



Institute of Actuaries of India

GUIDANCE NOTE 26 (GN 26):

Actuarial Reports under Accounting Standard 15 (Revised, 2005) issued by the Institute of Chartered Accountants of India

Classification: Practice Standard within the meaning of Section 4 “Breach of Professional Guidance” of Professional Conduct Standards (PCS) Ver. 2.00/27 05 2003”

Legislation or Authority:

1. Accounting Standard (AS) 15 (Revised 2005) - Employee Benefits issued by the Institute of Chartered Accountants of India – referred to herein after as AS 15 (R)
2. Professional Conduct Standards (PCS Ver. 2.00/ 27th May 2003) issued by Institute of Actuaries of India.

Author: Advisory Group on Pensions and Social Security matters

Application:

This Guidance Note applies for any actuarial report prepared as a requirement under AS 15 (R) and applies to every fellow member of IAI who carries out such actuarial valuation.

Compliance

Members are reminded that they must always comply with the Professional Conduct Standards (PCS) and that Guidance Notes impose additional requirements under specific circumstances.

Status

- (1) Issued under due process in accordance with the “Principles and Procedures for issuance of Guidance Notes (GNs) (Ver. 2.00) [adopted by the EC on 04 03 2003]
- (2) This Guidance Note shall constitute a Guidance Note on professional matters within the meaning of Rule 29 (l) of the Rules of the Institute.

Version

Applicable to all Actuarial reports carried out in respect to AS 15 (Revised). The effective date of this Guidance Note is 31st March 2008.



1 Objective:

This Guidance Note provides guidance to actuaries in making actuarial valuations and preparing their actuarial reports on valuations done under AS 15(R). For the purposes of making actuarial valuation under AS 15 (R), an actuary should be well versed with all the requirements of AS 15 (R). In case an actuary is not well versed with the requirements of AS 15 (R), he/ she should get in-depth knowledge of AS 15 (R) before making any actuarial valuation under AS 15 (R).

2 Background: The definitions or explanations given hereinafter are in respect of terminology used in the AS 15 (R) . However, in case of any conflict with the definition or interpretation as given in the AS 15 (R), the provisions of AS 15 (R) shall prevail.

This Guidance Note applies to all valuations carried out in compliance with AS 15 (R)

Currently actuarial reports under AS 15 are given within the framework of some of the provisions of GN11 and GN12 issued by Institute of Actuaries of India. These GNs shall remain in force in respect of the valuations an actuary is required to carry out for the clients for the period for which provisions of AS 15 (R) do not apply.

- (1) It may be noted that while AS 15 (R) provides that it is the responsibility of the “reporting enterprise” to measure the obligations under defined benefit plans, the AS 15 (R) recognizes *“that for doing so the enterprise would normally use the services of a Fellow of Institute of Actuaries of India ”* (link para 49 of AS 15 (R))
- (2) For the purpose of para 49 of AS 15 (R) , a qualified actuary would mean a Fellow member of the Institute of Actuaries of India, provided however that such a member would be required to hold a Certificate of Practice from whatever future date such certificates are available from the Institute of Actuaries of India.
- (3) **Projected Unit Credit Method:** Also called Projected Unit Method, under which the amount of actuarial liability for the service reckoned as at the valuation date, is calculated after taking in to account all types of relevant decrements and projecting the qualifying salary up to the assumed date of cessation of service (link: para 51 (b) & para 65). This method considers each period of service as giving rise to an additional unit of benefit measurement and measures each unit separately to build up the final obligation

Past Service Cost is the change in the present value of defined benefit obligation for employee’s service in prior periods, resulting in the current period from the introduction of or changes to, post employment benefits or other long term benefits for the first time .

- (4) (a) As on the date of adoption of AS 15(R) transitional liability has to be computed in the manner specified in para 144 of AS 15(R) .
(b) The liability that would have been recognized on the same date as per the pre-revised AS 15 (1995) should also be computed.

The difference between (a) and (b) is the amount to be adjusted against opening balance of revenue reserves and surplus as per para 145 of AS 15(R).



(5) The Enterprise accounts are generally prepared on a going concern basis. Accordingly calculations under AS 15 (R) should be prepared on the assumption of an ongoing scheme unless the circumstances indicate otherwise or unless there are specific instructions from the Enterprise to the contrary. In the latter case such specific instructions should be made part of the Actuarial report and the actuary should disclose the assumption and the basis on which the calculations are made.

(6) **Materiality:** Materiality is a technical accounting term reflecting the importance of a monetary amount to the Enterprise's financial results. The relevant amount may differ for the Balance Sheet, the Profit & Loss Account or for any other specified purpose. The Actuary should seek from the Enterprise an indication of the materiality levels applicable for each accounting period (interim or full year results). The actuary is required to consider materiality in determining the level of accuracy required in actuarial valuation so that he may advise an enterprise about the steps required to be taken to achieve the degree of accuracy required in the valuation. To illustrate, where a comparatively lower amount is considered to be material in the context of an enterprise, a higher level of accuracy is required in the actuarial valuations. To achieve that level of accuracy, the actuary may advise the enterprise that for determination of future salary increases, it should consider trends over a comparatively longer period. Also, to give advice to an enterprise on the steps required to achieve, within the reporting timescale, the degree of accuracy required in the valuation should be one of the responsibilities of an actuary. (link: para 51 (f) of AS 15 (R)).

(7) This GN covers actuarial valuation inputs for accounting for a wide range of employee benefits including, but not limited to;

- i. Gratuity Schemes and Superannuation Schemes, whether "approved" under provisions of Income Tax Act/Rules or not.
- ii. Other Employee Schemes such as Leave Encashment and Availment, Post retirement medical benefits and similar and other long term benefits,
- iii. Funded and Un-funded arrangements,
- iv. Indian or overseas reporting Enterprise reporting under AS 15 (Revised, 2005)
- v. Multi-employer arrangements,
- vi. Defined Benefits secured under Trusts or otherwise,
- vii. Constructive as well as legal obligations.

(8) As per AS 15 (R), 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. It is, therefore, possible that a plan, which otherwise appears to be a defined contribution plan, is, in substance, a defined benefit plan. Paragraph 26 of AS 15(R) provides examples of certain plans under which an enterprise's obligation is not limited to the contribution made to the respective fund and, therefore, plans, in substance, are considered to be defined benefit plans. AS 15 (R) requires that obligations under such plans should be determined on actuarial valuation basis in the same manner as under other defined benefit plans.

As per AS 15(R), actuarial valuation is also required to be carried out in respect of other long-term employee benefits.

If any non-vested past service cost arises under ‘other long term employee benefits’ due to introduction of or changes to the plan it should be recognized immediately unlike ‘post employment benefits’ (link: para 128).

No specific disclosures are prescribed in respect of ‘other long term benefits’, but all the same the components of ‘amount recognized as a liability and ‘expense recognized’ should be identified and disclosed (link: paras 129, 130 and 132).

Certain enterprises allow as a practice unavailed short-term absences, which otherwise expire within 12 months, to be carried forward in future period(s) for availing them at any time on or before retirement. Since, as per AS 15(R), informal practices are also taken into consideration in accounting for employee benefits, such short-term compensated absences, in substance, are considered to be of the nature of other long-term employee benefits. Accordingly, an enterprise is required to determine the obligation in respect of such absences using the actuarial valuation method as prescribed in AS 15 (R) for other long-term employee benefits.

3 Relationships, Context and Information

- (1) Enterprise’s accounts are the responsibility of the directors (or equivalent) and may be public documents. The actuary should endeavour to establish the significance of AS 15 (R) results to the Enterprise’s accounts and measure of financial performance.
- (2) The actuary should be aware that the Auditor may have specific requirements and should liaise with the Auditor if requested to do so, by the client.
- (3) The actuary should ensure that the employer knows that the arrangements set out in (4) need to be in place to meet the time constraints of the Enterprise’s financial reporting regime. The actuary should if necessary, initiate discussions with the enterprise and the auditor on other relevant aspects of the reporting exercise including assumptions, any split of work between different actuaries and the time scale for reporting.
- (4) For each reporting exercise the actuary should make arrangements with the employer to ensure access to all relevant information including, but not limited to:
 - i. Immediately preceding year’s disclosures under AS 15 or AS 15 (R) as the case may be.
 - ii. Scheme membership data.
 - iii. Details of Scheme including documents such as Trust Deed and Rules,
 - iv. Details of any benefit improvements, benefit curtailments or any other amendments,
 - v. Scheme financial statements such as relating to income, expenditure, assets.



- vi. Details of bulk transfers or other settlements if any,
- vii. Details of any relevant constructive obligations and discretionary benefits,
- viii. Details of any material events, actions or changes. The actuary should ensure the enterprise is aware of the sort of events, actions or changes which could have material impact on the actuary's calculations.

The above list is not meant to be exhaustive.

4 Valuation Method

Paragraph 55 of AS 15(R) deals with the amount of defined benefit liability to be recognised in the balance sheet; paragraph 59 deals with the recognition of defined benefit assets and paragraph 61 deals with the components of defined benefit expense to be recognised in the statement of profit and loss of an enterprise. The actuary is required to include these items specifically in his report to the management.

For arriving at the present value (or actuarial values) in respect of defined benefit obligations, the related current service cost and, where applicable, past service cost, the Actuary under AS 15 (R) is required to adopt the Projected Unit Credit Method (para 65). The results of the valuation of the various items should be prepared in a tabular form, which will form part of the Actuary's Report addressed to the client. The AS 15 (R) prescribes a list of "Disclosure items" pertaining to defined benefit plans in paras 119 –125; further Appendix A & B to AS 15 (R) contains illustrative statement, disclosures. The valuation results table should be prepared on the same lines to ensure that no items are missed and the figures presented are duly reconciled.

5 Actuarial Assumptions

AS 15 (R) has set out in paras 78 –91 the basis upon which the various assumptions to be used in the actuarial valuation are to be determined. The actuarial assumptions are the enterprise's **best estimates** of the different variables and the responsibility for setting these financial assumptions rests with the enterprise. However, the actuary shall advise the client on the interpretation of AS 15 (R) and determination of the various assumptions and comment on the assumptions chosen by the client. Similar considerations would apply in the determination of Fair Value of plan Assets.

6 Actuarial Gains and Losses - recognition

AS 15 (R) has specified that "Actuarial Gains and Losses" should be immediately recognized in the statement of Profit and Loss as income or expense (link: para 92).

7 Past Service Cost - recognition

AS 15 (R) has specified that Past Service Cost should be recognized immediately to the extent that they are already vested; and non-vested past service cost should be recognized as expense on a straight line basis over the “average period” until the benefits become vested (link: para 94). The Actuarial report should contain such average and also specify as to how such “average period” has been calculated.

8 Reporting

(1) The following aspects should be covered in the Actuary’s Report:

- benefits covered;
- enterprise for which valuation figures are being prepared;
- whether the actuary is advising on assumptions, calculating liabilities and costs for the schemes covered;
- full valuation or subsequent actuarial assessment on which the update is based;
- information and instructions used for the valuation/ update;
- assumptions used and the actuary's advice relating to those assumptions;
- the results of the actuarial valuation, including all figures required from an actuary for complying with the requirements of AS 15 (R) concerning recognition of defined benefit obligation in the balance sheet, recognition of defined benefit expense in the statement of profit and loss and making all disclosures required by AS 15 (R);
- whether (and, if so, what) allowance for deferred tax has been made.

(2) The Actuarial Report under AS 15 (R) should specifically state that in setting the assumptions the relevant sections of AS 15 (R) have been taken in to account. If for any reason, any of the assumptions are not in conformity with AS 15 (R), the actuary should state so giving the reasons for such choice (link para 120(l) 5 of AS 15 (R),

(3) If for any reason, any of the actuarial assumptions is not in conformity with AS 15 (R), the auditor of the enterprise would be required to disclose the same in his audit report. As a part of this disclosure, the auditor would also be required to disclose the effect of the same, in case it is determinable. In order to enable an auditor to comply with this requirement, the actuary should disclose, if determinable, the effect of the assumptions not being in conformity with AS



15 (R), along with the reasons for choosing different assumptions.

Annexure: Suggested Model Report (using Gratuity Plan as example)

A model report is given below. It is to be understood that this is only a model and not a comprehensive one. A plan may contain features not dealt with in this model and which may attract various provisions of AS 15 (R). These have to be dealt with as required by the Standard. This report has to be read along with its annexure.



ACTUARIAL REPORT UNDER AS 15(revised 2005) FOR GRATUITY PLAN VALUATION AS ON 31 03 2007

NAME OF THE PLAN:

Name and address of the Enterprise:

I have been requested by the ABC COMPANY LIMITED to calculate the accounting expenses associated with the Gratuity Plan for the financial year ended 31 03 2007 in terms of Accounting Standard (AS) 15 (revised 2005) issued by the Institute of Chartered Accountants of India.

The results set out in this Report and its annexure are based on requirements of AS 15 (revised 2005) and its application to the Plan. They have been prepared for the specific requirements of AS 15 (revised 2005) and should not be used for any other purpose. In particular this Report does not constitute a formal funding actuarial valuation of the Plan and does not present any recommendation of contributions or funding levels.

This Report is provided solely for the Company's use and for the specific purposes indicated above. Except where I expressly agree in writing, it should not be disclosed or provided to any third party, other than as provided below. In the absence of such consent and an express assumption of responsibility, no responsibility whatsoever is accepted by me for any consequences arising from any third party relying on this Report or any advice relating to its contents. The Company may make a copy of this Report available to its auditors, but I make no representation as to the suitability of this Report for any purpose other than that for which it was originally provided and accept no responsibility or liability to the Company's auditors in this regard. The Company should draw the provisions of this paragraph to the attention of its auditors when passing this Report to them.

2 Summary of Results

2.1 The table below shows a summary of the key results for year ended 31 03 2007.

<u>Assets/Liabilities</u> (Rupees in 000's)	<u>31 03 2006</u>	<u>31 03 2007</u>
1. Present Value of obligation	7,500	10,000
2. Fair Value of Plan Assets	6,250	7,950
3. Net asset/(liability) recognised in balance sheet	1,250	2,050

<u>Employer Expense</u> (Rupees in 000's)	<u>Year ending 31 03 2007</u>
1. Current Service Cost	2,500
2. Total Employer expense	2,800

Medical costs where applicable to be shown separately.

- 2.2 Current Service Cost represents the cost associated with the current fiscal year benefit accruals. Total Employer expense is the expense under AS15 (Revised, 2005), inclusive of Current Service Cost, Actuarial Gain/loss and net interest.**
- 3.1 The calculations have been based on the membership information for the Plan as at 31 03 2007 as supplied by the company. A summary of the data is given below.**

Summary of Membership Data

As at	31 03 2006	31 03 2007
Number of employees	500	530
Total Monthly salary in Rupees in 000's	5,000	5,500
Average past service	12	13
Average age	37	38

3.2 The company has provided us with the fair value of assets of the Plan as at 31 03 2007. A complete description of the amounts included in the fair value of assets is shown below. We have also been provided with information relating to the contribution and the benefits paid out during the year ended 31 03 2007.

3.3 In preparing this Report we have relied on the completeness and accuracy of the information provided to us orally and in writing by or on behalf of the Company and its advisers. We have not completed any detailed validation checks on the information provided. We have, however, carried out broad consistency checks.

4 CONCLUSIONS

4.1 The assumptions and methodology used in compiling this Report are consistent with the requirements of AS15 (Revised 2005).

4.2 The key assumptions used in the calculations are as under.

The principal assumptions are the (1) discount rate & (2) Salary Increase.

The discount rate should be based upon the market yields available on Government bonds at the accounting date with a term that matches that of the liabilities & the salary increase should take account inflation, seniority, promotion and other relevant factors.

The financial assumptions employed for the calculations as at 31 03 2007 are as follows

- *Discount Rate:* The discount rate of 6.5% per annum that has been used as at 31 03 2007 for the purposes of the AS15 (Revised 2005) calculations has been chosen by reference to market yields on government bonds as at the same date.
- *Expected Rate of Return:* The expected rate of return was again assumed to be 6.5% per annum.
- *Salary Increases:* Salary Increase rate of 6% per annum has been assumed keeping in view the inflation rate on long term basis.

Demographic assumptions:

Mortality: We have assumed that active members of the Scheme will experience in-service mortality in accordance with the standard table LIC (1994-96) ultimate.

Withdrawal: Plan Members are assumed to withdraw in accordance with the following table:

Age	Withdrawal Rate (%)
Up to 44 years	2.0
Above 44 years	1.0

Disability

No explicit allowance

Medical costs and trends (where applicable)

4.3 The results are particularly sensitive to some assumptions, such as the discount rate, level of salary inflation, level of assumed price inflation and mortality. A decrease in the discount rate assumed or an increase in salary inflation will lead to an increase in reported cost.

4.4 The methodology used in the calculations is set out below.

We have used the Projected Unit Credit (PUC) actuarial method to assess the Plan's liabilities, including those related to death-in-service and incapacity benefits.

Under the PUC method a "projected accrued benefit" is calculated at the beginning of the year and again at the end of the year for each benefit that will accrue for all active members of the Plan. The "projected accrued benefit" is based on the Plan's accrual formula and upon service as of the beginning or end of the year, but using a member's final compensation, projected to the age at which the employee is assumed to leave active



service. **The Plan Liability is the actuarial present value of the "projected accrued benefits" as of the beginning of the year for active members.**

4.5 The benefits valued in this Report are summarised below.

Principal Plan Provisions

We give below a summary of the principal rules of the Plan.

Normal Retirement Age	58 Years
Salary for calculation of gratuity	Last drawn basic salary plus dearness allowance (excluding all other allowances and perquisites)
Vesting Period	5 years of service
Benefit on normal retirement	$15/26 \times \text{salary} \times \text{number of years of completed service}$, subject to completion of 5 years service
Benefit on early retirement/ withdrawal/resignation	Same as normal retirement benefit.
Benefit on death in service	Same as normal retirement benefit except that no vesting conditions apply

4.6 We have made full actuarial valuations as at the start and end of the accounting period, based on member data and plan information provided to us at these dates.

4.7 The definitions of various terms used in the Report are given in the GLOSSARY below.

4.8 The full results of our calculations are set out in Disclosure Table in the Annexure to this Report.

4.9 We would be pleased to discuss this Report with you.

**ANNEXURE TO AND FORMING PART OF MODEL AS 15 (REVISED 2005)
REPORT**

GRATUITY REPORT UNDER AS 15(REVISED 2005) IN RESPECT OF GRATUITY PLAN

ABC COMPANY LIMITED, NEW DELHI



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I. Assumptions:	As of 31 03 2006	As of 31 03 2007
Discount Rate	6.50%	6.50%
Rate of increase in Compensation levels	6.00%	6.00%
Rate of Return on Plan Assets	6.50%	6.50%
Expected Average remaining working lives of employees (years)	21	20

II. Table Showing Changes in Present Value of Obligations :

All figures in Rupees 000's	31 03 2006	31 03 2007
Present Value of Obligation as at the beginning of the year	6,000	7,500
Acquisition adjustment	----	----
Interest Cost	390	488
Past Service Cost	----	----
Current Service Cost	2,000	2,500
Curtailement Cost / (Credit)	----	----
Settlement Cost / (Credit)	----	----



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Benefits paid	(600)	(800)
Actuarial (gain)/ loss on obligations	(290)	312
Present Value of Obligation as at the end of the year	7,500	10,000

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III. Table Showing changes in the Fair value of Plan Assets

	<u>31 03 2006</u>	<u>31 03 2007</u>
Fair Value of Plan Assets at the beginning of the year	5,000	6,250
Acquisition Adjustments	----	----
Expected Return on Plan Assets	366	461
Contributions	1,500	2,000
Benefits Paid	(600)	(800)
Actuarial Gain /(loss) on Plan Assets	(16)	39
Fair Value of Plan Assets at the end of the year	6,250	7,950

IV. Tables showing Fair Value of Plan Assets

Fair value of plan asset at the beginning of year	5,000	6,250
Acquisition Adjustments	-----	-----

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Actual return on plan assets	350	500
Contributions	1,500	2,000
Benefits Paid	(600)	(800)
Fair value of plan assets at the end of year	6,250	7,950
Funded Status	(1,250)	(2,050)
Excess of actual over estimated return on plan assets	(16)	39

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V. ACTUARIAL GAIN / LOSS RECOGNIZED

	<u>31 03 2006</u>	<u>31 03 2007</u>
Actuarial gain/(loss) for the year - Obligation	290	(312)
Actuarial (gain)/loss for the year - Plan Assets	(16)	39
Total (gain) / loss for the year	(274)	274
Actuarial (gain) / loss recognized in the year	(274)	274
Unrecognized actuarial (gains) / losses at the end of year	0	0

VI. THE AMOUNTS TO BE RECOGNIZED IN BALANCE SHEET AND STATEMENTS OF PROFIT AND LOSS

Present Value of Obligation as at the end of the year	7,500	10,000
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Fair Value of Plan Assets as at the end of the year	6,250	7,950
Funded Status	(1,250)	(2,050)
Unrecognized Actuarial (gains) / losses	0	0
Net Asset / (Liability) Recognized in Balance Sheet	1,250	2,050

VII. EXPENSE RECOGNIZED IN THE STATEMENT OF PROFIT AND LOSS

	<u>31 03 2006</u>	<u>31 03 2007</u>
Current Service Cost	2,000	2,500
Past Service Cost	----	----
Interest Cost	390	488
Expected Return on Plan Assets	(366)	(461)
Curtailment Cost / (Credit)	----	----
Settlement Cost / (Credit)	----	----
Net actuarial (gain)/ loss recognized in the year	(274)	274
Expenses Recognized in the statement of Profit & Loss	1,750	2,800

GLOSSARY

All definitions of terms are as per AS 15 (R). The following terms are used with explanations given below::



<i>Actuarial Gain or Loss</i>	From one plan year to the next, if the experience of the plan differs from that anticipated using the actuarial assumptions, an actuarial gain or loss occurs. For example, an actuarial gain would occur if the plan assets earned 12% for the year while the assumed rate of return used in the valuation was 8%. Other causes of actuarial gains or losses would include changes in actuarial assumptions and / or demographic changes in the population profile.
<i>Balance Sheet Asset/(Liability)</i>	The sponsor's balance sheet asset/(liability) entry, the net recognised amount, is the sum of the cumulative excess of contributions to the plan over net Annual Expense and other plan-related charges to income due either to business combination or accelerated recognition pursuant to IAS 19. The difference between this account and the Funded Status is the unrecognised net loss/(gain) unvested prior service costs [and net transition obligation.]
<i>Funded Status</i>	This is the excess/(shortfall) of the fair value of plan assets over the Plan Liability.
<i>Plan Liability</i>	This quantity is the discounted present value of all benefits attributed by the plan's benefit formula to service rendered prior to the measurement date. It is measured using an assumption as to future pay levels.
<i>Service Cost</i>	This is the discounted present value of benefits attributed by the plan's benefit formula to services rendered by employees during the accounting period. It is measured using an assumption as to future pay levels.
<i>Interest Costs</i>	The increase in the Plan liability over the accounting period due to interest (the time value of money)
<i>Expected Return on Assets</i>	The expected return on plan assets over the accounting period, based on an assumed rate of return.
<i>Net Periodic Benefit Cost</i>	This is the profit and loss charge for the accounting period, and comprises the sum of the service and interest costs less the expected return on assets, plus allowance for amortization of any net liabilities not recognized in the balance sheet.