### XYZ INTERNATIONAL MARKETING PVT LTD

EMPLOYEES GRATUITY SCHEME MEASUREMENT REPORT

UNDER US GAAP/FAS 158

#### FOR THE PERIOD ENDING 31-Mar-16

*N.SRINIVASAN B.Sc., A.I.A.(LOND)., A.F.I.I., F.I.A.I., Dip. Manag.* Mem.No: 00144(1985)

07 MAR 2017

श्रीनिवासन नाग सुब्रमनियन Srinivasan Naga Subramanian हन्स्टीय्यूट ऑफ एक्युअरीज ऑफ इंडिया के केलो Fellow of the Institute of Actuaries of India

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# 2. <u>PREAMBLE</u>

We have been accosted to ascertain the accounting expenses associated with the employees Gratuity Scheme (called "the scheme") by

#### XYZ INTERNATIONALMARKETING PVT LTD

(hereinafter called the "Company") in terms of US GAAP ASC 715-30 for the period ending on

31-Mar-16

keeping in view the provisions of

- a) The Rules of the Scheme, salient features of which are given later
- b) Relevant Guidance Notes issued by the Institute of Actuaries of India which are currently in vogue

1.1 The Company has a defined benefit gratuity plan. Every employee who has completed five years or more of service gets a gratuity on departure at 15 days salary (last drawn salary) for each completed year of service. The scheme is ..

funded with an insurance company in the form of a qualifying insurance policy. 1.2 The results set out in this Report are based on requirements of US GAAP,

ASC 715-30 and its application to the Scheme. They have been evaluated for the specific requirements of US GAAP and should not be put to any other use or purpose. In particular this Report does not constitute a formal funding actuarial valuation of the Scheme and does not present any recommendation of contributions or funding levels.

1.3 This Report is delivered solely for the Company's own use and for the definite and specific purposes indicated above. Except where we expressly agree in black and white, it should not be divulged or delivered to any third party, other than as indicated 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 of his advice relating to its contents. The Company may give 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 attention of its auditors when passing the report to them.

### **3.EXECUTIVE SUMMARY** THE TABLE BELOW SHOWS A SUMMARY OF THE KEY RESULTS FOR THE PERIOD ENDING 31-Mar-16 **ASSETS/LIABILITIES** 31-Mar-15 31-Mar-16 **1.PRESENT VALUE OF OBLIGATIONS** 2225,85,343 2000,31,463 2.FAIR VALUE OF THE PLAN ASSETS 2003,81,882 1703,72,287 EMPLOYER EXPENSE FOR PERIOD ENDING 31-Mar-16 **1.CURRENT SERVICE COST** 385,21,535 2.NET PERIODIC BENEFIT COST 356,47,906

Current Service Cost represents the cost associated with the current fiscal year benefit accruals. Total Employer expense is the expense under US GAAP inclusive of Current Service Cost, Actuarial Gain/loss and net interest. 2.2 Table 1 - The Net Asset/ (Liability) recognised on 31-Mar-15 2.3 Table 2 - The Calculation of Employer Expense for the period ending 31-Mar-16 2.4 Table 3 - The Net Asset/ (Liability) **Recognized in the Balance Sheet as at** 31-Mar-16 2.5 Table 4 - the Reconciliation of PV of Obligation & FV of Plan Assets - Period Ending 31-Mar-16 2.6 Table 5 - The reconciliation of Net Asset/ Liability **Recognized in the Balance Sheet over** 31-Mar-16

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# **4. SOURCES OF INFORMATION**

- 4.1 The calculations have been based on the membership information for the Plan as supplied by the Company as at31-Mar-16
- 4.2 In preparing this Report I have relied on the completeness and accuracy of the Data and Information supplied to me and corroborated orally and in writing by or on behalf of the Company and its advisers. I have not detailed validation completed any checks on the provided. I have. information however. carried out broad statistical checks for consistency
- 4.3 In particular I would like to mention that the details of Information on Assets, Plan provisions, Contributions and Benefits Payments, employee membership data and movements thereon from start of the period of investigations to the end of the period have been taken as provided by the company
- 4.4 The discount rate as on the valuation date is based on the market yields of high quality corporte bond, of a term that matches the term of the liability and applicable to the period over which the obligation is to be settled
- 4.5 The fair value of the Assets on the valuation date has been taken to be as provided by the Company for self-invested funds and as provided by the insurers for managed funds.

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4.6 A summary of the employee profile is given in Appendix A

## **5.CONCLUSIONS**

5.1 The assumptions and methodology used in compiling this Report are consistent with our understanding of US GAAP Our calculations follow the company's accounting policy of immediate recognition of gains and losses in the Other Comprehensive Income and not in Profit and Loss Account

5.2 The benefits valued in this Report are summarised in Appendix B

5.3 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

- 5.4 The key assumptions used in the valuations are set out in Appendix C.
- 5.5 The amounts for last four periods are set out in Appendix D
- 5.6 The assets distribution is set out in Appendix E
- 5.7 The methodology used in the calculations is set out in Appendix F5.8 The Items pertaining to Revised Schedule VI of Companies Act is in Table 3
- 5.9 Based on membership data and plan information provided to me as on 31-Mar-16
- I have made full actuarial valuations as at the end of this date 5.10 The full results of my calculations are set out in Tables 1 to 6

5.11 I would be pleased to discuss this Report with you Yours faithfully,

श्रीनिवासन नाग सुब्रमनियन Srinivasan Naga Subramanian हन्स्टीय्यूट ऑफ एक्युअरीज ऑफ इंडिया के फेलो Fellow of the Institute of Actuaries of India

SrinivasanNagasubramanian, Fellow of the Institute of Actuaries of India. Mem No: 00144 (1985). 7-Mar-17



#### TABLE 1 **XYZ INTERNATIONAL MARKETING PVT LTD EMPLOYEES GRATUITY SCHEME** Actuarial measurements for US GAAP purposes Net Asset/(Liability) Recognised in Balance Sheet on-31-Mar-15 Local currency -Rupees Α Net Asset/(Liability) Recognised in Balance Sheet -31-Mar-14 31-Mar-15 2000,31,463 Present value of Benefit Obligation 1674,80,414 1 1703,72,287 2 Fair Value of Plan Assets as at 1453,28,506 Funded status [Surplus/(Deficit)] -296,59,176 -221,51,908 3 0 0 4 Unrecognised Past Service Costs Net Assets/(Liability) -221,51,908 -296,59,176 Recognised in balance sheet 5 31-Mar-15 Assumption as on

#### 7.74%

#### AMOUNT TO BE RECOGNISED IN PROFIT & LOSS ACCOUNT NET PERIODIC BENEFIT COST RECOGNISED

### **TABLE 2**

XYZ INTERNATIONAL MARKETING PVT LTD

#### **EMPLOYEES GRATUITY SCHEME**

Actuarial measurements for US GAAP purposes

Disclosure of employer expense for the period ending

Local currency -

31-Mar-16 Rupees

Expense Recognised In Income Statement

The following table summarises the components of net benefit expenses recognised in the Profit & Loss Account

**A** Components of Employer expense

		31-Mar-15	31-Mar-16
1	Current service Cost	318,23,488	385,21,535
2	Interest cost	119,56,573	135,76,907
3	Expected return On assets	-117,46,713	-134,26,972
4	Amortization Of Prior Service Costs	0	0
5	Losses / (Gains) On Curtailments &Settlement		
6	Net Actuarial Loss/(Gain)	0	0
7	Amortization of Actuarial Loss/(Gain)	-68,37,796	-30,23,563
	Net Periodic Beneits Cost/(Income)	251,95,552	356,47,906
	Cost/Income of SFAS 88 Events	0	0
9	Total Emp. Exp Recognised for the period	251,95,552	356,47,906
	in the Statement of P or L		

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1	Assumption on 31-Mar-16	
	Discount rate as per market yields on high quality corporate bonds as at valuation date	
	7.52%	

# NET AMOUNTS TO BE RECOGNISED IN THE BALANCE SHEET

DETAILS OF PROVISION FOR GRATUITY/FUNDED STATUS	

	TABLE 3				
	XYZ INTERNATIONAL				
	MARKETING PVT LTD				
	EMPLOYEES GRATUITY SCHEME				
	Actuarial measurements for US GAAP purposes				
	Net Asset/(Liability) Recognised in Balance Sheet on-		31-Mar-16		
	Local currency -	Rup	ees		
A	Net Asset/(Liability) Recognised in Balance Sheet –	31-Mar-15	31-Mar-16		
1	Present value of Benefit Obligation	2000,31,463	2225,85,343		
2	Fair Value of Plan Assets t	1703,72,287	2003,81,882		
3	Funded status [Surplus/(Deficit)]	-296,59,176	-222,03,461		
4	Unrecognised Past Service Costs	0	0		
5	Net Assets/(Liability)				
	Recognised in balance sheet	-296,59,176	-222,03,461		

	Assumption on 31-Mar-16	
	Discount rate as per market yields on high quality corporate bonds as at valuation date	
	7.50%	
	7.52%	

INFORMATION REQUIRED UNDER FAS-132	INFORMATION	REQUIRED	UNDER	FAS-132
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TABLE 3.1XYZ INTERNATIONALMARKETING PVT LTD

EMPLOYEES GRATUITY SCHEME

Actuarial measurements for US GAAP purposes

31-Mar-16

Rupees

Local currency -

The following Table gives the Funded Status and the amount recognised in the Balance Sheet for the Plan

A	INFORMATION REQUIRED UNDER FAS-132	31-Mar-15	31-Mar-16	
1	Projected Benefit Obligation	2000,31,463	2225,85,343	
2	Accumulated Benefits Obligation	1679,79,061	1809,48,204	
3	FIVE YEAR PAYOUTS			
4	2015	390,80	390,80,727	
5	2,016	321,2	321,25,668	
	2,017	255,0	7,849	
	2,018	192,83	192,83,539	
	2,019	148,09	148,09,666 385,31,459	
	NEXT 5 YEAR PAYOUTS(6-10YRS)	385.3 <sup>°</sup>		

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### FOR WEIGHTED AVERAGE ASSUMPTIONS SEE APPENDIX C, TABLE C

### CHANGES IN PRESENT VALUE OF DEFINED BENEFIT

OBLIGATION AND RECONCILIATION THEREOF

	AS 15 Para 120( c ) (i) to (x)		
	TABLE 4		
	XYZ INTERNATIONAL		
	MARKETING PVT LTD		
	EMPLOYEES GRATUITY SCHEME		
	Actuarial measurements for US GAAP purposes		
Α	Change in Obligation over the period ending on		31-Mar-16
	Local currency - Rupees	31-Mar-15	31-Mar-16
1	Present Value of Defined Benefits	1674,80,414	2000,31,463
	Obligation At Beginning(Opening)		
2	Current Service Cost	318,23,488	385,21,535
3	Interest Cost	119,56,573	135,76,907
4	Plan Amendments		0
5	Prior Service Costs	0	0
6	Curtailments		0
7	Settlements		0
8	Actuarial (Gains)/Loss	147,76,444	94,30,419
9	Benefits Paid	-260,05,456	-389,74,981
10	Acquisitions/Divestures		
11	Present Value Of Defined Benefits	2000,31,463	2225,85,343
	Obligation At the end (Closing)		
В	RECONCILIATION OF OPENING & CLOSING VALUES OF PLAN ASSETS		
	AS15 Para 120( e ) (i) to ( viii)		

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1	Fair Value of Plan Assets	1453,28,506	1703,72,287
	at the beginning(Opening)		
2	Expected Return on Assets	117,46,713	134,26,972
3	Employer Contribution	389,16,452	562,48,553
4	Plan Participants Contributions		0
6	Settlements By Fund Manager		
7	Benefits Payouts	-260,05,456	-389,74,981
8	Actuarial gain/(Loss)	3,86,072	-6,90,949
9	Fair Value of assets at the End	1703,72,287	2003,81,882
10	Actual Return on Plan Assets	121,32,785	127,36,023

AMOUNTS RECOGNIZED IN OTHER COMPREHENSIVE INCOME

	TABLE 4.1		
	XYZ INTERNATIONAL		
	MARKETING PVT LTD		
	EMPLOYEES GRATUITY SCHEME		
	Actuarial measurements for US GAAP purposes		
	Amounts Recognized in Other Comprehensive Income		
	For the period ending on		31-Mar-16
_	For the period ending on Local currency - Rupees		31-Mar-16
		31-Mar-15	31-Mar-16
	Local currency - Rupees	31-Mar-15	
	Local currency - Rupees	31-Mar-15 -553,81,590	
	Local currency - Rupees A Amounts Recognized in Other Comprehensive Income		31-Mar-16
	Local currency - Rupees          A       Amounts Recognized in Other Comprehensive Income         1       Opening Unrecognized Losses / (Gains)	-553,81,590	31-Mar-16 -341,53,421
	Local currency - Rupees          A       Amounts Recognized in Other Comprehensive Income         1       Opening Unrecognized Losses / (Gains)         2       Actuarial Loss / (Gain) On DBO	-553,81,590 147,76,444	31-Mar-16 -341,53,421 94,30,419

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6	Amortization Actuarial Loss /(Gain)	-68,37,796	-30,23,563
7	Total Recognised In Other Comprehensive Income	-341,53,421	-210,08,489

#### **RECONCILIATION OF NET BALANCE SHEET LIABILITY**

	TABLE 5					
XYZ INTERNATIONAL						
	MARKETING PVT LTD					
	EMPLOYEES GRATUITY SCHEME					
	Actuarial measurements for US GAAP purposes					
	Reconciliation Of Net Balance Sheet Liability					
	For the period ending on		31-Mar-1			
	T 1 D					
1	Local currency - Rupees					
	Local currency - Rupees					
	Local currency - Rupees					
	Local currency - Rupees					
	For the Period ending	31-Mar-15	31-Mar-16			
		31-Mar-15	31-Mar-16			
1		31-Mar-15 -221,51,908	31-Mar-16 -296,59,176			
1 2	For the Period ending					
	For the Period ending Net Balance sheet Asset/(Liability) Recognised at begginning	-221,51,908	-296,59,176			

5	(Cost)/Income of SF AS 88 Events	0	0
6	Employer Contribution	389,16,452	562,48,553
7	Currency Impact	0	0
8	(Accrued)/ Prepaid benefit cost(Before Adj) at end of period	-638,12,597	-432,11,950
9	Amount Recognised In Accumulated Other Comprehensive Income/Loss at the end of the period	-341,53,421	-210,08,489
10	Net Balance Sheet Asset/Liab Recognised at the end of the period	-296,59,176	-222,03,461

CUMULATIVE ACTUARIAL GAIN/LOSS RECOGNISED IN THE OCI ACCOUNT ANALYSIS OF GAINS AND LOSSESS

_							
	TABLE 6						
	XYZ INTERNATIONAL						
	MARKETING PVT LTD						
	EMPLOYEES GRATUITY SCHEME						
	Actuarial measurements for US GAAP purposes						
	Actaurial (gains)/and Losses Recognised in Balance Sheet		04 Мак				
	For the period ending on		31-Mar- 16				
	Local currency - Rupees						
	Company follows a policy of immediate recognition of Actuarial losses(gains) in Other Co not in Profit and Loss Account	omprehensive In	come and				
	A Components of Experience Adjustments						
		31-Mar-15	31-Mar-16				
	1 Net Actuarial Loss/(Gain) at the Begginning	-553,81,590	-341,53,421				
	2 Actuarial Losses/(Gains) On Obligations	147,76,444	94,30,419				
	3 Actuarial Lossesand (Gains)	-3,86,072	6,90,949				

	On Plan Assets		
4		0	0
5			
6	Total Losses/(Gains) for the year	143,90,372	101,21,369
7	Recognised During Current Yr	-68,37,796	-30,23,563
8	Total Inc/Dec in AOCI	212,28,168	131,44,932
9	AOCI/Closing OCI for the year	-341,53,421	-210,08,489
		_	
	- 1		,

#### AMOUNT TO BE RECOGNISED IN PROFIT & LOSS ACCOUNT NET PERIODIC BENEFIT COST FOR NEXT YEAR

	TABLE 7			
XYZ INTERNATIONAL				
	MARKETING PVT LTD			
	EMPLOYEES GRATUITY SCHEME			
	Actuarial measurements for US GAAP purposes			
	Disclosure of employer expense for the period ending	31-Mar-ŕ		
	Local currency - Expense Recognised In Income Statement The following table summarises the components of net benefit expenses r	Rupees ecognised in the Profit & Loss		
	Local currency - Expense Recognised In Income Statement			
	Local currency - Expense Recognised In Income Statement The following table summarises the components of net benefit expenses r Account			
	Local currency - Expense Recognised In Income Statement The following table summarises the components of net benefit expenses r Account			
	Local currency - Expense Recognised In Income Statement The following table summarises the components of net benefit expenses r Account	ecognised in the Profit & Loss		
1	Local currency - Expense Recognised In Income Statement The following table summarises the components of net benefit expenses r Account	ecognised in the Profit & Loss 31-Mar-17		
1	Local currency -         Local currency -         Expense Recognised In Income Statement         The following table summarises the components of net benefit expenses r Account         A       Components of Employer expense         Current service Cost	ecognised in the Profit & Loss 31-Mar-17 342,27,507		
12	Local currency -         Expense Recognised In Income Statement         The following table summarises the components of net benefit expenses r         A         Components of Employer expense         Current service Cost         Interest cost	ecognised in the Profit & Loss 31-Mar-17 342,27,507 182,34,517		

6	Net Actuarial Loss/(Gain)		0
7	Amortization of Actuarial Loss/(Gain)		0
8	Total Emp. Exp Recognised		373,93,306
	in the Statement of P & L		
	Assumption on 31-Mar-16		
	Discount rate as per market yields on high quality corporate bonds 12/11/14	as at the	
	12/11/14		
	7.52%		
			<u> </u>

SUMMARY	OF EMP	LOYEE	PROFILE

## A.1 Active Members:

_					
	TABLE A				
		XYZ INTERNATIONAL			
		MARKETING PVT LTD			
		EMPLOYEES GRATUITY SCHEME			
		<b>ACTIVE MEMBERS</b>			
	Α	AS AT	31-Mar-15	31-Mar-16	
ĺ					
ľ	1 Nu	mber of Employees	5,490	6,036	
	2 <b>T</b> o	tal Monthly salaries	993,00,140	1107,64,818	
_					

ļ	3	Average Monthly Salaries	18,087	18,351
	4	Average past service	3.59	3.40
	5	Discontinuance Gratuity	2571,27,976	2756,55,510
	6	Decrement Adjusted Future Service	4.68	4.68
i	7	Average Age	32.21	31.73
				<u> </u>



PROVISIONS

	APPENDIX B				
	XYZ INTERNATIONAL				
	MARKETING PVT LTD				
	EMPLOYEES GRATUITY SCHEME				
SYNOPSIS OF SCHEME PROVISIONS					
	STRUE SIS OF SCHEMET ROVISIONS				
	STACE SIG OF SCHEMET ROMSIONS				
RETIREMENT AGE	FOR OFFICERS	60			
RETIREMENT AGE RETIREMENT AGE		60 60			

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ENEFITS AS PER GRATUITY ACT				
FOR		15/26xSalaryxNumber of		
NORMAL/EARLY			eted years of service,	
RETIREMENTS		with parts there of in excess of six months		
VESTING PERIOD	5 Years of completed serv	ervice for retirements & withdrawals		
FOR DEATH IN SERVICE	15/26xSalaryxNumber of completed years of service		leted years of service	
FOR DEATH IN SERVICE	THE VESTING PERIOD OF	5 YEAI	RS IS NOT APPLICABLE	
MAXIMUM LIMIT		Rs	10,00,000	



One of the principal assumptions is the discount rate, which 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 financial and demographic assumptions employed for the calculations as at the end of previous period and current period are as follows

Assumption	31-Mar-1	15 31-Mar-16
		T
Discount rate	7.74%	7.52%
		T
Expected return on assets	8.00%	7.52%
		<u> </u>
Salary Escalation	5.00%	5.00%
Attrition Rate	19.08%	19.08%

Indian Assured Lives Mortality(2006- 08)
(Ultimate)

a sample pick from this table as below

Age	Mortality
20	0.000848
30	0.001056
35	0.001282

Disability:

Mortality

No Explicit Allowance

Notes

1.All the assumptions have been set following discussions with the company in this regard

2.We understand that the assumption of future salary increases (which has been set in consultation with the company), take account of inflation, seniority, promotion and other relevant factors, such as supply and demand in the employment market

Contd...

#### **AMOUNTS FOR CURRENT & PREVIOUS FOUR PERIODS**

APPENDIX D					
	XYZ INTERNATIONAL				
	N	ARKETING PVT LTD			
	EMPLOYEE	CS GRATUITY SCHEME			
	31-Mar-13		31-Mar-14	31-Mar-15	31-Mar-16
	31-Mar-13		31-Mar-14	31-Mar-15	31-Mar-16
1	31-Mar-13	Defined benefits Obligation	31-Mar-14	31-Mar-15	31-Mar-16
1	31-Mar-13	Defined benefits Obligation	31-Mar-14 1674,80,414	<b>31-Mar-15</b> 2000,31,463	1
1		Defined benefits Obligation Plan assets			31-Mar-16

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3		Surplus /Deficits			
	0		-221,51,908	-296,59,176	-222,03,461
4 Experince Adjustments on Plan Liabilities					
	0		0	-553,81,589	-1618,89,197
5		Experince Adjustments on Plan Assets			
	0		0	-3,86,072	6,90,949

#### MAJOR CATEGORIES OF PLAN ASSET

AS A PERCENTAGE OF THE FAIR VALUE

	APPENDIX E					
	XYZ INTERNATIONAL					
	MARKETING PVT LTD					
-	EMPLOYEES GRATUITY SCHEME					
	ASSETS DISTRIBUTION					
A	AS AT	31-Mar-15	31-Mar-16			
	PERCENTAGES					
1	Govt Securities(Central&State)	0.00%	0.00%			
2	Highquality Corporate Bonds	0.00%	0.00%			
-						

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3	Equity shares of Listed Cos	0.00%	0.00%
4	Property	0.00%	0.00%
5	Special deposits	0.00%	0.00%
6	Others(PSU)	0.00%	0.00%
7	Assets Under Insurance Schemes	100.00%	100.00%
8	Total	1.00	1

The overall expected rate of return on assets is determined based on the market prices prevailing on that date, applicable to the period over which the obligation is to to be settled. There has been significant change in expected rate of return on assets due to the improved stock market scenario.

#### FULL PLAN INFORMATION:

This valuation reflects the provisions of the plan as at valuation date. Following is a summary of the major plan provisions used to determine the plan's financial position; It should not be used to determine individual plan benefits.

VALUATION DATE SPONSORING EMPLOYER

> TYPE OF PLAN COVERING ELIGIBILITY

VESTING CRITERIA

31-MAR-16 XYZ INTERNATIONAL MARKETING PVT LTD DEFINED BENEFITS GRATUITY ALL REGULAR EMPLOYEES

ON RETIREMENT	5 YEARS OF SERVICE
On LEAVING SERVICE	EQUAL TO OR MORE THAN 5 YEARS OF SERVICE
ON DEATH	VESTING CONDITION NOT APPLICABLE
EMPLOYER CONTRIBUTION	100%
EMPLOYEE CONTRIBUTIONS	NIL
APPLICABLE SALARY	LAST DRAWN FIXED CTC
NORMAL RETIREMENT AGE	60
Benefit Basis	ACCRUED BENEFITS
Benefit Types	
NORMAL RETIREMENT BENEFIT	15/26xSalaryxPQS
EARLY RETIREMENT BENEFIT	SAME AS ABOVE
DEATH BENEFIT	SAME AS ABOVE
Note	PQS IS COMPLETED YEARS OF SERVICE ROUNDED TO NEAREST INTEGER, SUBJECT TO A MINIMUM OF 5 YEARS OF QUALIFYING SERVICE
MAXIMUM LIMIT ON BENEFITS	Rs. 10,00,000
SPECIAL CONDITIONS	SALARY PAID IN A MONTH IS TREATED AS FOR 26 DAYS AS PER SUPREME COURT JUDGMENT

## **QUALIFICATION ON ASSETS**

#### **BELOW PARA IS NOT APPLICABLE**

#### Summary of Plan Assets:

The company is only making book provisions for the entire Gratuity Liability on the valuation date and follows a 'pay as you go' system to meet the liabilities as and when they fall due. Therefore the scheme is fully unfunded and no assets are maintained by the company and assets values are taken as zero.

#### **BELOW PARA IS APPLICABLE**

#### Insurer Administered Fund

The company has funded the liability with the insurance company. The

entire investible assets are managed by the fund managers of the

Insurance company and the assets Values as informed by the Insurance Company has been taken for the valuation purposes. **BELOW PARA IS NOT APPLICABLE** Summary of Plan Assets. The Plan Asset is a self-managed fund. The company has provided us with the fair value of assets of the Plan as at the Valuation Date As suggested by the Company, the fair value of assets considered for disclosure is the book value of assets and not the market value of assets **BELOW PARA IS NOT APPLICABLE** Amounts Included in the fair value of Plan Assets . he fair value of plan assets includes no direct investments relating to any of the company's own financial instruments any property occupied by, or other assets used by, the company.

#### ACTUARIAL ASSUMPTIONS:

I have used actuarial assumptions selected by the Company. Any Changes in actuarial assumptions, methods or plan provisions since the prior valuations are described in this report. The assumptions used in compiling this report are consistent with the requirements of US GAAP. The company was advised on assumptions as per the requirements under US GAAP.

#### **DEMOGRAPHIC ASSUMPTIONS:**

THE FOLLOWING DEMOGRAPHIC ASSUMPTIONS WERE USED IN VALUING THE LIABILITIES AND BENEFITS UNDER THE PLAN.

Mortality:	INDIAN ASSURED LIVES Mortality (2006-08 Ultimate		
DISABILITY:	5% OF MORTALITY RATE RATES		
WITHDRAWAL:			
RETIREMENT AGE:	60 #		

### TABLE OF SAMPLE RATES

M	Mortality			Disability	
Male	Female	Ag	ge	Male	Female
0.0848%	0.0848%	2	0	0.0042%	0.0042%
0.0984%	0.0984%	2	5	0.0049%	0.0049%
0.1056%	0.1056%	3	0	0.0053%	0.0053%
0.1282%	0.1282%	3	5	0.0064%	0.0064%
0.1803%	0.1803%	4	0	0.0090%	0.0090%
0.2874%	0.2874%	4	5	0.0144%	0.0144%
0.4946%	0.4946%	5	0	0.0247%	0.0247%
0.7888%	0.7888%	5	5	0.0394%	0.0394%
1.1534%	1.1534%	6	0	0.0577%	0.0577%

Π	Mortality		Disability		
Male	Female	Age	Male	Female	
1.7009%	1.7009%	65	0.0850%	0.0850%	
2.5855%	2.5855%	70	0.1293%	0.1293%	
3.9637%	3.9637%	75	0.1982%	0.1982%	
6.0558%	6.0558%	80	0.3028%	0.3028%	
9.1982%	9.1982%	85	0.4599%	0.4599%	
13.8895%	13.8895%	90	0.6945%	0.6945%	
20.8585%	20.8585%	95	1.0429%	1.0429%	
31.1628%	31.1628%	100	1.5581%	1.5581%	

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		Age			
Withdrawal			Retirement		
19%	19%	20	0%	0%	
19%	19%	25	0%	0%	
19%	19%	30	0%	0%	
19%	19%	35	0%	0%	
19%	19%	40	0%	0%	
19%	19%	45	0%	0%	
19%	19%	50	0%	0%	
19%	19%	55	0%	0%	
0%	0%	60	100%	100%	
0%	0%	65	100%	100%	
0%	0%	70	100%	100%	
0%	0%	75	100%	100%	
0%	0%	80	100%	100%	
0%	0%	85	100%	100%	
0%	0%	90	100%	100%	
0%	0%	95	100%	100%	
0%	0%	100	100%	100%	

## APPENDIX F: THE METHODOLOGY

**D.1 Defined Benefits Schemes:** 

These are schemes under which benefits are related to the remuneration at or near retirement, and /or years of service. The extent of an employer's obligation under such schemes is usually uncertain and requires estimation. In estimating the obligation, assumptions are made regarding future conditions and events, which are largely outside the employer's control.

#### **D.2 Allocation Problems:**

The retirement benefits under defined benefit schemes are earned over a long period and various factors frequently enter into the computation of these benefits. As a result, allocation problems arise in determining how the cost of retirement benefits should be recognized in the financial statements of the employer. The cost of retirement benefits to an employer relates to service put in by employees who are entitled to receive such benefits. Consequently the cost of retirement benefits needs to be accounted for in the period during which these services are rendered. Expensing the Defined Benefit retirement benefit costs at the time of employees exit does not appropriately achieve the objective of allocating these costs uniformly over the working lifetime of the employees.

#### **D.3 Actuarial Value of Accrued Obligation:**

#### This is done having regard to the following:

1) The Accrued Service as on the date of valuation 2) Salaries projected to the date of separation, based on appropriate assumptions as to the average rate of future annual salary increases. 3) The probabilities of death or resignation before retirement. 4) The likely future return on investments of funds.

#### D.4 Projected Unit Credit Method (Summary of Actuarial Cost Method)

We have used the Projected Unit Credit (PUC) actuarial method to assess the Scheme's liabilities, as required by US GAAP,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 Scheme'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 Scheme Liability is the actuarial present value of the "projected accrued benefits" as of the beginning of the year for active members.

#### **D.5** The measurement:

The liability is determined actuarially, by calculating the expected future cash outflows in respect of each individual employee by the application of a multiple decrement table which takes in to account the exits by way of normal age-retirement, earlier death while in service and other premature withdrawals. Then the present value of these expected payments is arrived at, using an appropriate rate of discount and added up.

#### **D.6Recognition of Actuarial Gains and Losses.**

The company has adopted the corridor approach for the recognition of actuarial gains and losses. The amount of gains and losses recognized as income or expense in a particular year equals the excess of unrecognized gain / loss at the start of the year over the greater of 10% value of assets and the value of defined benefit obligation at the start of the year, divided by expected average remaining working life of the membership.

# **COMMENTARY**

# Description of plan Characteristics and associated risks:

The Gratuity scheme is a final salary defined benefit plan. That provides for a lump some payment at the time of seperation based on scheme rules the benefits are calculated on the basis of last drawn salary and the period of service at the time of seperation and paid as lumpsum.

#### The design entiles the following lists that affect the liabilities and cash flows,

- 1. Interest rates risk : the deifined benefit obligation calculated uses a discount rate based on government bonds. If bond yields fall, the defined benefit obligation will tend to increase.
- 2. Salary inflation risk: higher than expected increases in salary will increase the defined benefit obligation.
- **3.** Demographic risks: this is the risk of volatility of results due to unexpected nature of decrements that include mortality attrition, disability and retirement. The effects of these decrement on the DBO depends upon the combination salary increase, discount rate, and vesting criteria and therefore not very straight forward. It is important not to overstate widthdrawal rate because the cost of retirement benefit of a short carring employees will be less compared to long service employees.

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# Description of funding arrangements and policies

While the payment of gratuity is statutory and provided by the Gratuity Act, there are no statutory minimum funding requirement for gratuity plans in india. However the companies can setup a separate irrevocable trust and start funding for the gratuity liability and avail of tax exemption under the income tax act by this security of gratuity benefits to the employees is ensure.

To prepare this report, actuarial assumptions as agreed by the Company, are used to select a single scenario from the range of possibilities. The results of that single scenario are included in this report. However, the future is uncertain and the plan's actual experience will differ from those assumptions; these differences may be significant or material. In addition, different assumptions or scenarios may also be within the reasonable range and results based on those assumptions would be different. Actuarial assumptions may also be changed from one valuation to the next because of mandated requirements, plan experience, changes in expectations about the future and other factors.

The effects of Morbidity and Withdrawals(Attrition) have been factored by constructing multiple decrement table on assumption of Mortality Table

### Basis of Valuation:

All costs, liabilities and other factors under the plan were determined in accordance with generally accepted actuarial principles and procedures.

### Accounting Principles:

The benefit expense for the year is made up of:

- the cost of the additional benefits that members accrue during the year based on projected salaries at retirement or earlier termination (current service cost);
- plus interest on the defined benefit obligation (interest cost);
- less the expected return on the assets held by the plan (expected return on plan assets);
- plus or minus the amount required to recognise actuarial losses or gains in accordance with the Company's accounting policy.

The amount recognized as a net gratuity/pension liability / (asset) in the company balance sheet is:

- the deficit (surplus) in the plan at the balance sheet date
- The amount falling due in the next one year

#### Current & Non –Current Liabilities.

Regarding funded post-employment benefit obligations, amount due for payment to the fund created for this purpose within twelve months is treated as "current" liability. Regarding the unfunded postemployment benefit obligations, a company will have settlement obligation at the Balance Sheet date or within twelve months for employees such as those who have already resigned or are expected to resign (which is factored for actuarial valuation) or are due for retirement within the next twelve months from the Balance Sheet date. Thus, the amount of obligation attributable to these employees is a current Liability

Discontinuance Gratuity refers to the payment of Gratuity Liability on the valuation Date in case the company discontinues its commercial operations.

Decrement adjusted future service represents the term of the future liability.

# **GLOSSARY**

<u>Actuarial Accrued Liability</u>. The portion of the present value of prospective benefits allocated to service before the valuation date in accordance with the actuarial cost method.

<u>Actuarial Cost Method</u>.Sometimes called "funding method," a particular technique used by actuaries for establishing the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortisation of the unfunded actuarial accrued liability.

<u>Actuarial Gain or Loss</u>. The actuarial loss is the excess of the plan's unfunded actuarial accrued liability on the valuation date over the unfunded actuarial accrued liability that would have resulted had all of the actuarial assumptions been realised. If the actuarial loss is less than zero, it is called an actuarial gain. From one plan year to 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.

<u>Actuarial Present Value</u>. The current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The actuarial present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

<u>Adjustment for limit on net asset</u>. A reduction of the net asset that may be necessary in situations where the company is unable to recover a surplus of the plan either through reduced contributions in the future or through refunds from the plan.

Balance Sheet Asset/(Liability) The sponsor's balance sheet asset/(liability) entry, the

Net recognized 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. The difference between this account and the Funded Status is the un-recognized net loss/(gain) unvested prior service costs [and net transition obligation.]

<u>Current Service Cost.</u>(component of expense). The actuarial present value of benefits attributed by the gratuity/pension benefit formula to services rendered by employees during that period based on assumptions as to future compensation levels. The interest rate used in determining the present value is the discount rate.

*Curtailment*. An event that significantly reduces the expected years of future service of present employees or eliminates for a significant number of employees the accrual of defined benefits for some or all of their future services.

*Deficit or surplus*. The excess of the present value of the obligation over plan assets.

**Discount Rate.** Also referred to as the "settlement rate," the discount rate represents the employer's estimate (as of the valuation date) of the interest rate at which pension benefits could be effectively settled. Assumed discount rates are used in the measurement of the present value of the obligation.

*Expected Return on Assets.* The expected return on plan assets over the accounting period, based on an assumed rate of return

**Expected Long-Term Rate of Return on Plan Assets.** An assumption as to the rate of return on plan assets reflecting the average rate of earnings expected on the funds invested or to be invested to provide for the benefits included in the projected benefit obligation. This assumption is used to determine the expected return on assets for purposes of US GAAP pension expense.

*Expense recognized in balance sheet.* The amount recognised in an employer's financial statements as the cost of a pension plan for a period, pursuant to US GAAP. Components of expense are current service cost, interest cost, expected return on plan assets along with settlement and curtailment charges (if any).

**Fair value of plan assets.** The assets out of which the obligations have to be settled, measured at their market value.

*Funded Status*. This is the excess/(shortfall) of the fair value of plan assets over the Plan Liability.

<u>Interest Cost</u>(component of net periodic Gratuity/Pension cost). The increase in the present value of obligation due to passage of time or The increase in the Plan liability over the accounting period due to interest (the time value of money)

<u>Net Periodic Benefit Cost</u>. This is the profit and loss charge for the accounting period, *underUS GAAP* and comprises the sum of the service and net interest costs, plus amortized actuarial gain /Loss.

<u>Past Service Cost</u>. Plan amendments often include provisions that grant increased benefits based on services rendered in prior periods. These provisions give rise to past service costs.

<u>*Plan Liability.*</u> 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.

<u>Present Value.</u>Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

<u>Present value of the Obligation</u>. The actuarial present value as of a date of all benefits attributed by the pension benefit formula to employee service rendered before that date. The Present value of obligation is defined in US GAAP and is measured based on the discount rate and other assumptions used for accounting disclosure purposes. The present value of the obligation is measured using assumptions as to future compensation levels and increases in maximum benefit limitations (if applicable). The interest rate used in determining the present value is the discount rate.

Service Cost. It has the following components.

A) This is the discounted present value of benefits attributed by the plan's benefit formulato services rendered by employees during the accounting period. It is measured using an assumption as to future pay levels.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

<u>Settlement</u>. A transaction that is irrevocable relieves the employer (or the plan) of primary responsibility for a pension benefit obligation and eliminates significant risks related to the obligation and the assets used to effect the settlement. The purchase of non-participating annuities or the payment of significant lump-sum payments to plan participants might constitute a settlement.

<u>*Termination Benefits.*</u> Benefits provided to employees in connection with their termination of employment at a specific time or under certain prescribed circumstances

<u>Unrecognized Net Gain or Loss</u>. The cumulative net gain or loss that has not been recognised as a part of net periodic pension cost.

<u>Unrecognised Past Service Cost</u>. That portion of past service cost that has not yet been recognised as part of expense is unrecognised past service cost.

ENDS.