic unwinding of the discount shall be recognised in profit or loss as a finance cost as it occurs. Capitalisation under Ind AS 23 is not permitted.

Appendix B

This appendix is an integral part of the Ind AS.

Stripping Costs in the Production Phase of a Surface Mine

Background

1. In surface mining operations, entities may find it necessary to remove mine waste materials ('overburden') to gain access to mineral ore deposits. This waste removal activity is known as 'stripping'.
2. During the development phase of the mine (before production begins), stripping costs are usually capitalised as part of the depreciable cost of building, developing and constructing the mine. Those capitalised costs are depreciated or amortised on a systematic basis, usually by using the units of production method, once production begins.
3. A mining entity may continue to remove overburden and to incur stripping costs during the production phase of the mine.
4. The material removed when stripping in the production phase will not necessarily be a total waste; often it will be a combination of ore and waste. The ratio of ore to waste can range from uneconomic low grade to profitable high grade. Removal of material with a low ratio of ore to waste may produce some usable material, which can be used to produce inventory. This removal might also provide access to deeper levels of material that have a higher ratio of ore to waste. There can therefore be two benefits accruing to the entity from the stripping activity: usable ore that can be used to produce inventory and improved access to further quantities of material that will be mined in future periods.
5. This Appendix considers when and how to account separately for these two benefits arising from the stripping activity, as well as how to measure these benefits both initially and subsequently.

Scope

6. This Appendix applies to waste removal costs that are incurred in surface mining activity during the production phase of the mine ('production stripping costs').

Issues

7. This Appendix addresses the following issues:
 - (a) recognition of production stripping costs as an asset;
 - (b) initial measurement of the stripping activity asset; and
 - (c) subsequent measurement of the stripping activity asset.

Accounting Principles

Recognition of production stripping costs as an asset

8. To the extent that the benefit from the stripping activity is realised in the form of inventory produced, the entity shall account for the costs of that stripping overburden removal activity in accordance with the principles of Ind AS 2, *Inventories*. To the extent the benefit is improved access to ore, the entity shall recognise these costs as a non-current asset, say, Stripping Activity Asset, if the criteria in paragraph 9 below are met.
9. An entity shall recognise a stripping activity asset if, and only if, all of the following are met:
 - (a) it is probable that the future economic benefit (improved access to the ore body) associated with the stripping activity will flow to the entity;
 - (b) the entity can identify the component of the ore body for which access has been improved; and
 - (c) the costs relating to the stripping activity associated with that component can be measured reliably.
10. The stripping activity asset shall be accounted for as an addition to, or as an enhancement of, an existing asset. In other words, the stripping activity asset will be accounted for as *part* of an existing asset.
11. The stripping activity asset's classification as a tangible or intangible asset is the same as the existing asset. In other words, the nature of this existing asset will determine whether the entity shall classify the stripping activity asset as tangible or intangible.

Initial measurement of the stripping activity asset

12. The entity shall initially measure the stripping activity asset at cost, this being the accumulation of costs directly incurred to perform the stripping activity that improves access to the identified component of ore, plus an allocation of directly attributable overhead costs. Examples of the types of costs that would be included as directly attributable overhead costs include an allocation of salary costs of the mine supervisor overseeing that component of the mine, and the rental costs of any equipment that was hired specifically to perform the stripping activity. Some incidental operations may take place at the same time as the production stripping activity, but which are not necessary for the production stripping activity to continue as planned. The costs associated with these incidental operations shall not be included in the cost of the stripping activity asset. An example of such type of incidental operations would be building an access road in the area in which the stripping campaign is taking place.

13. When the costs of the stripping activity asset and the inventory produced are not separately identifiable, the entity shall allocate the production stripping costs between the inventory produced and the stripping activity asset by using an allocation basis that is based on a relevant production measure. This production measure shall be calculated for the identified component of the ore body, and shall be used as a benchmark to identify the extent to which the additional activity of creating a future benefit has taken place. Examples of such measures include:
 - (a) cost of inventory produced compared with expected cost;
 - (b) volume of waste extracted compared with expected volume, for a given volume of ore production; and
 - (c) mineral content of the ore extracted compared with expected mineral content to be extracted, for a given quantity of ore produced.

- 13A The production measure shall not be calculated using a basis that is based on sales values. A basis that is based on sales values, in the context of stripping costs, is inappropriate because it is not closely linked to the activity taking place. Furthermore, if the current sales price of the relevant material is used in determining the allocation basis, the same current sales price will be applied to the volume of the mineral in both the extracted ore and the identified component. Hence, the relevant variable will be the volume of mineral in both the extracted ore and the identified component, i.e., the current sales price will not change the allocation basis. Applying a future sales price basis involves practical difficulties. Identifying a future sales price for ore that will be mined in the future can be difficult, given the volatility of market prices for many minerals. Further complexities may arise when more than one mineral is present (whether by-products or joint products) when the ore is extracted.

Subsequent measurement of the stripping activity asset

14. After initial recognition, the stripping activity asset shall be carried at either its cost or its revalued amount less depreciation or amortisation and less impairment losses, in the same way as the existing asset of which it is a part.
15. The stripping activity asset shall be depreciated or amortised on a systematic basis, over the expected useful life of the identified component of the ore body that becomes more accessible as a result of the stripping activity. The units of production method shall be applied unless another method is more appropriate.
16. The expected useful life of the identified component of the ore body that is used to depreciate or amortise the stripping activity asset will differ from the expected useful life that is used to depreciate or amortise the mine itself and the related life-of-mine assets. The exception to this are those limited circumstances when the stripping activity provides improved access to the whole of the remaining ore body. For example, this might occur towards the end of a mine's useful life when the identified component represents the final part of the ore body to be extracted.

Appendix C

References to matters contained in other Indian Accounting Standards

This Appendix is an integral part of the Ind AS.

This appendix lists the appendices which are part of other Indian Accounting Standards and make reference to Ind AS 16, *Property, Plant and Equipment*.

- 1 Appendix C, *Service Concession Arrangements* contained in Ind AS 115, *Revenue from Contracts with Customers*.
- 2 Appendix D, *Service Concession Arrangements: Disclosures* contained in Ind AS 115, *Revenue from Contracts with Customers*.
- 3 Appendix C, *Determining whether an Arrangement contains a Lease* contained in Ind AS 17, *Leases*.
- 4 Appendix A, *Intangible Assets—Web Site Costs* contained in Ind AS 38, *Intangible Assets*.

Appendix I

Note: This Appendix is not a part of the Indian Accounting Standard. The purpose of this Appendix is only to bring out the major differences, if any, between Indian Accounting Standard (Ind AS) 16 and the corresponding International Accounting Standard (IAS) 16, Property, Plant and Equipment, and IFRIC 1, Changes in Existing Decommissioning, Restoration and Similar Liabilities and IFRIC 20, Stripping Costs in the Production Phase of a Surface Mine issued by the International Accounting Standards Board.

Comparison with IAS 16, Property, Plant and Equipment, IFRIC 1 and IFRIC 20

- 1 The transitional provisions given in IAS 16 and IFRIC 1 and IFRIC 20 have not been given in Ind AS 16, since all transitional provisions related to Ind ASs, wherever considered appropriate have been included in Ind AS 101, *First-time Adoption of Indian Accounting Standards* corresponding to IFRS 1, *First-time Adoption of International Financial Reporting Standards*.
- 2 Different terminology is used in this standard, eg, the term 'balance sheet' is used instead of 'Statement of financial position' and 'Statement of profit' and loss is used instead of 'Statement of comprehensive income'.
- 3 Paragraph 28 has been deleted since Ind AS 20, *Accounting for Government Grants and Disclosure of Government Assistance*, does not permit the option of reducing the carrying amount of an item of property, plant and equipment by the amount of government grant received in respect of such an item, which is permitted in IAS 20. However, to maintain consistency with paragraph numbers of IAS 16, this paragraph number is retained in Ind AS 16.
- 4 The following paragraph numbers appear as 'Deleted' in IAS 16. In order to maintain consistency with paragraph numbers of IAS 16, the paragraph numbers are retained in Ind AS 16:
 - (i) paragraphs 32-33
 - (ii) paragraph 64
 - (iii) paragraph 77(c)-(d)

- 5 Paragraphs 5 of Ind AS 16 has been modified, since Ind AS 40, *Investment Property*, prohibits the use of fair value model.

6. Paragraph 12 of Appendix B has been modified and paragraph 13A of Appendix B has been added to provide guidance with regard to the requirements contained in the paragraphs 12 and 13.



Indian Accounting Standard (Ind AS) 19

Employee Benefits

(This Indian Accounting Standard includes paragraphs set in bold type and plain type, which have equal authority. Paragraphs in bold type indicate the main principles.)

Objective

- 1 The objective of this Standard is to prescribe the accounting and disclosure for employee benefits. The Standard requires an entity to recognise:
 - (a) a liability when an employee has provided service in exchange for employee benefits to be paid in the future; and
 - (b) an expense when the entity consumes the economic benefit arising from service provided by an employee in exchange for employee benefits.

Scope

- 2 **This Standard shall be applied by an employer in accounting for all employee benefits, except those to which Ind AS 102, *Share-based Payment*, applies.**
- 3 This Standard does not deal with reporting by employee benefit plans.
- 4 The employee benefits to which this Standard applies include those provided:
 - (a) under formal plans or other formal agreements between an entity and individual employees, groups of employees or their representatives;
 - (b) under legislative requirements, or through industry arrangements, whereby entities are required to contribute to national, state, industry or other multi-employer plans; or
 - (c) by those informal practices that give rise to a constructive obligation. Informal practices give rise to a constructive obligation where the entity has no realistic alternative but to pay employee benefits. An example of a constructive obligation is where a change in the entity's informal practices would cause unacceptable damage to its relationship with employees.
- 5 Employee benefits include:
 - (a) short-term employee benefits, such as the following, if expected to be settled wholly before twelve months after the end of the annual reporting period in which the employees render the related services:
 - (i) wages, salaries and social security contributions;

- (ii) paid annual leave and paid sick leave;
 - (iii) profit-sharing and bonuses; and
 - (iv) non-monetary benefits (such as medical care, housing, cars and free or subsidised goods or services) for current employees;
- (b) post-employment benefits, such as the following:
- (i) retirement benefits (eg pensions and lump sum payments on retirement); and
 - (ii) other post-employment benefits, such as post-employment life insurance and post-employment medical care;
- (c) other long-term employee benefits, such as the following:
- (i) long-term paid absences such as long-service leave or sabbatical leave;
 - (ii) jubilee or other long-service benefits; and
 - (iii) long-term disability benefits; and
- (d) termination benefits.
- 6 Employee benefits include benefits provided either to employees or to their dependants or beneficiaries and may be settled by payments (or the provision of goods or services) made either directly to the employees; to their spouses, children or other dependants or to others, such as insurance companies.
- 7 An employee may provide services to an entity on a full-time, part-time, permanent, casual or temporary basis. For the purpose of this Standard, employees include directors and other management personnel.

Definitions

- 8 The following terms are used in this Standard with the meanings specified:

Definitions of employee benefits

Employee benefits are all forms of consideration given by an entity in exchange for service rendered by employees or for the termination of employment.

Short-term employee benefits are employee benefits (other than termination benefits) that are expected to be settled wholly before twelve months after the end of the annual reporting period in which the employees render the related service.

Post-employment benefits are employee benefits (other than termination benefits and short-term employee benefits) that are payable after the completion of employment.

Other long-term employee benefits are all employee benefits other than short-term employee benefits, post-employment benefits and termination benefits.

Termination benefits are employee benefits provided in exchange for the termination of an employee's employment as a result of either:

- (a) an entity's decision to terminate an employee's employment before the normal retirement date; or
- (b) an employee's decision to accept an offer of benefits in exchange for the termination of employment.

Definitions relating to classification of plans

Post-employment benefit plans are formal or informal arrangements under which an entity provides post-employment benefits for one or more employees.

Defined contribution plans are post-employment benefit plans under which an entity pays fixed contributions into a separate entity (a fund) and will have no legal or constructive obligation to pay further contributions if the fund does not hold sufficient assets to pay all employee benefits relating to employee service in the current and prior periods.

Defined benefit plans are post-employment benefit plans other than defined contribution plans.

Multi-employer plans are defined contribution plans (other than state plans) or defined benefit plans (other than state plans) that:

- (a) pool the assets contributed by various entities that are not under common control; and
- (b) use those assets to provide benefits to employees of more than one entity, on the basis that contribution and benefit levels are determined without regard to the identity of the entity that employs the employees.

Definitions relating to the net defined benefit liability (asset)

The *net defined benefit liability (asset)* is the deficit or surplus, adjusted for any effect of limiting a net defined benefit asset to the asset ceiling.

The *deficit or surplus* is:

- (a) the present value of the defined benefit obligation less
- (b) the fair value of plan assets (if any).

The *asset ceiling* is the present value of any economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan.

The present value of a defined benefit obligation is the present value, without deducting any plan assets, of expected future payments required to settle the obligation resulting from employee service in the current and prior periods.

Plan assets comprise:

- (a) assets held by a long-term employee benefit fund; and
- (b) qualifying insurance policies.

Assets held by a long-term employee benefit fund are assets (other than non-transferable financial instruments issued by the reporting entity) that:

- (a) are held by an entity (a fund) that is legally separate from the reporting entity and exists solely to pay or fund employee benefits; and
- (b) are available to be used only to pay or fund employee benefits, are not available to the reporting entity's own creditors (even in bankruptcy), and cannot be returned to the reporting entity, unless either:
 - (i) the remaining assets of the fund are sufficient to meet all the related employee benefit obligations of the plan or the reporting entity; or
 - (ii) the assets are returned to the reporting entity to reimburse it for employee benefits already paid.

A qualifying insurance policy is an insurance policy^{*} issued by an insurer that is not a related party (as defined in Ind AS 24, *Related Party Disclosures*) of the reporting entity, if the proceeds of the policy:

- (a) can be used only to pay or fund employee benefits under a defined benefit plan; and
- (b) are not available to the reporting entity's own creditors (even in bankruptcy) and cannot be paid to the reporting entity, unless either:
 - i. the proceeds represent surplus assets that are not needed for the policy to meet all the related employee benefit obligations; or
 - ii. the proceeds are returned to the reporting entity to reimburse it for employee benefits already paid.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. (See Ind AS 113, *Fair Value Measurement*.)

^{*} A qualifying insurance policy is not necessarily an insurance contract, as defined in Ind AS 104, *Insurance Contracts*.

Definitions relating to defined benefit cost

Service cost comprises:

- (a) *current service cost*, which is the increase in the present value of the defined benefit obligation resulting from employee service in the current period;
- (b) *past service cost*, which is the change in the present value of the defined benefit obligation for employee service in prior periods, resulting from a plan amendment (the introduction or withdrawal of, or changes to, a defined benefit plan) or a curtailment (a significant reduction by the entity in the number of employees covered by a plan); and
- (c) any gain or loss on settlement.

Net interest on the net defined benefit liability (asset) is the change during the period in the net defined benefit liability (asset) that arises from the passage of time.

Remeasurements of the net defined benefit liability (asset) comprise:

- (a) actuarial gains and losses;
- (b) the return on plan assets, excluding amounts included in net interest on the net defined benefit liability (asset); and
- (c) any change in the effect of the asset ceiling, excluding amounts included in net interest on the net defined benefit liability (asset).

Actuarial gains and losses are changes in the present value of the defined benefit obligation resulting from:

- (a) experience adjustments (the effects of differences between the previous actuarial assumptions and what has actually occurred); and
- (b) the effects of changes in actuarial assumptions.

The *return on plan assets* is interest, dividends and other income derived from the plan assets, together with realised and unrealised gains or losses on the plan assets, less:

- (a) any costs of managing plan assets; and
- (b) any tax payable by the plan itself, other than tax included in the actuarial assumptions used to measure the present value of the defined benefit obligation.

A *settlement* is a transaction that eliminates all further legal or constructive obligations for part or all of the benefits provided under a defined benefit plan, other than a payment of benefits to, or on behalf of, employees that is set out in the terms of the plan and included in the actuarial assumptions.

Short-term employee benefits

- 9 Short-term employee benefits include items such as the following, if expected to be settled wholly before twelve months after the end of the annual reporting period in which the employees render the related services:
- (a) wages, salaries and social security contributions;
 - (b) paid annual leave and paid sick leave;
 - (c) profit-sharing and bonuses; and
 - (d) non-monetary benefits (such as medical care, housing, cars and free or subsidised goods or services) for current employees.
- 10 An entity need not reclassify a short-term employee benefit if the entity's expectations of the timing of settlement change temporarily. However, if the characteristics of the benefit change (such as a change from a non-accumulating benefit to an accumulating benefit) or if a change in expectations of the timing of settlement is not temporary, then the entity considers whether the benefit still meets the definition of short-term employee benefits.

Recognition and measurement

All short-term employee benefits

- 11 **When an employee has rendered service to an entity during an accounting period, the entity shall recognise the undiscounted amount of short-term employee benefits expected to be paid in exchange for that service:**
- (a) **as a liability (accrued expense), after deducting any amount already paid. If the amount already paid exceeds the undiscounted amount of the benefits, an entity shall recognise that excess as an asset (prepaid expense) to the extent that the prepayment will lead to, for example, a reduction in future payments or a cash refund.**
 - (b) **as an expense, unless another Ind AS requires or permits the inclusion of the benefits in the cost of an asset (see, for example, Ind AS 2, *Inventories*, and Ind AS 16, *Property, Plant and Equipment*).**
- 12 Paragraphs 13, 16 and 19 explain how an entity shall apply paragraph 11 to short-term employee benefits in the form of paid absences and profit-sharing and bonus plans.

Short-term paid absences

- 13 An entity shall recognise the expected cost of short-term employee benefits in the form of paid absences under paragraph 11 as follows:

- (a) in the case of accumulating paid absences, when the employees render service that increases their entitlement to future paid absences.
- (b) in the case of non-accumulating paid absences, when the absences occur.
- 14 An entity may pay employees for absence for various reasons including holidays, sickness and short-term disability, maternity or paternity, jury service and military service. Entitlement to paid absences falls into two categories:
- (a) accumulating; and
- (b) non-accumulating.
- 15 Accumulating paid absences are those that are carried forward and can be used in future periods if the current period's entitlement is not used in full. Accumulating paid absences may be either vesting (in other words, employees are entitled to a cash payment for unused entitlement on leaving the entity) or non-vesting (when employees are not entitled to a cash payment for unused entitlement on leaving). An obligation arises as employees render service that increases their entitlement to future paid absences. The obligation exists, and is recognised, even if the paid absences are non-vesting, although the possibility that employees may leave before they use an accumulated non-vesting entitlement affects the measurement of that obligation.
- 16 An entity shall measure the expected cost of accumulating paid absences as the additional amount that the entity expects to pay as a result of the unused entitlement that has accumulated at the end of the reporting period.
- 17 The method specified in the previous paragraph measures the obligation at the amount of the additional payments that are expected to arise solely from the fact that the benefit accumulates. In many cases, an entity may not need to make detailed computations to estimate that there is no material obligation for unused paid absences. For example, a sick leave obligation is likely to be material only if there is a formal or informal understanding that unused paid sick leave may be taken as paid annual leave.

Example illustrating paragraphs 16 and 17

An entity has 100 employees, who are each entitled to five working days of paid sick leave for each year. Unused sick leave may be carried forward for one calendar year. Sick leave is taken first out of the current year's entitlement and then out of any balance brought forward from the previous year (a LIFO basis). At 31 December 20X1 the average unused entitlement is two days per employee. The entity expects, on the basis of experience that is expected to continue, that 92 employees will take no more than five days of paid sick leave in 20X2 and that the remaining eight employees will take an average of six and a half days each.

The entity expects that it will pay an additional twelve days of sick pay as a result of the unused entitlement that has accumulated at 31 December 20X1 (one and a half days each, for eight employees). Therefore, the entity recognises a liability equal to twelve days of sick pay.

18 Non-accumulating paid absences do not carry forward: they lapse if the current period's entitlement is not used in full and do not entitle employees to a cash payment for unused entitlement on leaving the entity. This is commonly the case for sick pay (to the extent that unused past entitlement does not increase future entitlement), maternity or paternity leave and paid absences for jury service or military service. An entity recognises no liability or expense until the time of the absence, because employee service does not increase the amount of the benefit.

Profit-sharing and bonus plans

19 An entity shall recognise the expected cost of profit-sharing and bonus payments under paragraph 11 when, and only when:

- (a) the entity has a present legal or constructive obligation to make such payments as a result of past events; and
- (b) a reliable estimate of the obligation can be made.

A present obligation exists when, and only when, the entity has no realistic alternative but to make the payments.

20 Under some profit-sharing plans, employees receive a share of the profit only if they remain with the entity for a specified period. Such plans create a constructive obligation as employees render service that increases the amount to be paid if they remain in service until the end of the specified period. The measurement of such constructive obligations reflects the possibility that some employees may leave without receiving profit-sharing payments.

Example illustrating paragraph 20

A profit-sharing plan requires an entity to pay a specified proportion of its profit for the year to employees who serve throughout the year. If no employees leave during the year, the total profit-sharing payments for the year will be 3 per cent of profit. The entity estimates that staff turnover will reduce the payments to 2.5 per cent of profit.

The entity recognises a liability and an expense of 2.5 per cent of profit.

21 An entity may have no legal obligation to pay a bonus. Nevertheless, in some cases, an entity has a practice of paying bonuses. In such cases, the entity has a constructive obligation because the entity has no realistic alternative but to pay the bonus. The measurement of the constructive obligation reflects the possibility that some employees may leave without receiving a bonus.

22 An entity can make a reliable estimate of its legal or constructive obligation under a profit-sharing or bonus plan when, and only when:

- (a) the formal terms of the plan contain a formula for determining the amount of the benefit;

- (b) the entity determines the amounts to be paid before the financial statements are approved for issue; or
 - (c) past practice gives clear evidence of the amount of the entity's constructive obligation.
- 23 An obligation under profit-sharing and bonus plans results from employee service and not from a transaction with the entity's owners. Therefore, an entity recognises the cost of profit-sharing and bonus plans not as a distribution of profit but as an expense.
- 24 If profit-sharing and bonus payments are not expected to be settled wholly before twelve months after the end of the annual reporting period in which the employees render the related service, those payments are other long-term employee benefits (see paragraphs 153–158).

Disclosure

- 25 Although this Standard does not require specific disclosures about short-term employee benefits, other Ind ASs may require disclosures. For example, Ind AS 24 requires disclosures about employee benefits for key management personnel. Ind AS 1, *Presentation of Financial Statements*, requires disclosure of employee benefits expense.

Post-employment benefits: distinction between defined contribution plans and defined benefit plans

- 26 Post-employment benefits include items such as the following:

- (a) retirement benefits (eg pensions and lump sum payments on retirement); and
- (b) other post-employment benefits, such as post-employment life insurance and post-employment medical care.

Arrangements whereby an entity provides post-employment benefits are post-employment benefit plans. An entity applies this Standard to all such arrangements whether or not they involve the establishment of a separate entity to receive contributions and to pay benefits.

- 27 Post-employment benefit plans are classified as either defined contribution plans or defined benefit plans, depending on the economic substance of the plan as derived from its principal terms and conditions.
- 28 Under defined contribution plans the entity's legal or constructive obligation is limited to the amount that it agrees to contribute to the fund. Thus, the amount of the post-employment benefits received by the employee is determined by the amount of contributions paid by an entity (and perhaps also the employee) to a post-employment benefit plan or to an insurance company, together with investment returns arising from the contributions. In consequence, actuarial risk (that benefits will be less than expected) and investment risk (that assets invested will be insufficient to meet expected benefits) fall, in substance, on the employee.

- 29 Examples of cases where an entity's obligation is not limited to the amount that it agrees to contribute to the fund are when the entity has a legal or constructive obligation through:
- (a) a plan benefit formula that is not linked solely to the amount of contributions and requires the entity to provide further contributions if assets are insufficient to meet the benefits in the plan benefit formula;
 - (b) a guarantee, either indirectly through a plan or directly, of a specified return on contributions; or
 - (c) those informal practices that give rise to a constructive obligation. For example, a constructive obligation may arise where an entity has a history of increasing benefits for former employees to keep pace with inflation even where there is no legal obligation to do so.
- 30 Under defined benefit plans:
- (a) the entity's obligation is to provide the agreed benefits to current and former employees; and
 - (b) actuarial risk (that benefits will cost more than expected) and investment risk fall, in substance, on the entity. If actuarial or investment experience are worse than expected, the entity's obligation may be increased.
- 31 Paragraphs 32–49 explain the distinction between defined contribution plans and defined benefit plans in the context of multi-employer plans, defined benefit plans that share risks between entities under common control, state plans and insured benefits.

Multi-employer plans

- 32 **An entity shall classify a multi-employer plan as a defined contribution plan or a defined benefit plan under the terms of the plan (including any constructive obligation that goes beyond the formal terms).**
- 33 **If an entity participates in a multi-employer defined benefit plan, unless paragraph 34 applies, it shall:**
- (a) **account for its proportionate share of the defined benefit obligation, plan assets and cost associated with the plan in the same way as for any other defined benefit plan; and**
 - (b) **disclose the information required by paragraphs 135–148 (excluding paragraph 148(d)).**
- 34 **When sufficient information is not available to use defined benefit accounting for a multi-employer defined benefit plan, an entity shall:**
- (a) **account for the plan in accordance with paragraphs 51 and 52 as if it were a defined contribution plan; and**
 - (b) **disclose the information required by paragraph 148.**

35 One example of a multi-employer defined benefit plan is one where:

- (a) the plan is financed on a pay-as-you-go basis: contributions are set at a level that is expected to be sufficient to pay the benefits falling due in the same period; and future benefits earned during the current period will be paid out of future contributions; and
- (b) employees' benefits are determined by the length of their service and the participating entities have no realistic means of withdrawing from the plan without paying a contribution for the benefits earned by employees up to the date of withdrawal. Such a plan creates actuarial risk for the entity: if the ultimate cost of benefits already earned at the end of the reporting period is more than expected, the entity will have either to increase its contributions or to persuade employees to accept a reduction in benefits. Therefore, such a plan is a defined benefit plan.

36 Where sufficient information is available about a multi-employer defined benefit plan, an entity accounts for its proportionate share of the defined benefit obligation, plan assets and post-employment cost associated with the plan in the same way as for any other defined benefit plan. However, an entity may not be able to identify its share of the underlying financial position and performance of the plan with sufficient reliability for accounting purposes. This may occur if:

- (a) the plan exposes the participating entities to actuarial risks associated with the current and former employees of other entities, with the result that there is no consistent and reliable basis for allocating the obligation, plan assets and cost to individual entities participating in the plan; or
- (b) the entity does not have access to sufficient information about the plan to satisfy the requirements of this Standard.

In those cases, an entity accounts for the plan as if it were a defined contribution plan and discloses the information required by paragraph 148.

37 There may be a contractual agreement between the multi-employer plan and its participants that determines how the surplus in the plan will be distributed to the participants (or the deficit funded). A participant in a multi-employer plan with such an agreement that accounts for the plan as a defined contribution plan in accordance with paragraph 34 shall recognise the asset or liability that arises from the contractual agreement and the resulting income or expense in profit or loss.

Example illustrating paragraph 37

An entity participates in a multi-employer defined benefit plan that does not prepare plan valuations on an Ind AS 19 basis. It therefore accounts for the plan as if it were a defined contribution plan. A non-Ind AS 19 funding valuation shows a deficit of Rs.100 million in the plan. The plan has agreed under contract a schedule of contributions with the participating employers in the plan that will eliminate the deficit over the next five years. The entity's total contributions under the contract are Rs.8 million.

The entity recognises a liability for the contributions adjusted for the time value of money and an equal expense in profit or loss.

- 38 Multi-employer plans are distinct from group administration plans. A group administration plan is merely an aggregation of single employer plans combined to allow participating employers to pool their assets for investment purposes and reduce investment management and administration costs, but the claims of different employers are segregated for the sole benefit of their own employees. Group administration plans pose no particular accounting problems because information is readily available to treat them in the same way as any other single employer plan and because such plans do not expose the participating entities to actuarial risks associated with the current and former employees of other entities. The definitions in this Standard require an entity to classify a group administration plan as a defined contribution plan or a defined benefit plan in accordance with the terms of the plan (including any constructive obligation that goes beyond the formal terms).
- 39 **In determining when to recognise, and how to measure, a liability relating to the wind-up of a multi-employer defined benefit plan, or the entity's withdrawal from a multi-employer defined benefit plan, an entity shall apply Ind AS 37, Provisions, Contingent Liabilities and Contingent Assets.**

Defined benefit plans that share risks between entities under common control

- 40 Defined benefit plans that share risks between entities under common control, for example, a parent and its subsidiaries, are not multi-employer plans.
- 41 An entity participating in such a plan shall obtain information about the plan as a whole measured in accordance with this Standard on the basis of assumptions that apply to the plan as a whole. If there is a contractual agreement or stated policy for charging to individual group entities the net defined benefit cost for the plan as a whole measured in accordance with this Standard, the entity shall, in its separate or individual financial statements, recognise the net defined benefit cost so charged. If there is no such agreement or policy, the net defined benefit cost shall be recognised in the separate or individual financial statements of the group entity that is legally the sponsoring employer for the plan. The other group entities shall, in their separate or individual financial statements, recognise a cost equal to their contribution payable for the period.
- 42 Participation in such a plan is a related party transaction for each individual group entity. An entity shall therefore, in its separate or individual financial statements, disclose the information required by paragraph 149.

State plans

- 43 **An entity shall account for a state plan in the same way as for a multi-employer plan (see paragraphs 32–39).**
- 44 State plans are established by legislation to cover all entities (or all entities in a particular category, for example, a specific industry) and are operated by national or local government or by another body (for example, an autonomous agency created specifically for this purpose) that is not subject to control or influence by the reporting entity. Some plans established by an entity provide both compulsory benefits, as a substitute for benefits that would otherwise be covered under a state plan, and additional voluntary benefits. Such plans are not state plans.
- 45 State plans are characterised as defined benefit or defined contribution, depending on the entity's obligation under the plan. Many state plans are funded on a pay-as-you-go basis: contributions are

set at a level that is expected to be sufficient to pay the required benefits falling due in the same period; future benefits earned during the current period will be paid out of future contributions. Nevertheless, in most state plans the entity has no legal or constructive obligation to pay those future benefits: its only obligation is to pay the contributions as they fall due and if the entity ceases to employ members of the state plan, it will have no obligation to pay the benefits earned by its own employees in previous years. For this reason, state plans are normally defined contribution plans. However, when a state plan is a defined benefit plan an entity applies paragraphs 32–39.

Insured benefits

- 46 **An entity may pay insurance premiums to fund a post-employment benefit plan. The entity shall treat such a plan as a defined contribution plan unless the entity will have (either directly, or indirectly through the plan) a legal or constructive obligation either:**
- (a) **to pay the employee benefits directly when they fall due; or**
 - (b) **to pay further amounts if the insurer does not pay all future employee benefits relating to employee service in the current and prior periods.**

If the entity retains such a legal or constructive obligation, the entity shall treat the plan as a defined benefit plan.

- 47 The benefits insured by an insurance policy need not have a direct or automatic relationship with the entity's obligation for employee benefits. Post-employment benefit plans involving insurance policies are subject to the same distinction between accounting and funding as other funded plans.
- 48 Where an entity funds a post-employment benefit obligation by contributing to an insurance policy under which the entity (either directly, indirectly through the plan, through the mechanism for setting future premiums or through a related party relationship with the insurer) retains a legal or constructive obligation, the payment of the premiums does not amount to a defined contribution arrangement. It follows that the entity:
- (a) accounts for a qualifying insurance policy as a plan asset (see paragraph 8); and
 - (b) recognises other insurance policies as reimbursement rights (if the policies satisfy the criterion in paragraph 116).
- 49 Where an insurance policy is in the name of a specified plan participant or a group of plan participants and the entity does not have any legal or constructive obligation to cover any loss on the policy, the entity has no obligation to pay benefits to the employees and the insurer has sole responsibility for paying the benefits. The payment of fixed premiums under such contracts is, in substance, the settlement of the employee benefit obligation, rather than an investment to meet the obligation. Consequently, the entity no longer has an asset or a liability. Therefore, an entity treats such payments as contributions to a defined contribution plan.

Post-employment benefits: defined contribution plans

- 50 Accounting for defined contribution plans is straightforward because the reporting entity's obligation for each period is determined by the amounts to be contributed for that period. Consequently, no

actuarial assumptions are required to measure the obligation or the expense and there is no possibility of any actuarial gain or loss. Moreover, the obligations are measured on an undiscounted basis, except where they are not expected to be settled wholly before twelve months after the end of the annual reporting period in which the employees render the related service.

Recognition and measurement

- 51 **When an employee has rendered service to an entity during a period, the entity shall recognise the contribution payable to a defined contribution plan in exchange for that service:**
- (a) **as a liability (accrued expense), after deducting any contribution already paid. If the contribution already paid exceeds the contribution due for service before the end of the reporting period, an entity shall recognise that excess as an asset (prepaid expense) to the extent that the prepayment will lead to, for example, a reduction in future payments or a cash refund.**
 - (b) **as an expense, unless another Ind AS requires or permits the inclusion of the contribution in the cost of an asset (see, for example, Ind AS 2 and Ind AS 16).**
- 52 **When contributions to a defined contribution plan are not expected to be settled wholly before twelve months after the end of the annual reporting period in which the employees render the related service, they shall be discounted using the discount rate specified in paragraph 83.**

Disclosure

- 53 **An entity shall disclose the amount recognised as an expense for defined contribution plans.**
- 54 **Where required by Ind AS 24 an entity discloses information about contributions to defined contribution plans for key management personnel.**

Post-employment benefits: defined benefit plans

- 55 **Accounting for defined benefit plans is complex because actuarial assumptions are required to measure the obligation and the expense and there is a possibility of actuarial gains and losses. Moreover, the obligations are measured on a discounted basis because they may be settled many years after the employees render the related service.**

Recognition and measurement

- 56 **Defined benefit plans may be unfunded, or they may be wholly or partly funded by contributions by an entity, and sometimes its employees, into an entity, or fund, that is legally separate from the reporting entity and from which the employee benefits are paid. The payment of funded benefits when they fall due depends not only on the financial position and the investment performance of the fund but also on an entity's ability, and willingness, to make good any shortfall in the fund's assets. Therefore, the entity is, in substance, underwriting the actuarial and investment risks associated with the plan. Consequently, the expense recognised for a defined benefit plan is not necessarily the amount of the contribution due for the period.**

57 Accounting by an entity for defined benefit plans involves the following steps:

- (a) determining the deficit or surplus. This involves:
 - (i) using an actuarial technique, the projected unit credit method, to make a reliable estimate of the ultimate cost to the entity of the benefit that employees have earned in return for their service in the current and prior periods (see paragraphs 67–69). This requires an entity to determine how much benefit is attributable to the current and prior periods (see paragraphs 70–74) and to make estimates (actuarial assumptions) about demographic variables (such as employee turnover and mortality) and financial variables (such as future increases in salaries and medical costs) that will affect the cost of the benefit (see paragraphs 75–98).
 - (ii) discounting that benefit in order to determine the present value of the defined benefit obligation and the current service cost (see paragraphs 67–69 and 83–86).
 - (iii) deducting the fair value of any plan assets (see paragraphs 113–115) from the present value of the defined benefit obligation.
- (b) determining the amount of the net defined benefit liability (asset) as the amount of the deficit or surplus determined in (a), adjusted for any effect of limiting a net defined benefit asset to the asset ceiling (see paragraph 64).
- (c) determining amounts to be recognised in profit or loss:
 - (i) current service cost (see paragraphs 70–74).
 - (ii) any past service cost and gain or loss on settlement (see paragraphs 99–112).
 - (iii) net interest on the net defined benefit liability (asset) (see paragraphs 123–126).
- (d) determining the remeasurements of the net defined benefit liability (asset), to be recognised in other comprehensive income, comprising:
 - (i) actuarial gains and losses (see paragraphs 128 and 129);
 - (ii) return on plan assets, excluding amounts included in net interest on the net defined benefit liability (asset) (see paragraph 130); and
 - (iii) any change in the effect of the asset ceiling (see paragraph 64), excluding amounts included in net interest on the net defined benefit liability (asset).

Where an entity has more than one defined benefit plan, the entity applies these procedures for each material plan separately.

58 An entity shall determine the net defined benefit liability (asset) with sufficient regularity that the amounts recognised in the financial statements do not differ materially from the amounts that would be determined at the end of the reporting period.

59 This Standard encourages, but does not require, an entity to involve a qualified actuary in the measurement of all material post-employment benefit obligations. For practical reasons, an entity may request a qualified actuary to carry out a detailed valuation of the obligation before the end of

the reporting period. Nevertheless, the results of that valuation are updated for any material transactions and other material changes in circumstances (including changes in market prices and interest rates) up to the end of the reporting period.

- 60 In some cases, estimates, averages and computational short cuts may provide a reliable approximation of the detailed computations illustrated in this Standard.

Accounting for the constructive obligation

- 61 **An entity shall account not only for its legal obligation under the formal terms of a defined benefit plan, but also for any constructive obligation that arises from the entity's informal practices. Informal practices give rise to a constructive obligation where the entity has no realistic alternative but to pay employee benefits. An example of a constructive obligation is where a change in the entity's informal practices would cause unacceptable damage to its relationship with employees.**
- 62 The formal terms of a defined benefit plan may permit an entity to terminate its obligation under the plan. Nevertheless, it is usually difficult for an entity to terminate its obligation under a plan (without payment) if employees are to be retained. Therefore, in the absence of evidence to the contrary, accounting for post-employment benefits assumes that an entity that is currently promising such benefits will continue to do so over the remaining working lives of employees.

Balance Sheet

- 63 **An entity shall recognise the net defined benefit liability (asset) in the balance sheet.**
- 64 **When an entity has a surplus in a defined benefit plan, it shall measure the net defined benefit asset at the lower of:**
- (a) the surplus in the defined benefit plan; and**
 - (b) the asset ceiling, determined using the discount rate specified in paragraph 83.**
- 65 A net defined benefit asset may arise where a defined benefit plan has been overfunded or where actuarial gains have arisen. An entity recognises a net defined benefit asset in such cases because:
- (a) the entity controls a resource, which is the ability to use the surplus to generate future benefits;
 - (b) that control is a result of past events (contributions paid by the entity and service rendered by the employee); and
 - (c) future economic benefits are available to the entity in the form of a reduction in future contributions or a cash refund, either directly to the entity or indirectly to another plan in deficit. The asset ceiling is the present value of those future benefits.

Recognition and measurement: present value of defined benefit obligations and current service cost

66 The ultimate cost of a defined benefit plan may be influenced by many variables, such as final salaries, employee turnover and mortality, employee contributions and medical cost trends. The ultimate cost of the plan is uncertain and this uncertainty is likely to persist over a long period of time. In order to measure the present value of the post-employment benefit obligations and the related current service cost, it is necessary:

- (a) to apply an actuarial valuation method (see paragraphs 67–69);
- (b) to attribute benefit to periods of service (see paragraphs 70–74); and
- (c) to make actuarial assumptions (see paragraphs 75–98).

Actuarial valuation method

67 An entity shall use the projected unit credit method to determine the present value of its defined benefit obligations and the related current service cost and, where applicable, past service cost.

68 The projected unit credit method (sometimes known as the accrued benefit method pro-rated on service or as the benefit/years of service method) sees each period of service as giving rise to an additional unit of benefit entitlement (see paragraphs 70–74) and measures each unit separately to build up the final obligation (see paragraphs 75–98).

Example illustrating paragraph 68					
A lump sum benefit is payable on termination of service and equal to 1 per cent of final salary for each year of service. The salary in year 1 is Rs.10,000 and is assumed to increase at 7 per cent (compound) each year. The discount rate used is 10 per cent per year. The following table shows how the obligation builds up for an employee who is expected to leave at the end of year 5, assuming that there are no changes in actuarial assumptions. For simplicity, this example ignores the additional adjustment needed to reflect the probability that the employee may leave the entity at an earlier or later date.					
<i>Year</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>
<i>Benefit attributed to:</i>					
<i>– prior years</i>	<i>0</i>	<i>131</i>	<i>262</i>	<i>393</i>	<i>524</i>
<i>– current year (1% of final salary)</i>	<i>131</i>	<i>131</i>	<i>131</i>	<i>131</i>	<i>131</i>
<i>– current</i>	<u><i>131</i></u>	<u><i>262</i></u>	<u><i>393</i></u>	<u><i>524</i></u>	<u><i>655</i></u>

<i>and prior years</i>					
<i>Opening Obligation</i>	—	89	196	324	476
<i>Interest at 10%</i>	—	9	20	33	48
<i>Current service cost</i>	89	98	108	119	131
<i>Closing Obligation</i>	<u>89</u>	<u>196</u>	<u>324</u>	<u>476</u>	<u>655</u>
<i>Note:</i>					
1. <i>The opening obligation is the present value of the benefit attributed to prior years.</i>					
2. <i>The current service cost is the present value of the benefit attributed to the current year.</i>					
3. <i>The closing obligation is the present value of the benefit attributed to current and prior years.</i>					

69 An entity discounts the whole of a post-employment benefit obligation, even if part of the obligation is expected to be settled before twelve months after the reporting period.

Attributing benefit to periods of service

70 In determining the present value of its defined benefit obligations and the related current service cost and, where applicable, past service cost, an entity shall attribute benefit to periods of service under the plan's benefit formula. However, if an employee's service in later years will lead to a materially higher level of benefit than in earlier years, an entity shall attribute benefit on a straight-line basis from:

- (a) the date when service by the employee first leads to benefits under the plan (whether or not the benefits are conditional on further service) until
- (b) the date when further service by the employee will lead to no material amount of further benefits under the plan, other than from further salary increases.

71 The projected unit credit method requires an entity to attribute benefit to the current period (in order to determine current service cost) and the current and prior periods (in order to determine the present value of defined benefit obligations). An entity attributes benefit to periods in which the obligation to provide post-employment benefits arises. That obligation arises as employees render services in return for post-employment benefits that an entity expects to pay in future reporting periods.

Actuarial techniques allow an entity to measure that obligation with sufficient reliability to justify recognition of a liability.

Examples illustrating paragraph 71

1. A defined benefit plan provides a lump sum benefit of Rs.100 payable on retirement for each year of service.

A benefit of Rs.100 is attributed to each year. The current service cost is the present value of Rs.100. The present value of the defined benefit obligation is the present value of Rs.100, multiplied by the number of years of service up to the end of the reporting period.

If the benefit is payable immediately when the employee leaves the entity, the current service cost and the present value of the defined benefit obligation reflect the date at which the employee is expected to leave. Thus, because of the effect of discounting, they are less than the amounts that would be determined if the employee left at the end of the reporting period.

2. A plan provides a monthly pension of 0.2 per cent of final salary for each year of service. The pension is payable from the age of 65.

Benefit equal to the present value, at the expected retirement date, of a monthly pension of 0.2 per cent of the estimated final salary payable from the expected retirement date until the expected date of death is attributed to each year of service. The current service cost is the present value of that benefit. The present value of the defined benefit obligation is the present value of monthly pension payments of 0.2 per cent of final salary, multiplied by the number of years of service up to the end of the reporting period. The current service cost and the present value of the defined benefit obligation are discounted because pension payments begin at the age of 65.

72 Employee service gives rise to an obligation under a defined benefit plan even if the benefits are conditional on future employment (in other words they are not vested). Employee service before the vesting date gives rise to a constructive obligation because, at the end of each successive reporting period, the amount of future service that an employee will have to render before becoming entitled to the benefit is reduced. In measuring its defined benefit obligation, an entity considers the probability that some employees may not satisfy any vesting requirements. Similarly, although some post-employment benefits, for example, post-employment medical benefits, become payable only if a specified event occurs when an employee is no longer employed, an obligation is created when the employee renders service that will provide entitlement to the benefit if the specified event occurs. The probability that the specified event will occur affects the measurement of the obligation, but does not determine whether the obligation exists.

Examples illustrating paragraph 72

1. A plan pays a benefit of Rs.100 for each year of service. The benefits vest after ten years of service.

A benefit of Rs.100 is attributed to each year. In each of the first ten years, the current service cost and the present value of the obligation reflect the probability that the employee may not complete ten years of service.

2. A plan pays a benefit of Rs.100 for each year of service, excluding service before the age of 25. The benefits vest immediately.

No benefit is attributed to service before the age of 25 because service before that date does not lead to benefits (conditional or unconditional). A benefit of Rs.100 is attributed to each subsequent year.

- 73 The obligation increases until the date when further service by the employee will lead to no material amount of further benefits. Therefore, all benefit is attributed to periods ending on or before that date. Benefit is attributed to individual accounting periods under the plan's benefit formula. However, if an employee's service in later years will lead to a materially higher level of benefit than in earlier years, an entity attributes benefit on a straight-line basis until the date when further service by the employee will lead to no material amount of further benefits. That is because the employee's service throughout the entire period will ultimately lead to benefit at that higher level.

Examples illustrating paragraph 73

1. A plan pays a lump sum benefit of Rs.1,000 that vests after ten years of service. The plan provides no further benefit for subsequent service.

A benefit of Rs.100 (Rs.1,000 divided by ten) is attributed to each of the first ten years.

The current service cost in each of the first ten years reflects the probability that the employee may not complete ten years of service. No benefit is attributed to subsequent years.

2. A plan pays a lump sum retirement benefit of Rs.2,000 to all employees who are still employed at the age of 55 after twenty years of service, or who are still employed at the age of 65, regardless of their length of service.

For employees who join before the age of 35, service first leads to benefits under the plan at the age of 35 (an employee could leave at the age of 30 and return at the age of 33, with no effect on the amount or timing of benefits). Those benefits are conditional on further service. Also, service beyond the age of 55 will lead to no material amount of further benefits. For these employees, the entity attributes benefit of Rs.100 (Rs.2,000 divided by twenty) to each year from the age of 35 to the age of 55.

For employees who join between the ages of 35 and 45, service beyond twenty years will lead to no material amount of further benefits. For these employees, the entity attributes benefit of 100 (2,000 divided by twenty) to each of the first twenty years.

For an employee who joins at the age of 55, service beyond ten years will lead to no material amount of

further benefits. For this employee, the entity attributes benefit of Rs.200 (Rs.2,000 divided by ten) to each of the first ten years.

For all employees, the current service cost and the present value of the obligation reflect the probability that the employee may not complete the necessary period of service.

3. A post-employment medical plan reimburses 40 per cent of an employee's post-employment medical costs if the employee leaves after more than ten and less than twenty years of service and 50 per cent of those costs if the employee leaves after twenty or more years of service.

Under the plan's benefit formula, the entity attributes 4 per cent of the present value of the expected medical costs (40 per cent divided by ten) to each of the first ten years and 1 per cent (10 per cent divided by ten) to each of the second ten years. The current service cost in each year reflects the probability that the employee may not complete the necessary period of service to earn part or all of the benefits. For employees expected to leave within ten years, no benefit is attributed.

4. A post-employment medical plan reimburses 10 per cent of an employee's post-employment medical costs if the employee leaves after more than ten and less than twenty years of service and 50 per cent of those costs if the employee leaves after twenty or more years of service.

Service in later years will lead to a materially higher level of benefit than in earlier years. Therefore, for employees expected to leave after twenty or more years, the entity attributes benefit on a straight-line basis under paragraph 71. Service beyond twenty years will lead to no material amount of further benefits. Therefore, the benefit attributed to each of the first twenty years is 2.5 per cent of the present value of the expected medical costs (50 per cent divided by twenty).

For employees expected to leave between ten and twenty years, the benefit attributed to each of the first ten years is 1 per cent of the present value of the expected medical costs.

For these employees, no benefit is attributed to service between the end of the tenth year and the estimated date of leaving.

For employees expected to leave within ten years, no benefit is attributed.

5. An entity has 1,000 employees. As per the statutory requirements, gratuity shall be payable to an employee on the termination of his employment after he has rendered continuous service for not less than five years (a) on his superannuation, or (b) on his retirement or resignation, or (c) on his death or disablement due to accident or disease. The completion of continuous service of five years shall not be necessary where the termination of the employment of any employee is due to death or disablement. The amount payable is determined by a formula linked to number of years of service and last drawn salary. As per the law, the amount payable shall not exceed Rs.1,000,000.

The amount of gratuity attributed to each year of service will be calculated as follows:

Number of employees not likely to fulfil the eligibility criteria will be ignored.

Other employees will be grouped according to period of service they are expected to render taking into account mortality rate, disablement and resignation after 5 years. Gratuity payable will be calculated in accordance with the formula prescribed in the governing statute based on the period of service and the salary at the time of termination of employment, assuming promotion, salary increases etc.

For those employees for whom the amount payable as per the formula does not exceed Rs.1,000,000, over the expected period of service, the amount payable will be divided by the expected period of service and the resulting amount will be attributed to each year of the expected period of service, including the period before the stipulated period of 5 years.

In case of the remaining employees, the amount as per the formula exceeds Rs. 1,000,000 over the expected period of service of 10 years, and the amount of the statutory threshold of Rs. 1,000,000 is reached at the end of 8 years. Rs. 1,25,000 (Rs. 1,000,000 divided by 8) is attributed to each of the first 8 years. In this case, no benefit is attributed to subsequent two years. This is because service beyond 8 years will lead to no material amount of further benefits

- 74 Where the amount of a benefit is a constant proportion of final salary for each year of service, future salary increases will affect the amount required to settle the obligation that exists for service before the end of the reporting period, but do not create an additional obligation. Therefore:
- (a) for the purpose of paragraph 70(b), salary increases do not lead to further benefits, even though the amount of the benefits is dependent on final salary; and
 - (b) the amount of benefit attributed to each period is a constant proportion of the salary to which the benefit is linked.

Example illustrating paragraph 74

Employees are entitled to a benefit of 3 per cent of final salary for each year of service before the age of 55.

Benefit of 3 per cent of estimated final salary is attributed to each year up to the age of 55. This is the date when further service by the employee will lead to no material amount of further benefits under the plan. No benefit is attributed to service after that age.

Actuarial assumptions

- 75 **Actuarial assumptions shall be unbiased and mutually compatible.**
- 76 Actuarial assumptions are an entity's best estimates of the variables that will determine the ultimate cost of providing post-employment benefits. Actuarial assumptions comprise:
- (a) demographic assumptions about the future characteristics of current and former employees (and their dependants) who are eligible for benefits. Demographic assumptions deal with matters such as:
 - (i) mortality (see paragraphs 81 and 82);
 - (ii) rates of employee turnover, disability and early retirement;
 - (iii) the proportion of plan members with dependants who will be eligible for benefits;

- (iv) the proportion of plan members who will select each form of payment option available under the plan terms; and
 - (v) claim rates under medical plans.
- (b) financial assumptions, dealing with items such as:
- (i) the discount rate (see paragraphs 83–86);
 - (ii) benefit levels, excluding any cost of the benefits to be met by employees, and future salary (see paragraphs 87–95);
 - (iii) in the case of medical benefits, future medical costs, including claim handling costs (ie the costs that will be incurred in processing and resolving claims, including legal and adjuster's fees) (see paragraphs 96–98); and
 - (iv) taxes payable by the plan on contributions relating to service before the reporting date or on benefits resulting from that service.

77 Actuarial assumptions are unbiased if they are neither imprudent nor excessively conservative.

78 Actuarial assumptions are mutually compatible if they reflect the economic relationships between factors such as inflation, rates of salary increase and discount rates. For example, all assumptions that depend on a particular inflation level (such as assumptions about interest rates and salary and benefit increases) in any given future period assume the same inflation level in that period.

79 An entity determines the discount rate and other financial assumptions in nominal (stated) terms, unless estimates in real (inflation-adjusted) terms are more reliable, for example, in a hyperinflationary economy (see Ind AS 29, *Financial Reporting in Hyperinflationary Economies*), or where the benefit is index-linked and there is a deep market in index-linked bonds of the same currency and term.

80 **Financial assumptions shall be based on market expectations, at the end of the reporting period, for the period over which the obligations are to be settled.**

Actuarial assumptions: mortality

81 **An entity shall determine its mortality assumptions by reference to its best estimate of the mortality of plan members both during and after employment.**

82 In order to estimate the ultimate cost of the benefit an entity takes into consideration expected changes in mortality, for example by modifying standard mortality tables with estimates of mortality improvements.

Actuarial assumptions: discount rate

83 **The rate used to discount post-employment benefit obligations (both funded and unfunded) shall be determined by reference to market yields at the end of the reporting period on government bonds. However, subsidiaries, associates, joint ventures and branches domiciled outside India shall discount post-employment benefit obligations arising on account of post-**

employment benefit plans using the rate determined by reference to market yields at the end of the reporting period on high quality corporate bonds. In case, such subsidiaries, associates, joint ventures and branches are domiciled in countries where there is no deep market in such bonds, the market yields (at the end of the reporting period) on government bonds of that country shall be used. The currency and term of the government bonds or corporate bonds shall be consistent with the currency and estimated term of the post-employment benefit obligations.

- 84 One actuarial assumption that has a material effect is the discount rate. The discount rate reflects the time value of money but not the actuarial or investment risk. Furthermore, the discount rate does not reflect the entity-specific credit risk borne by the entity's creditors, nor does it reflect the risk that future experience may differ from actuarial assumptions.
- 85 The discount rate reflects the estimated timing of benefit payments. In practice, an entity often achieves this by applying a single weighted average discount rate that reflects the estimated timing and amount of benefit payments and the currency in which the benefits are to be paid.
- 86 In some cases, there may be no deep market in government bonds with a sufficiently long maturity to match the estimated maturity of all the benefit payments. In such cases, an entity uses current market rates of the appropriate term to discount shorter-term payments, and estimates the discount rate for longer maturities by extrapolating current market rates along the yield curve. The total present value of a defined benefit obligation is unlikely to be particularly sensitive to the discount rate applied to the portion of benefits that is payable beyond the final maturity of the available government bonds.

Actuarial assumptions: salaries, benefits and medical costs

- 87 An entity shall measure its defined benefit obligations on a basis that reflects:
- (a) the benefits set out in the terms of the plan (or resulting from any constructive obligation that goes beyond those terms) at the end of the reporting period;
 - (b) any estimated future salary increases that affect the benefits payable;
 - (c) the effect of any limit on the employer's share of the cost of the future benefits;
 - (d) contributions from employees or third parties that reduce the ultimate cost to the entity of those benefits; and
 - (e) estimated future changes in the level of any state benefits that affect the benefits payable under a defined benefit plan, if, and only if, either:
 - (i) those changes were enacted before the end of the reporting period; or
 - (ii) historical data, or other reliable evidence, indicate that those state benefits will change in some predictable manner, for example, in line with future changes in general price levels or general salary levels.
- 88 Actuarial assumptions reflect future benefit changes that are set out in the formal terms of a plan (or a constructive obligation that goes beyond those terms) at the end of the reporting period. This is the case if, for example:

- (a) the entity has a history of increasing benefits, for example, to mitigate the effects of inflation, and there is no indication that this practice will change in the future;
 - (b) the entity is obliged, by either the formal terms of a plan (or a constructive obligation that goes beyond those terms) or legislation, to use any surplus in the plan for the benefit of plan participants (see paragraph 108(c)); or
 - (c) benefits vary in response to a performance target or other criteria. For example, the terms of the plan may state that it will pay reduced benefits or require additional contributions from employees if the plan assets are insufficient. The measurement of the obligation reflects the best estimate of the effect of the performance target or other criteria.
- 89 Actuarial assumptions do not reflect future benefit changes that are not set out in the formal terms of the plan (or a constructive obligation) at the end of the reporting period. Such changes will result in:
- (a) past service cost, to the extent that they change benefits for service before the change; and
 - (b) current service cost for periods after the change, to the extent that they change benefits for service after the change.
- 90 Estimates of future salary increases take account of inflation, seniority, promotion and other relevant factors, such as supply and demand in the employment market.
- 91 Some defined benefit plans limit the contributions that an entity is required to pay. The ultimate cost of the benefits takes account of the effect of a limit on contributions. The effect of a limit on contributions is determined over the shorter of:
- (a) the estimated life of the entity; and
 - (b) the estimated life of the plan.
- 92 Some defined benefit plans require employees or third parties to contribute to the cost of the plan. Contributions by employees reduce the cost of the benefits to the entity. An entity considers whether third-party contributions reduce the cost of the benefits to the entity, or are a reimbursement right as described in paragraph 116. Contributions by employees or third parties are either set out in the formal terms of the plan (or arise from a constructive obligation that goes beyond those terms), or are discretionary. Discretionary contributions by employees or third parties reduce service cost upon payment of these contributions to the plan.
- 93 Contributions from employees or third parties set out in the formal terms of the plan either reduce service cost (if they are linked to service), or affect remeasurements of the net defined benefit liability (asset) (if they are not linked to service). An example of contributions that are not linked to service is when the contributions are required to reduce a deficit arising from losses on plan assets or from actuarial losses. If contributions from employees or third parties are linked to service, those contributions reduce the service cost as follows:
- (a) if the amount of the contributions is dependent on the number of years of service, an entity shall attribute the contributions to periods of service using the same attribution

method required by paragraph 70 for the gross benefit (ie either using the plan's contribution formula or on a straight-line basis); or

- (b) if the amount of the contributions is independent of the number of years of service, the entity is permitted to recognise such contributions as a reduction of the service cost in the period in which the related service is rendered. Examples of contributions that are independent of the number of years of service include those that are a fixed percentage of the employee's salary, a fixed amount throughout the service period or dependent on the employee's age.

Appendix A provides related application guidance.

- 94 For contributions from employees or third parties that are attributed to periods of service in accordance with paragraph 93(a), changes in the contributions result in:
 - (a) current and past service cost (if those changes are not set out in the formal terms of a plan and do not arise from a constructive obligation); or
 - (b) actuarial gains and losses (if those changes are set out in the formal terms of a plan, or arise from a constructive obligation).
- 95 Some post-employment benefits are linked to variables such as the level of state retirement benefits or state medical care. The measurement of such benefits reflects the best estimate of such variables, based on historical data and other reliable evidence.
- 96 **Assumptions about medical costs shall take account of estimated future changes in the cost of medical services, resulting from both inflation and specific changes in medical costs.**
- 97 Measurement of post-employment medical benefits requires assumptions about the level and frequency of future claims and the cost of meeting those claims. An entity estimates future medical costs on the basis of historical data about the entity's own experience, supplemented where necessary by historical data from other entities, insurance companies, medical providers or other sources. Estimates of future medical costs consider the effect of technological advances, changes in health care utilisation or delivery patterns and changes in the health status of plan participants.
- 98 The level and frequency of claims is particularly sensitive to the age, health status and sex of employees (and their dependants) and may be sensitive to other factors such as geographical location. Therefore, historical data are adjusted to the extent that the demographic mix of the population differs from that of the population used as a basis for the data. They are also adjusted where there is reliable evidence that historical trends will not continue.

Past service cost and gains and losses on settlement

- 99 **Before determining past service cost, or a gain or loss on settlement, an entity shall remeasure the net defined benefit liability (asset) using the current fair value of plan assets and current actuarial assumptions (including current market interest rates and other current market**

prices) reflecting the benefits offered under the plan before the plan amendment, curtailment or settlement.

- 100 An entity need not distinguish between past service cost resulting from a plan amendment, past service cost resulting from a curtailment and a gain or loss on settlement if these transactions occur together. In some cases, a plan amendment occurs before a settlement, such as when an entity changes the benefits under the plan and settles the amended benefits later. In those cases an entity recognises past service cost before any gain or loss on settlement.
- 101 A settlement occurs together with a plan amendment and curtailment if a plan is terminated with the result that the obligation is settled and the plan ceases to exist. However, the termination of a plan is not a settlement if the plan is replaced by a new plan that offers benefits that are, in substance, the same.

Past service cost

- 102 Past service cost is the change in the present value of the defined benefit obligation resulting from a plan amendment or curtailment.
- 103 An entity shall recognise past service cost as an expense at the earlier of the following dates:
- (a) when the plan amendment or curtailment occurs; and
 - (b) when the entity recognises related restructuring costs (see Ind AS 37) or termination benefits (see paragraph 165).
- 104 A plan amendment occurs when an entity introduces, or withdraws, a defined benefit plan or changes the benefits payable under an existing defined benefit plan.
- 105 A curtailment occurs when an entity significantly reduces the number of employees covered by a plan. A curtailment may arise from an isolated event, such as the closing of a plant, discontinuance of an operation or termination or suspension of a plan.
- 106 Past service cost may be either positive (when benefits are introduced or changed so that the present value of the defined benefit obligation increases) or negative (when benefits are withdrawn or changed so that the present value of the defined benefit obligation decreases).
- 107 Where an entity reduces benefits payable under an existing defined benefit plan and, at the same time, increases other benefits payable under the plan for the same employees, the entity treats the change as a single net change.
- 108 Past service cost excludes:
- (a) the effect of differences between actual and previously assumed salary increases on the obligation to pay benefits for service in prior years (there is no past service cost because actuarial assumptions allow for projected salaries);
 - (b) underestimates and overestimates of discretionary pension increases when an entity has a constructive obligation to grant such increases (there is no past service cost because actuarial assumptions allow for such increases);

- (c) estimates of benefit improvements that result from actuarial gains or from the return on plan assets that have been recognised in the financial statements if the entity is obliged, by either the formal terms of a plan (or a constructive obligation that goes beyond those terms) or legislation, to use any surplus in the plan for the benefit of plan participants, even if the benefit increase has not yet been formally awarded (there is no past service cost because the resulting increase in the obligation is an actuarial loss, see paragraph 88); and
- (d) the increase in vested benefits (ie benefits that are not conditional on future employment, see paragraph 72) when, in the absence of new or improved benefits, employees complete vesting requirements (there is no past service cost because the entity recognised the estimated cost of benefits as current service cost as the service was rendered).

Gains and losses on settlement

109 The gain or loss on a settlement is the difference between:

- (a) the present value of the defined benefit obligation being settled, as determined on the date of settlement; and
- (b) the settlement price, including any plan assets transferred and any payments made directly by the entity in connection with the settlement.

110 **An entity shall recognise a gain or loss on the settlement of a defined benefit plan when the settlement occurs.**

111 A settlement occurs when an entity enters into a transaction that eliminates all further legal or constructive obligation for part or all of the benefits provided under a defined benefit plan (other than a payment of benefits to, or on behalf of, employees in accordance with the terms of the plan and included in the actuarial assumptions). For example, a one-off transfer of significant employer obligations under the plan to an insurance company through the purchase of an insurance policy is a settlement; a lump sum cash payment, under the terms of the plan, to plan participants in exchange for their rights to receive specified post-employment benefits is not.

112 In some cases, an entity acquires an insurance policy to fund some or all of the employee benefits relating to employee service in the current and prior periods. The acquisition of such a policy is not a settlement if the entity retains a legal or constructive obligation (see paragraph 46) to pay further amounts if the insurer does not pay the employee benefits specified in the insurance policy. Paragraphs 116–119 deal with the recognition and measurement of reimbursement rights under insurance policies that are not plan assets.

Recognition and measurement: plan assets

Fair value of plan assets

113 The fair value of any plan assets is deducted from the present value of the defined benefit obligation in determining the deficit or surplus.

114 Plan assets exclude unpaid contributions due from the reporting entity to the fund, as well as any non-transferable financial instruments issued by the entity and held by the fund. Plan assets are

reduced by any liabilities of the fund that do not relate to employee benefits, for example, trade and other payables and liabilities resulting from derivative financial instruments.

- 115 Where plan assets include qualifying insurance policies that exactly match the amount and timing of some or all of the benefits payable under the plan, the fair value of those insurance policies is deemed to be the present value of the related obligations (subject to any reduction required if the amounts receivable under the insurance policies are not recoverable in full).

Reimbursements

- 116 **When, and only when, it is virtually certain that another party will reimburse some or all of the expenditure required to settle a defined benefit obligation, an entity shall:**

- (a) **recognise its right to reimbursement as a separate asset. The entity shall measure the asset at fair value.**
- (b) **disaggregate and recognise changes in the fair value of its right to reimbursement in the same way as for changes in the fair value of plan assets (see paragraphs 124 and 125). The components of defined benefit cost recognised in accordance with paragraph 120 may be recognised net of amounts relating to changes in the carrying amount of the right to reimbursement.**

- 117 Sometimes, an entity is able to look to another party, such as an insurer, to pay part or all of the expenditure required to settle a defined benefit obligation. Qualifying insurance policies, as defined in paragraph 8, are plan assets. An entity accounts for qualifying insurance policies in the same way as for all other plan assets and paragraph 116 is not relevant (see paragraphs 46–49 and 115).

- 118 When an insurance policy held by an entity is not a qualifying insurance policy, that insurance policy is not a plan asset. Paragraph 116 is relevant to such cases: the entity recognises its right to reimbursement under the insurance policy as a separate asset, rather than as a deduction in determining the defined benefit deficit or surplus. Paragraph 140(b) requires the entity to disclose a brief description of the link between the reimbursement right and the related obligation.

- 119 If the right to reimbursement arises under an insurance policy that exactly matches the amount and timing of some or all of the benefits payable under a defined benefit plan, the fair value of the reimbursement right is deemed to be the present value of the related obligation (subject to any reduction required if the reimbursement is not recoverable in full).

Components of defined benefit cost

- 120 **An entity shall recognise the components of defined benefit cost, except to the extent that another Ind AS requires or permits their inclusion in the cost of an asset, as follows:**

- (a) **service cost (see paragraphs 66–112) in profit or loss;**
- (b) **net interest on the net defined benefit liability (asset) (see paragraphs 123–126) in profit or loss; and**
- (c) **remeasurements of the net defined benefit liability (asset) (see paragraphs 127–130) in other comprehensive income.**

121 Other Ind ASs require the inclusion of some employee benefit costs within the cost of assets, such as inventories and property, plant and equipment (see Ind AS 2 and Ind AS 16). Any post-employment benefit costs included in the cost of such assets include the appropriate proportion of the components listed in paragraph 120.

122 **Remeasurements of the net defined benefit liability (asset) recognised in other comprehensive income shall not be reclassified to profit or loss in a subsequent period. However, the entity may transfer those amounts recognised in other comprehensive income within equity.**

Net interest on the net defined benefit liability (asset)

123 **Net interest on the net defined benefit liability (asset) shall be determined by multiplying the net defined benefit liability (asset) by the discount rate specified in paragraph 83, both as determined at the start of the annual reporting period, taking account of any changes in the net defined benefit liability (asset) during the period as a result of contribution and benefit payments.**

124 Net interest on the net defined benefit liability (asset) can be viewed as comprising interest income on plan assets, interest cost on the defined benefit obligation and interest on the effect of the asset ceiling mentioned in paragraph 64.

125 Interest income on plan assets is a component of the return on plan assets, and is determined by multiplying the fair value of the plan assets by the discount rate specified in paragraph 83, both as determined at the start of the annual reporting period, taking account of any changes in the plan assets held during the period as a result of contributions and benefit payments. The difference between the interest income on plan assets and the return on plan assets is included in the remeasurement of the net defined benefit liability (asset).

126 Interest on the effect of the asset ceiling is part of the total change in the effect of the asset ceiling, and is determined by multiplying the effect of the asset ceiling by the discount rate specified in paragraph 83, both as determined at the start of the annual reporting period. The difference between that amount and the total change in the effect of the asset ceiling is included in the remeasurement of the net defined benefit liability (asset).

Remeasurements of the net defined benefit liability (asset)

127 Remeasurements of the net defined benefit liability (asset) comprise:

- (a) actuarial gains and losses (see paragraphs 128 and 129);
- (b) the return on plan assets (see paragraph 130), excluding amounts included in net interest on the net defined benefit liability (asset) (see paragraph 125); and
- (c) any change in the effect of the asset ceiling, excluding amounts included in net interest on the net defined benefit liability (asset) (see paragraph 126).

128 Actuarial gains and losses result from increases or decreases in the present value of the defined benefit obligation because of changes in actuarial assumptions and experience adjustments. Causes of actuarial gains and losses include, for example:

- (a) unexpectedly high or low rates of employee turnover, early retirement or mortality or of increases in salaries, benefits (if the formal or constructive terms of a plan provide for inflationary benefit increases) or medical costs;
- (b) the effect of changes to assumptions concerning benefit payment options;
- (c) the effect of changes in estimates of future employee turnover, early retirement or mortality or of increases in salaries, benefits (if the formal or constructive terms of a plan provide for inflationary benefit increases) or medical costs; and
- (d) the effect of changes in the discount rate.

129 Actuarial gains and losses do not include changes in the present value of the defined benefit obligation because of the introduction, amendment, curtailment or settlement of the defined benefit plan, or changes to the benefits payable under the defined benefit plan. Such changes result in past service cost or gains or losses on settlement.

130 In determining the return on plan assets, an entity deducts the costs of managing the plan assets and any tax payable by the plan itself, other than tax included in the actuarial assumptions used to measure the defined benefit obligation (paragraph 76). Other administration costs are not deducted from the return on plan assets.

Presentation

Offset

131 **An entity shall offset an asset relating to one plan against a liability relating to another plan when, and only when, the entity:**

- (a) **has a legally enforceable right to use a surplus in one plan to settle obligations under the other plan; and**
- (b) **intends either to settle the obligations on a net basis, or to realize the surplus in one plan and settle its obligation under the other plan simultaneously.**

132 The offsetting criteria are similar to those established for financial instruments in Ind AS 32, *Financial Instruments: Presentation*.

Current/non-current distinction

133 Some entities distinguish current assets and liabilities from non-current assets and liabilities. This Standard does not specify whether an entity should distinguish current and non-current portions of assets and liabilities arising from post-employment benefits.

Components of defined benefit cost

134 Paragraph 120 requires an entity to recognise service cost and net interest on the net defined benefit liability (asset) in profit or loss. This Standard does not specify how an entity should present service cost and net interest on the net defined benefit liability (asset). An entity presents those components in accordance with Ind ASI.

Disclosure

135 An entity shall disclose information that:

- (a) explains the characteristics of its defined benefit plans and risks associated with them (see paragraph 139);
- (b) identifies and explains the amounts in its financial statements arising from its defined benefit plans (see paragraphs 140–144); and
- (c) describes how its defined benefit plans may affect the amount, timing and uncertainty of the entity's future cash flows (see paragraphs 145–147).

136 To meet the objectives in paragraph 135, an entity shall consider all the following:

- (a) the level of detail necessary to satisfy the disclosure requirements;
- (b) how much emphasis to place on each of the various requirements;
- (c) how much aggregation or disaggregation to undertake; and
- (d) whether users of financial statements need additional information to evaluate the quantitative information disclosed.

137 If the disclosures provided in accordance with the requirements in this Standard and other Ind ASs are insufficient to meet the objectives in paragraph 135, an entity shall disclose additional information necessary to meet those objectives. For example, an entity may present an analysis of the present value of the defined benefit obligation that distinguishes the nature, characteristics and risks of the obligation. Such a disclosure could distinguish:

- (a) between amounts owing to active members, deferred members, and pensioners.
- (b) between vested benefits and accrued but not vested benefits.
- (c) between conditional benefits, amounts attributable to future salary increases and other benefits.

138 An entity shall assess whether all or some disclosures should be disaggregated to distinguish plans or groups of plans with materially different risks. For example, an entity may disaggregate disclosure about plans showing one or more of the following features:

- (a) different geographical locations.
- (b) different characteristics such as flat salary pension plans, final salary pension plans or post-employment medical plans.

- (c) different regulatory environments.
- (d) different reporting segments.
- (e) different funding arrangements (eg wholly unfunded, wholly or partly funded).

Characteristics of defined benefit plans and risks associated with them

139 An entity shall disclose:

- (a) information about the characteristics of its defined benefit plans, including:
 - (i) the nature of the benefits provided by the plan (eg final salary defined benefit plan or contribution-based plan with guarantee).
 - (ii) a description of the regulatory framework in which the plan operates, for example the level of any minimum funding requirements, and any effect of the regulatory framework on the plan, such as the asset ceiling (see paragraph 64).
 - (iii) a description of any other entity's responsibilities for the governance of the plan, for example responsibilities of trustees or of board members of the plan.
- (b) a description of the risks to which the plan exposes the entity, focused on any unusual, entity-specific or plan-specific risks, and of any significant concentrations of risk. For example, if plan assets are invested primarily in one class of investments, eg property, the plan may expose the entity to a concentration of property market risk.
- (c) a description of any plan amendments, curtailments and settlements.

Explanation of amounts in the financial statements

140 An entity shall provide a reconciliation from the opening balance to the closing balance for each of the following, if applicable:

- (a) the net defined benefit liability (asset), showing separate reconciliations for:
 - (i) plan assets.
 - (ii) the present value of the defined benefit obligation.
 - (iii) the effect of the asset ceiling.
- (b) any reimbursement rights. An entity shall also describe the relationship between any reimbursement right and the related obligation.

141 Each reconciliation listed in paragraph 140 shall show each of the following, if applicable:

- (a) current service cost.

- (b) interest income or expense.
- (c) remeasurements of the net defined benefit liability (asset), showing separately:
 - (i) the return on plan assets, excluding amounts included in interest in (b).
 - (ii) actuarial gains and losses arising from changes in demographic assumptions (see paragraph 76(a)).
 - (iii) actuarial gains and losses arising from changes in financial assumptions (see paragraph 76(b)).
 - (iv) changes in the effect of limiting a net defined benefit asset to the asset ceiling, excluding amounts included in interest in (b). An entity shall also disclose how it determined the maximum economic benefit available, ie whether those benefits would be in the form of refunds, reductions in future contributions or a combination of both.
- (d) past service cost and gains and losses arising from settlements. As permitted by paragraph 100, past service cost and gains and losses arising from settlements need not be distinguished if they occur together.
- (e) the effect of changes in foreign exchange rates.
- (f) contributions to the plan, showing separately those by the employer and by plan participants.
- (g) payments from the plan, showing separately the amount paid in respect of any settlements.
- (h) the effects of business combinations and disposals.

142 An entity shall disaggregate the fair value of the plan assets into classes that distinguish the nature and risks of those assets, subdividing each class of plan asset into those that have a quoted market price in an active market (as defined in Ind AS 113, *Fair Value Measurement*) and those that do not. For example, and considering the level of disclosure discussed in paragraph 136, an entity could distinguish between:

- (a) cash and cash equivalents;
- (b) equity instruments (segregated by industry type, company size, geography etc);
- (c) debt instruments (segregated by type of issuer, credit quality, geography etc);
- (d) real estate (segregated by geography etc);
- (e) derivatives (segregated by type of underlying risk in the contract, for example, interest rate contracts, foreign exchange contracts, equity contracts, credit contracts, longevity swaps etc);
- (f) investment funds (segregated by type of fund);

(g) asset-backed securities; and

(h) structured debt.

143 An entity shall disclose the fair value of the entity's own transferable financial instruments held as plan assets, and the fair value of plan assets that are property occupied by, or other assets used by, the entity.

144 An entity shall disclose the significant actuarial assumptions used to determine the present value of the defined benefit obligation (see paragraph 76). Such disclosure shall be in absolute terms (eg as an absolute percentage, and not just as a margin between different percentages and other variables). When an entity provides disclosures in total for a grouping of plans, it shall provide such disclosures in the form of weighted averages or relatively narrow ranges.

Amount, timing and uncertainty of future cash flows

145 An entity shall disclose:

(a) a sensitivity analysis for each significant actuarial assumption (as disclosed under paragraph 144) as of the end of the reporting period, showing how the defined benefit obligation would have been affected by changes in the relevant actuarial assumption that were reasonably possible at that date.

(b) the methods and assumptions used in preparing the sensitivity analyses required by (a) and the limitations of those methods.

(c) changes from the previous period in the methods and assumptions used in preparing the sensitivity analyses, and the reasons for such changes.

146 An entity shall disclose a description of any asset-liability matching strategies used by the plan or the entity, including the use of annuities and other techniques, such as longevity swaps, to manage risk.

147 To provide an indication of the effect of the defined benefit plan on the entity's future cash flows, an entity shall disclose:

(a) a description of any funding arrangements and funding policy that affect future contributions.

(b) the expected contributions to the plan for the next annual reporting period.

(c) information about the maturity profile of the defined benefit obligation. This will include the weighted average duration of the defined benefit obligation and may include other information about the distribution of the timing of benefit payments, such as a maturity analysis of the benefit payments.

Multi-employer plans

148 If an entity participates in a multi-employer defined benefit plan, it shall disclose:

- (a) a description of the funding arrangements, including the method used to determine the entity's rate of contributions and any minimum funding requirements.
- (b) a description of the extent to which the entity can be liable to the plan for other entities' obligations under the terms and conditions of the multi-employer plan.
- (c) a description of any agreed allocation of a deficit or surplus on:
 - (i) wind-up of the plan; or
 - (ii) the entity's withdrawal from the plan.
- (d) if the entity accounts for that plan as if it were a defined contribution plan in accordance with paragraph 34, it shall disclose the following, in addition to the information required by (a)-(c) and instead of the information required by paragraphs 139-147:
 - (i) the fact that the plan is a defined benefit plan.
 - (ii) the reason why sufficient information is not available to enable the entity to account for the plan as a defined benefit plan.
 - (iii) the expected contributions to the plan for the next annual reporting period.
 - (iv) information about any deficit or surplus in the plan that may affect the amount of future contributions, including the basis used to determine that deficit or surplus and the implications, if any, for the entity.
 - (v) an indication of the level of participation of the entity in the plan compared with other participating entities. Examples of measures that might provide such an indication include the entity's proportion of the total contributions to the plan or the entity's proportion of the total number of active members, retired members, and former members entitled to benefits, if that information is available.

Defined benefit plans that share risks between entities under common control

149 If an entity participates in a defined benefit plan that shares risks between entities under common control, it shall disclose:

- (a) the contractual agreement or stated policy for charging the net defined benefit cost or the fact that there is no such policy.
- (b) the policy for determining the contribution to be paid by the entity.
- (c) if the entity accounts for an allocation of the net defined benefit cost as noted in paragraph 41, all the information about the plan as a whole required by paragraphs 135-147.
- (d) if the entity accounts for the contribution payable for the period as noted in paragraph 41, the information about the plan as a whole required by paragraphs 135-137, 139, 142-144 and 147(a) and (b).

150 The information required by paragraph 149(c) and (d) can be disclosed by cross-reference to disclosures in another group entity's financial statements if:

- (a) that group entity's financial statements separately identify and disclose the information required about the plan; and
- (b) that group entity's financial statements are available to users of the financial statements on the same terms as the financial statements of the entity and at the same time as, or earlier than, the financial statements of the entity.

Disclosure requirements in other Ind ASs

151 Where required by Ind AS 24 an entity discloses information about:

- (a) related party transactions with post-employment benefit plans; and
- (b) post-employment benefits for key management personnel.

152 Where required by Ind AS 37 an entity discloses information about contingent liabilities arising from post-employment benefit obligations.

Other long-term employee benefits

153 Other long-term employee benefits include items such as the following, if not expected to be settled wholly before twelve months after the end of the annual reporting period in which the employees render the related service:

- (a) long-term paid absences such as long-service or sabbatical leave;
- (b) jubilee or other long-service benefits;
- (c) long-term disability benefits;
- (d) profit-sharing and bonuses; and
- (e) deferred remuneration.

154 The measurement of other long-term employee benefits is not usually subject to the same degree of uncertainty as the measurement of post-employment benefits. For this reason, this Standard requires a simplified method of accounting for other long-term employee benefits. Unlike the accounting required for post-employment benefits, this method does not recognise remeasurements in other comprehensive income.

Recognition and measurement

155 In recognising and measuring the surplus or deficit in an other long-term employee benefit plan, an entity shall apply paragraphs 56–98 and 113–115. An entity shall apply paragraphs 116–119 in recognising and measuring any reimbursement right.

156 For other long-term employee benefits, an entity shall recognise the net total of the following amounts in profit or loss, except to the extent that another Ind AS requires or permits their inclusion in the cost of an asset:

- (a) service cost (see paragraphs 66–112);
- (b) net interest on the net defined benefit liability (asset) (see paragraphs 123–126); and
- (c) remeasurements of the net defined benefit liability (asset) (see paragraphs 127–130).

157 One form of other long-term employee benefit is long-term disability benefit. If the level of benefit depends on the length of service, an obligation arises when the service is rendered. Measurement of that obligation reflects the probability that payment will be required and the length of time for which payment is expected to be made. If the level of benefit is the same for any disabled employee regardless of years of service, the expected cost of those benefits is recognised when an event occurs that causes a long-term disability.

Disclosure

158 Although this Standard does not require specific disclosures about other long-term employee benefits, other Ind ASs may require disclosures. For example, Ind AS 24 requires disclosures about employee benefits for key management personnel. Ind AS 1 requires disclosure of employee benefits expense.

Termination benefits

159 This Standard deals with termination benefits separately from other employee benefits because the event that gives rise to an obligation is the termination of employment rather than employee service. Termination benefits result from either an entity's decision to terminate the employment or an employee's decision to accept an entity's offer of benefits in exchange for termination of employment.

160 Termination benefits do not include employee benefits resulting from termination of employment at the request of the employee without an entity's offer, or as a result of mandatory retirement requirements, because those benefits are post-employment benefits. Some entities provide a lower level of benefit for termination of employment at the request of the employee (in substance, a post-employment benefit) than for termination of employment at the request of the entity. The difference between the benefit provided for termination of employment at the request of the employee and a higher benefit provided at the request of the entity is a termination benefit.

161 The form of the employee benefit does not determine whether it is provided in exchange for service or in exchange for termination of the employee's employment. Termination benefits are typically lump sum payments, but sometimes also include:

- (a) enhancement of post-employment benefits, either indirectly through an employee benefit plan or directly.

- (b) salary until the end of a specified notice period if the employee renders no further service that provides economic benefits to the entity.

162 Indicators that an employee benefit is provided in exchange for services include the following:

- (a) the benefit is conditional on future service being provided (including benefits that increase if further service is provided).
- (b) the benefit is provided in accordance with the terms of an employee benefit plan.

163 Some termination benefits are provided in accordance with the terms of an existing employee benefit plan. For example, they may be specified by statute, employment contract or union agreement, or may be implied as a result of the employer's past practice of providing similar benefits. As another example, if an entity makes an offer of benefits available for more than a short period, or there is more than a short period between the offer and the expected date of actual termination, the entity considers whether it has established a new employee benefit plan and hence whether the benefits offered under that plan are termination benefits or post-employment benefits. Employee benefits provided in accordance with the terms of an employee benefit plan are termination benefits if they both result from an entity's decision to terminate an employee's employment and are not conditional on future service being provided.

164 Some employee benefits are provided regardless of the reason for the employee's departure. The payment of such benefits is certain (subject to any vesting or minimum service requirements) but the timing of their payment is uncertain. Although such benefits are described in some jurisdictions as termination indemnities or termination gratuities, they are post-employment benefits rather than termination benefits, and an entity accounts for them as post-employment benefits.

Recognition

165 **An entity shall recognise a liability and expense for termination benefits at the earlier of the following dates:**

- (a) when the entity can no longer withdraw the offer of those benefits; and**
- (b) when the entity recognises costs for a restructuring that is within the scope of Ind AS 37 and involves the payment of termination benefits.**

166 For termination benefits payable as a result of an employee's decision to accept an offer of benefits in exchange for the termination of employment, the time when an entity can no longer withdraw the offer of termination benefits is the earlier of:

- (a) when the employee accepts the offer; and
- (b) when a restriction (eg a legal, regulatory or contractual requirement or other restriction) on the entity's ability to withdraw the offer takes effect. This would be when the offer is made, if the restriction existed at the time of the offer.

- 167 For termination benefits payable as a result of an entity's decision to terminate an employee's employment, the entity can no longer withdraw the offer when the entity has communicated to the affected employees a plan of termination meeting all of the following criteria:
- (a) Actions required to complete the plan indicate that it is unlikely that significant changes to the plan will be made.
 - (b) The plan identifies the number of employees whose employment is to be terminated, their job classifications or functions and their locations (but the plan need not identify each individual employee) and the expected completion date.
 - (c) The plan establishes the termination benefits that employees will receive in sufficient detail that employees can determine the type and amount of benefits they will receive when their employment is terminated.
- 168 When an entity recognises termination benefits, the entity may also have to account for a plan amendment or a curtailment of other employee benefits (see paragraph 103).

Measurement

- 169 An entity shall measure termination benefits on initial recognition, and shall measure and recognise subsequent changes, in accordance with the nature of the employee benefit, provided that if the termination benefits are an enhancement to post-employment benefits, the entity shall apply the requirements for post-employment benefits. Otherwise:
- (a) if the termination benefits are expected to be settled wholly before twelve months after the end of the annual reporting period in which the termination benefit is recognised, the entity shall apply the requirements for short-term employee benefits.
 - (b) if the termination benefits are not expected to be settled wholly before twelve months after the end of the annual reporting period, the entity shall apply the requirements for other long-term employee benefits.
- 170 Because termination benefits are not provided in exchange for service, paragraphs 70–74 relating to the attribution of the benefit to periods of service are not relevant.

Example illustrating paragraphs 159–170

Background

As a result of a recent acquisition, an entity plans to close a factory in ten months and, at that time, terminate the employment of all of the remaining employees at the factory. Because the entity needs the expertise of the employees at the factory to complete some contracts, it announces a plan of termination as follows.

Each employee who stays and renders service until the closure of the factory will receive on the termination date a cash payment of Rs 30,000. Employees leaving before closure of the factory will receive Rs.10,000.

There are 120 employees at the factory. At the time of announcing the plan, the entity expects 20 of them to leave before closure. Therefore, the total expected cash outflows under the plan are Rs.3,200,000 (ie $20 \times \text{RS}.10,000 + 100 \times \text{Rs}.30,000$). As required by paragraph 160, the entity accounts for benefits provided in exchange for termination of employment as termination benefits and accounts for benefits provided in exchange for services as short-term employee benefits.

Termination benefits

The benefit provided in exchange for termination of employment is Rs.10,000. This is the amount that an entity would have to pay for terminating the employment regardless of whether the employees stay and render service until closure of the factory or they leave before closure. Even though the employees can leave before closure, the termination of all employees' employment is a result of the entity's decision to close the factory and terminate their employment (ie all employees will leave employment when the factory closes). Therefore the entity recognises a liability of Rs.1,200,000 (ie $120 \times \text{Rs}.10,000$) for the termination benefits provided in accordance with the employee benefit plan at the earlier of when the plan of termination is announced and when the entity recognises the restructuring costs associated with the closure of the factory.

Benefits provided in exchange for service

The incremental benefits that employees will receive if they provide services for the full ten-month period are in exchange for services provided over that period. The entity accounts for them as short-term employee benefits because the entity expects to settle them before twelve months after the end of the annual reporting period. In this example, discounting is not required, so an expense of Rs.200,000 (ie $\text{Rs}.2,000,000 \div 10$) is recognised in each month during the service period of ten months, with a corresponding increase in the carrying amount of the liability.

Disclosure

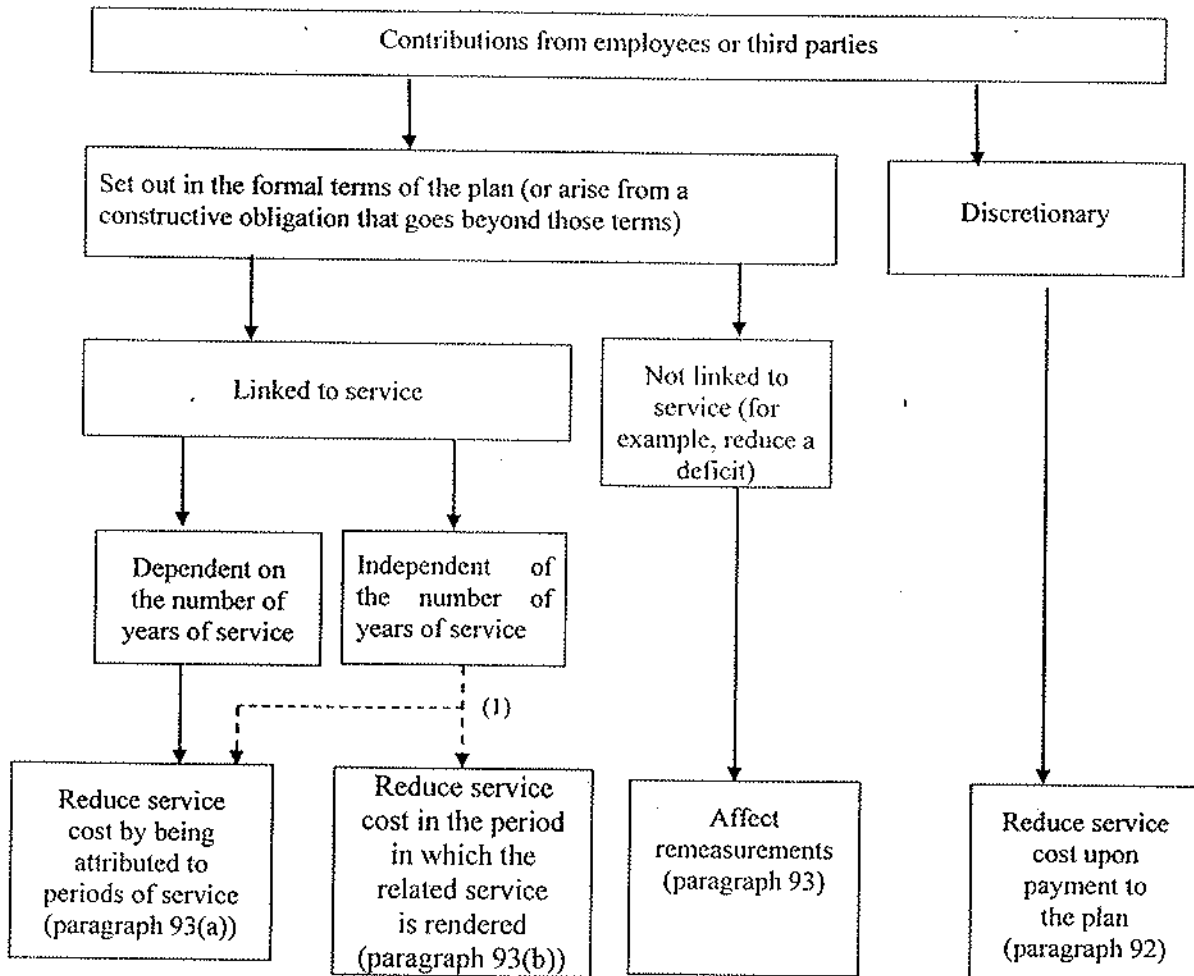
- 171 Although this Standard does not require specific disclosures about termination benefits, other Ind ASs may require disclosures. For example, Ind AS 24 requires disclosures about employee benefits for key management personnel. Ind AS 1 requires disclosure of employee benefits expense.

Appendix A

Application Guidance

This appendix is an integral part of the Ind AS. It describes the application of paragraphs 92-- 93 and has the same authority as the other parts of the Ind AS.

A1 The accounting requirements for contributions from employees or third parties are illustrated in the diagram below.



(1) This dotted arrow means that an entity is permitted to choose either accounting.

Appendix B

Ind AS 19 — The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction

This Appendix is an integral part of the Ind AS.

Background

- 1 Paragraph 64 of Ind 19 limits the measurement of a net defined benefit asset to the lower of the surplus in the defined benefit plan and the asset ceiling. Paragraph 8 of Ind AS 19 defines the asset ceiling as 'the present value of any economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan'. Questions have arisen about when refunds or reductions in future contributions should be regarded as available, particularly when a minimum funding requirement exists.
- 2 Minimum funding requirements exist in many countries to improve the security of the post-employment benefit promise made to members of an employee benefit plan. Such requirements normally stipulate a minimum amount or level of contributions that must be made to a plan over a given period. Therefore, a minimum funding requirement may limit the ability of the entity to reduce future contributions.
- 3 Further, the limit on the measurement of a defined benefit asset may cause a minimum funding requirement to be onerous. Normally, a requirement to make contributions to a plan would not affect the measurement of the defined benefit asset or liability. This is because the contributions, once paid, will become plan assets and so the additional net liability is nil. However, a minimum funding requirement may give rise to a liability if the required contributions will not be available to the entity once they have been paid.

3A [Refer Appendix 1].

Scope

- 4 This Appendix applies to all post-employment defined benefits and other long-term employee defined benefits.
- 5 For the purpose of this Appendix, minimum funding requirements are any requirements to fund a post-employment or other long-term defined benefit plan.

Issues

- 6 The issues addressed in this Appendix are:
- (a) when refunds or reductions in future contributions should be regarded as available in accordance with the definition of the asset ceiling in paragraph 8 of Ind AS 19 .
 - (b) how a minimum funding requirement might affect the availability of reductions in future contributions.
 - (c) when a minimum funding requirement might give rise to a liability.

Principles

Availability of a refund or reduction in future contributions

- 7 An entity shall determine the availability of a refund or a reduction in future contributions in accordance with the terms and conditions of the plan and any statutory requirements in the jurisdiction of the plan.
- 8 An economic benefit, in the form of a refund or a reduction in future contributions, is available if the entity can realise it at some point during the life of the plan or when the plan liabilities are settled. In particular, such an economic benefit may be available even if it is not realisable immediately at the end of the reporting period.
- 9 The economic benefit available does not depend on how the entity intends to use the surplus. An entity shall determine the maximum economic benefit that is available from refunds, reductions in future contributions or a combination of both. An entity shall not recognise economic benefits from a combination of refunds and reductions in future contributions based on assumptions that are mutually exclusive.
- 10 In accordance with Ind AS 1, the entity shall disclose information about the key sources of estimation uncertainty at the end of the reporting period that have a significant risk of causing a material adjustment to the carrying amount of the net asset or liability recognised in the balance sheet. This might include disclosure of any restrictions on the current realisability of the surplus or disclosure of the basis used to determine the amount of the economic benefit available.

The economic benefit available as a refund

The right to a refund

- 11 A refund is available to an entity only if the entity has an unconditional right to a refund:

- (a) during the life of the plan, without assuming that the plan liabilities must be settled in order to obtain the refund (eg in some jurisdictions, the entity may have a right to a refund during the life of the plan, irrespective of whether the plan liabilities are settled); or
- (b) assuming the gradual settlement of the plan liabilities over time until all members have left the plan; or
- (c) assuming the full settlement of the plan liabilities in a single event (ie as a plan wind-up).

An unconditional right to a refund can exist whatever the funding level of a plan at the end of the reporting period.

- 12 If the entity's right to a refund of a surplus depends on the occurrence or non-occurrence of one or more uncertain future events not wholly within its control, the entity does not have an unconditional right and shall not recognise an asset.

Measurement of the economic benefit

- 13 An entity shall measure the economic benefit available as a refund as the amount of the surplus at the end of the reporting period (being the fair value of the plan assets less the present value of the defined benefit obligation) that the entity has a right to receive as a refund, less any associated costs. For instance, if a refund would be subject to a tax other than income tax, an entity shall measure the amount of the refund net of the tax.
- 14 In measuring the amount of a refund available when the plan is wound up (paragraph 11(c)), an entity shall include the costs to the plan of settling the plan liabilities and making the refund. For example, an entity shall deduct professional fees if these are paid by the plan rather than the entity, and the costs of any insurance premiums that may be required to secure the liability on wind-up.
- 15 If the amount of a refund is determined as the full amount or a proportion of the surplus, rather than a fixed amount, an entity shall make no adjustment for the time value of money, even if the refund is realisable only at a future date.

The economic benefit available as a contribution reduction

- 16 If there is no minimum funding requirement for contributions relating to future service, the economic benefit available as a reduction in future contributions is the future service cost to the entity for each period over the shorter of the expected life of the plan and the expected life of the entity. The future service cost to the entity excludes amounts that will be borne by employees.
- 17 An entity shall determine the future service costs using assumptions consistent with those used to determine the defined benefit obligation and with the situation that exists at the end

of the reporting period as determined by Ind AS 19. Therefore, an entity shall assume no change to the benefits to be provided by a plan in the future until the plan is amended and shall assume a stable workforce in the future unless the entity makes a reduction in the number of employees covered by the plan. In the latter case, the assumption about the future workforce shall include the reduction.

The effect of a minimum funding requirement on the economic benefit available as a reduction in future contributions

- 18 An entity shall analyse any minimum funding requirement at a given date into contributions that are required to cover (a) any existing shortfall for past service on the minimum funding basis and (b) future service.
- 19 Contributions to cover any existing shortfall on the minimum funding basis in respect of services already received do not affect future contributions for future service. They may give rise to a liability in accordance with paragraphs 23–26.
- 20 If there is a minimum funding requirement for contributions relating to future service, the economic benefit available as a reduction in future contributions is the sum of:
 - (a) any amount that reduces future minimum funding requirement contributions for future service because the entity made a prepayment (ie paid the amount before being required to do so); and
 - (b) the estimated future service cost in each period in accordance with paragraphs 16 and 17, less the estimated minimum funding requirement contributions that would be required for future service in those periods if there were no prepayment as described in (a).
- 21 An entity shall estimate the future minimum funding requirement contributions for future service taking into account the effect of any existing surplus determined using the minimum funding basis but excluding the prepayment described in paragraph 20(a). An entity shall use assumptions consistent with the minimum funding basis and, for any factors not specified by that basis, assumptions consistent with those used to determine the defined benefit obligation and with the situation that exists at the end of the reporting period as determined by Ind AS 19. The estimate shall include any changes expected as a result of the entity paying the minimum contributions when they are due. However, the estimate shall not include the effect of expected changes in the terms and conditions of the minimum funding basis that are not substantively enacted or contractually agreed at the end of the reporting period.
- 22 When an entity determines the amount described in paragraph 20(b), if the future minimum funding requirement contributions for future service exceed the future IAS 19 service cost in any given period, that excess reduces the amount of the economic benefit available as a reduction in future contributions. However, the amount described in paragraph 20(b) can never be less than zero.

When a minimum funding requirement may give rise to a liability

- 23 If an entity has an obligation under a minimum funding requirement to pay contributions to cover an existing shortfall on the minimum funding basis in respect of services already received, the entity shall determine whether the contributions payable will be available as a refund or reduction in future contributions after they are paid into the plan.
 - 24 To the extent that the contributions payable will not be available after they are paid into the plan, the entity shall recognise a liability when the obligation arises. The liability shall reduce the net defined benefit asset or increase the net defined benefit liability so that no gain or loss is expected to result from applying paragraph 64 of Ind AS 19 when the contributions are paid.
- 25-26 (refer Appendix 1)

Appendix 1

Note: This Appendix is not a part of the Indian Accounting Standard. The purpose of this Appendix is only to bring out the major differences, if any, between Indian Accounting Standard (Ind AS) 19 and the corresponding International Accounting Standard (IAS) 19, Employee Benefits, and IFRIC 14, IAS 19 — The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction, issued by the International Accounting Standards Board.

Comparison with IAS 19, *Employee Benefits*, and IFRIC 14

- 1 Paragraph numbers 25-26 appear as 'Deleted' in IFRIC 14. In order to maintain consistency with paragraph numbers of IFRIC 14, the paragraph numbers are retained in Appendix B of Ind AS 19.
- 2 According to Ind AS 19 the rate to be used to discount post-employment benefit obligation shall be determined by reference to the market yields on government bonds, whereas under IAS 19, the government bonds can be used only where there is no deep market of high quality corporate bonds. However, requirements given in IAS 19 in this regard have been retained with appropriate modifications for subsidiaries, associates, joint ventures and branches domiciled outside India.
- 3 To illustrate treatment of gratuity subject to ceiling under Indian Gratuity Rules, an example has been added in paragraph 73.
- 4 Different terminology is used in this standard, e.g., the term 'balance sheet' is used instead of 'Statement of financial position'. The words 'approval of the financial statements for issue' have been used instead of 'authorisation of the financial statements for issue' in the context of financial statements considered for the purpose of events after the reporting period.
- 5 Paragraph 3A of Appendix B is deleted as this paragraph deals with reason for amending IFRIC 14, which is irrelevant for Appendix B to Ind AS 19.

Query No.5

It may please be noted that OHPC is preparing its Annual Accounts as per IND-AS which has been audited by Statutory Auditors appointed by C & AG, New Delhi and no separate set of account is being prepared by OHPC as per the Indian GAAP.

The details of Audited Capital Addition as per IND-AS amounting to Rs.32.88 crores and Rs.59.72 crores for the financial year 2017-18 and 2016-17 respectively have been submitted vide Page No.171 & page No.83 of the list of Annexure to OHPC Tariff Application for the FY 2019-20 which may kindly be referred. The calculation of the impact of these capital addition on account of RoE, Interest on Loan, Depreciation and Interest on working capital have been furnished from page No. 218 to 236 of the list of Annexure to the OHPC Tariff Application for FY 2019-20.



