Sri Lanka Accounting Standard-LKAS 19

Employee Benefits

CONTENTS

ORIECTIVE

paragraphs

SRI LANKA ACCOUNTING STANDARD-LKAS 19 EMPLOYEE BENEFITS

ODJECTIVE	
SCOPE	1–6
DEFINITIONS	7
SHORT-TERM EMPLOYEE BENEFITS	8–23
Recognition and measurement	10–22
All short-term employee benefits	10
Short-term compensated absences	11–16
Profit-sharing and bonus plans	17–22
Disclosure	23
POST-EMPLOYMENT BENEFITS: DISTINCTION BETWEEN DEFINED CONTRIBUTION PLANS AND DEFINED BENEFIT PLANS	24–42
Multi-employer plans	29–33
Defined benefit plans that share risks between various entities under common control	34–34B
State plans	36–38
Insured benefits	39–42
POST-EMPLOYMENT BENEFITS: DEFINED CONTRIBUTION PLANS	43–47
Recognition and measurement	44–45
Disclosure	46–47
POST-EMPLOYMENT BENEFITS: DEFINED BENEFIT PLANS	48–119
Recognition and measurement	49–62
Accounting for the constructive obligation	52-53

Statement of financial position	54–60
Profit or loss	61–62
Recognition and measurement: present value of defined benefit obligations and	
current service cost	63–101
Actuarial valuation method	64–66
Attributing benefit to periods of service	67–71
Actuarial assumptions	72–77
Actuarial assumptions: discount rate	78–82
Actuarial assumptions: salaries, benefits	
and medical costs	83–91
Actuarial gains and losses	92–95
Past service cost	96–101
Recognition and measurement: plan assets	102–107
Fair value of plan assets	102-104
Reimbursements	104A-104D
Return on plan assets	105–107
Business combinations	108
Curtailments and settlements	109–115
Presentation	116–119
Offset	116–117
Current/non-current distinction	118
Financial components of post-employment	
benefit costs	119
Disclosure	120–125
OTHER LONG-TERM EMPLOYEE BENEFITS	126–131
Recognition and measurement	128–130
Disclosure	131
TERMINATION BENEFITS	132–143

Recognition		133–138			
Measuremen	t	139–140			
Disclosure		141–143			
TRANSITIO	NAL PROVISIONS	153–156			
EFFECTIVE	DATE	157			
APPENDICE	ES				
Appendix A	Illustrative example				
Appendix B	Illustrative disclosures				
Appendix C	Illustration of the application of paragraph 58A				
Appendix D					
Annendix E	Formula on gratuity				

Sri Lanka Accounting Standard-LKAS 19 Employee Benefits

Sri Lanka Accounting Standard LKAS 19 *Employee Benefits* is set out in paragraphs 1–157 and Appendices A-E. All the paragraphs have equal authority. LKAS 19 should be read in the context of its objective, the *Preface to Sri Lanka Accounting Standards* and the *Framework for the Preparation and Presentation of Financial Statements*. LKAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* provides a basis for selecting and applying accounting policies in the absence of explicit guidance.

Objective

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

- This Standard shall be applied by an employer in accounting for all employee benefits, except those to which SLFRS 2 *Share-based Payment* applies.
- This Standard does not deal with reporting by employee benefit plans (see LKAS 26 Accounting and Reporting by Retirement Benefit Plans).
- 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.

4 Employee benefits include:

- (a) short-term employee benefits, such as wages, salaries and social security contributions, paid annual leave and paid sick leave, profit-sharing and bonuses (if payable within twelve months of the end of the period) and 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 pensions, other retirement benefits, post-employment life insurance and post-employment medical care:
- (c) other long-term employee benefits, including long-service leave or sabbatical leave, jubilee or other long-service benefits, long-term disability benefits and, if they are not payable wholly within twelve months after the end of the period, profit-sharing, bonuses and deferred compensation; and
- (d) termination benefits.

Because each category identified in (a)–(d) above has different characteristics, this Standard establishes separate requirements for each category.

- 5 Employee benefits include benefits provided to either employees or their dependants 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.
- 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

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

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

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

Post-employment benefits are employee benefits (other than termination benefits) which are payable after the completion of employment.

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 concerned.

Other long-term employee benefits are employee benefits (other than post-employment benefits and termination benefits) that are not due to be settled within twelve months after the end of the period in which the employees render the related service.

Termination benefits are employee benefits payable 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 voluntary redundancy in exchange for those benefits.

Vested employee benefits are employee benefits that are not conditional on future employment.

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.

Current service cost is the increase in the present value of a defined benefit obligation resulting from employee service in the current period.

Interest cost is the increase during a period in the present value of a defined benefit obligation which arises because the benefits are one period closer to settlement.

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 LKAS 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 amount for which an asset could be exchanged or a liability settled between knowledgeable, willing parties in an arm's length transaction.

The return on plan assets is interest, dividends and other revenue derived from the plan assets, together with realised and unrealised gains or losses on the plan assets, less any costs of administering the plan (other than those included in the actuarial assumptions

^{*} A qualifying insurance policy is not necessarily an insurance contract, as defined in SLFRS 4 *Insurance Contracts*.

used to measure the defined benefit obligation) and less any tax payable by the plan itself.

Actuarial gains and losses comprise:

- (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.

Past service cost is the change in the present value of the defined benefit obligation for employee service in prior periods, resulting in the current period from the introduction of, or changes to, postemployment benefits or other long-term employee benefits. 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 existing benefits are changed so that the present value of the defined benefit obligation decreases).

Short-term employee benefits

- 8 Short-term employee benefits include items such as:
 - (a) wages, salaries and social security contributions;
 - (b) short-term compensated absences (such as paid annual leave and paid sick leave) where the compensation for the absences is due to be settled within twelve months after the end of the period in which the employees render the related employee service;
 - (c) profit-sharing and bonuses payable within twelve months after the end of the period in which the employees render the related service; and
 - (d) non-monetary benefits (such as medical care, housing, cars and free or subsidised goods or services) for current employees.
- Accounting for short-term employee benefits is generally straightforward because no actuarial assumptions are required to measure the obligation or the cost and there is no possibility of any actuarial gain or loss. Moreover, short-term employee benefit obligations are measured on an undiscounted basis.

Recognition and measurement

All short-term employee benefits

- When an employee has rendered service to an entity during an accounting period, the entity shall recognise the undiscounted amount of short-tem 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; and
 - (b) as an expense, unless another Standard requires or permits the inclusion of the benefits in the cost of an asset (see, for example, LKAS 2 *Inventories* and LKAS 16 *Property, Plant and Equipment*).

Paragraphs 11, 14 and 17 explain how an entity shall apply this requirement to short-term employee benefits in the form of compensated absences and profit-sharing and bonus plans.

Short-term compensated absences

- An entity shall recognise the expected cost of short-term employee benefits in the form of compensated absences under paragraph 10 as follows:
 - (a) in the case of accumulating compensated absences, when the employees render service that increases their entitlement to future compensated absences; and
 - (b) in the case of non-accumulating compensated absences, when the absences occur.
- An entity may compensate employees for absence for various reasons including vacation, sickness and short-term disability, maternity or paternity, jury service and military service. Entitlement to compensated absences falls into two categories:
 - (a) accumulating; and

- (b) non-accumulating.
- Accumulating compensated 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 compensated 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 compensated absences. The obligation exists, and is recognised, even if the compensated 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.
- An entity shall measure the expected cost of accumulating compensated 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.
- 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 compensated 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 vacation.

Example illustrating paragraphs 14 and 15

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 30 December 20X1, the average unused entitlement is two days per employee. The entity expects, based on past experience which 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 12 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 12 days of sick pay.

Non-accumulating compensated 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 compensated 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

- An entity shall recognise the expected cost of profit-sharing and bonus payments under paragraph 10 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.

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 18

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% of profit. The entity estimates that staff turnover will reduce the payments to 2.5% of profit.

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

- 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.
- 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 authorised for issue; or
 - (c) past practice gives clear evidence of the amount of the entity's constructive obligation.
- 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.
- If profit-sharing and bonus payments are not due wholly within twelve months after the end of the period in which the employees render the related service, those payments are other long-term employee benefits (see paragraphs 126–131).

Disclosure

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

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

- 24 Post-employment benefits include, for example:
 - (a) retirement benefits, such as pensions; 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.

- 25 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. Under defined contribution plans:
 - (a) 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; and
 - (b) 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 on the employee.
- 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:
- (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.

27 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.
- Paragraphs 29–42 below explain the distinction between defined contribution plans and defined benefit plans in the context of multi-employer plans, state plans and insured benefits.

Multi-employer plans

- 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). Where a multi-employer plan is a defined benefit plan, an entity 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 paragraph 120A.
- When sufficient information is not available to use defined benefit accounting for a multi-employer plan that is a defined benefit plan, an entity shall:

- (a) account for the plan under paragraphs 44–46 as if it were a defined contribution plan;
- (b) disclose:
 - (i) the fact that the plan is a defined benefit plan; and
 - (ii) the reason why sufficient information is not available to enable the entity to account for the plan as a defined benefit plan; and
- (c) to the extent that a surplus or deficit in the plan may affect the amount of future contributions, disclose in addition:
 - (i) any available information about that surplus or deficit;
 - (ii) the basis used to determine that surplus or deficit; and
 - (iii) the implications, if any, for the entity.
- One example of a defined benefit multi-employer plan is one where:
 - (a) the plan is financed on a pay-as-you-go basis such that: 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 to either increase its contributions or persuade employees to accept a reduction in benefits. Therefore, such a plan is a defined benefit plan.
- Where sufficient information is available about a multi-employer plan which is a defined benefit plan, an entity accounts for its proportionate share of the defined benefit obligation, plan assets and post-employment benefit cost associated with the plan in the same way as for any other defined benefit plan. However, in some cases, 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 entity does not have access to information about the plan that satisfies the requirements of this Standard; or
- (b) 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.

In those cases, an entity accounts for the plan as if it were a defined contribution plan and discloses the additional information required by paragraph 30.

32A 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 30 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 32A

An entity participates in a multi-employer defined benefit plan that does not prepare plan valuations on an LKAS 19 basis. It therefore accounts for the plan as if it were a defined contribution plan. A non-LKAS 19 funding valuation shows a deficit of 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 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.

32B LKAS 37 *Provisions, Contingent Liabilities and Contingent Assets* requires an entity to disclose information about some contingent liabilities. In the context of a multi-employer plan, a contingent liability may arise from, for example:

- (a) actuarial losses relating to other participating entities because each entity that participates in a multi-employer plan shares in the actuarial risks of every other participating entity; or
- (b) any responsibility under the terms of a plan to finance any shortfall in the plan if other entities cease to participate.
- 33 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).

Defined benefit plans that share risks between various entities under common control

- Defined benefit plans that share risks between various entities under common control, for example, a parent and its subsidiaries, are not multi-employer plans.
- An entity participating in such a plan shall obtain information about the plan as a whole measured in accordance with LKAS 19 on the basis of assumptions that apply to the plan as a whole. If there is a contractual agreement or stated policy for charging the net defined benefit cost for the plan as a whole measured in accordance with LKAS 19 to individual group entities, 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.

- 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, make the following disclosures:
 - (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 in accordance with paragraph 34A, all the information about the plan as a whole in accordance with paragraphs 120–121.
 - (d) if the entity accounts for the contribution payable for the period in accordance with paragraph 34A, the information about the plan as a whole required in accordance with paragraphs 120A(b)–(e), (j), (n), (o), (q) and 121. The other disclosures required by paragraph 120A do not apply.

35 [Deleted]

State plans

- An entity shall account for a state plan in the same way as for a multi-employer plan (see paragraphs 29 and 30).
- 37 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) which is not subject to control or influence by the reporting entity. Some plans established by an entity provide both compulsory benefits which substitute for benefits that would otherwise be covered under a state plan and additional voluntary benefits. Such plans are not state plans.
- State plans are characterised as defined benefit or defined contribution in nature based 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, in the rare cases when a state plan is a defined benefit plan, an entity applies the treatment prescribed in paragraphs 29 and 30.

Insured benefits

- 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 to either:
 - (a) pay the employee benefits directly when they fall due; or
 - (b) 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.

- The benefits insured by an insurance contract need not have a direct or automatic relationship with the entity's obligation for employee benefits. Post-employment benefit plans involving insurance contracts are subject to the same distinction between accounting and funding as other funded plans.
- 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 7); and

- (b) recognises other insurance policies as reimbursement rights (if the policies satisfy the criteria in paragraph 104A).
- 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

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 do not fall due wholly within twelve months after the end of the period in which the employees render the related service.

Recognition and measurement

- 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; and
 - (b) as an expense, unless another Standard requires or permits the inclusion of the contribution in the cost of an asset (see,

for example, LKAS 2 Inventories and LKAS 16 Property, Plant and Equipment).

Where contributions to a defined contribution plan do not fall due wholly within twelve months after the end of the period in which the employees render the related service, they shall be discounted using the discount rate specified in paragraph 78.

Disclosure

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

Post-employment benefits: defined benefit plans

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

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.

- Accounting by an entity for defined benefit plans involves the following steps:
 - (a) using actuarial techniques to make a reliable estimate of the amount of benefit that employees have earned in return for their service in the current and prior periods. This requires an entity to determine how much benefit is attributable to the current and prior periods (see paragraphs 67–71) 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 influence the cost of the benefit (see paragraphs 72–91);
 - (b) discounting that benefit using the Projected Unit Credit Method in order to determine the present value of the defined benefit obligation and the current service cost (see paragraphs 64–66);
 - (c) determining the fair value of any plan assets (see paragraphs 102–104);
 - (d) determining the total amount of actuarial gains and losses and the amount of those actuarial gains and losses to be recognised (see paragraphs 92–95);
 - (e) where a plan has been introduced or changed, determining the resulting past service cost (see paragraphs 96–101); and
 - (f) where a plan has been curtailed or settled, determining the resulting gain or loss (see paragraphs 109–115).

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

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

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.

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 cancel a plan if employees are to be retained. Therefore, in the absence of evidence to the contrary, accounting for post-employment benefits assumes that an entity which is currently promising such benefits will continue to do so over the remaining working lives of employees.

Statement of financial position

- The amount recognised as a defined benefit liability shall be the net total of the following amounts:
 - (a) the present value of the defined benefit obligation at the end of the reporting period (see paragraph 64);
 - (b) plus any actuarial gains (less any actuarial losses) not recognised because of the treatment set out in paragraphs 92 and 93;
 - (c) minus any past service cost not yet recognised (see paragraph 96);
 - (d) minus the fair value at the end of the reporting period of plan assets (if any) out of which the obligations are to be settled directly (see paragraphs 102–104).
- The present value of the defined benefit obligation is the gross obligation, before deducting the fair value of any plan assets.
- An entity shall determine the present value of defined benefit obligations and the fair value of any plan assets 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.
- 57 This Standard requires entities listed in Appendix D [1] to engage a qualified actuary in the measurement of all material post-employment benefit obligations. The qualified actuary shall carryout such valuation at least once in every three years. All other companies listed in

Appendix D [2], may opt to use a qualified actuary or use the Gratuity Formula Method, as discussed in Appendix E. Other entities (not listed in Appendix D) may opt to measure the post employment benefit obligation under the Payment of Gratuity Act, by multiplying half month's salary by the number of years of service, in respect of all employees from the commencement of employment. If the half months' period is increased under special arrangement or agreement, then such increased periods salary should be used to calculate gratuity. Further 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.

- 57A A qualified actuary, as required in paragraph 57 would mean;
 - (a) a Fellow of the Institute of Actuaries in England or of the Faculty of Actuaries in Scotland or a Fellow of any other recognised professional Actuarial Institute; or
 - (b) an Associate of any of the professional Actuarial Institutes referred to in paragraph (a) with not less than ten years post qualification experience in relevant actuarial matters.
- The amount determined under paragraph 54 may be negative (an asset). An entity shall measure the resulting asset at the lower of:
 - (a) the amount determined under paragraph 54; and
 - (b) the total of:
 - (i) any cumulative unrecognised net actuarial losses and past service cost (see paragraphs 92, 93 and 96); and
 - (ii) 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 these economic benefits shall be determined using the discount rate specified in paragraph 78.
- 58A The application of paragraph 58 shall not result in a gain being recognised solely as a result of an actuarial loss or past service cost in the current period or in a loss being recognised solely as a result of an actuarial gain in the current period. The entity shall

therefore recognise immediately under paragraph 54 the following, to the extent that they arise while the defined benefit asset is determined in accordance with paragraph 58(b):

- (a) net actuarial losses of the current period and past service cost of the current period to the extent that they exceed any reduction in the present value of the economic benefits specified in paragraph 58(b)(ii). If there is no change or an increase in the present value of the economic benefits, the entire net actuarial losses of the current period and past service cost of the current period shall be recognised immediately under paragraph 54.
- (b) net actuarial gains of the current period after the deduction of past service cost of the current period to the extent that they exceed any increase in the present value of the economic benefits specified in paragraph 58(b)(ii). If there is no change or a decrease in the present value of the economic benefits, the entire net actuarial gains of the current period after the deduction of past service cost of the current period shall be recognized immediately under paragraph 54.
- Paragraph 58A applies to an entity only if it has, at the beginning or end of the accounting period, a surplus* in a defined benefit plan and cannot, based on the current terms of the plan, recover that surplus fully through refunds or reductions in future contributions. In such cases, past service cost and actuarial losses that arise in the period, the recognition of which is deferred under paragraph 54, will increase the amount specified in paragraph 58(b)(i). If that increase is not offset by an equal decrease in the present value of economic benefits that qualify for recognition under paragraph 58(b)(ii), there will be an increase in the net total specified by paragraph 58(b) and, hence, a recognized gain. Paragraph 58A prohibits the recognition of a gain in these circumstances.

The opposite effect arises with actuarial gains that arise in the period, the recognition of which is deferred under paragraph 54, to the extent that the actuarial gains reduce cumulative unrecognised actuarial losses. Paragraph 58A prohibits the recognition of a loss in

^{*} A surplus is an excess of the fair value of the plan assets over the present value of the defined benefit obligation.

- these circumstances. For examples of the application of this paragraph, see Appendix C.
- An asset may arise where a defined benefit plan has been overfunded or in certain cases where actuarial gains are recognised. An entity recognises an 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 limit in paragraph 58(b) does not override the delayed recognition of certain actuarial losses (see paragraphs 92 and 93) and certain past service cost (see paragraph 96), other than as specified in paragraph 58A. However, that limit does override the transitional option in paragraph 155(b). Paragraph 120A(f)(iii) requires an entity to disclose any amount not recognised as an asset because of the limit in paragraph 58(b).

Example illustrating paragraph 60	
A defined benefit plan has the following characteristics:	
Present value of the obligation	1,100
Fair value of plan assets	(1,190)
	(90)
Unrecognised actuarial losses	(110)
Unrecognised past service cost	(70)
Unrecognised increase in the liability on initial adoption of the Standard under paragraph 155(b)	(50)
Negative amount determined under paragraph 54	(320)
Present value of available future refunds and reductions in future contributions	90
The limit under paragraph 58(b) is computed as follows:	
Unrecognised actuarial losses	110
Unrecognised past service cost	70
Present value of available future refunds and reductions in future contributions	90
Limit	270_
270 is less than 320. Therefore, the entity recognises an asset of 270 and discloses that the limit reduced the carrying amount of the asset by 50 (see paragraph 120A(f)(iii)).	

Profit or loss

- An entity shall recognise the net total of the following amounts in profit or loss, except to the extent that another Standard requires or permits their inclusion in the cost of an asset:
 - (a) current service cost (see paragraphs 63–91);
 - (b) interest cost (see paragraph 82);

- (c) the expected return on any plan assets (see paragraphs 105–107) and on any reimbursement rights (see paragraph 104A);
- (d) actuarial gains and losses, as required in accordance with the entity's accounting policy (see paragraphs 92–93D);
- (e) past service cost (see paragraph 96);
- (f) the effect of any curtailments or settlements (see paragraphs 109 and 110); and
- (g) the effect of the limit in paragraph 58(b), unless it is recognised outside profit or loss in accordance with paragraph 93C.
- Other Standards require the inclusion of certain employee benefit costs within the cost of assets such as inventories or property, plant and equipment (see LKAS 2 and LKAS 16). Any post-employment benefit costs included in the cost of such assets include the appropriate proportion of the components listed in paragraph 61.

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

- The ultimate cost of a defined benefit plan may be influenced by many variables, such as final salaries, employee turnover and mortality, medical cost trends and, for a funded plan, the investment earnings on the plan assets. 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 to:
 - (a) apply an actuarial valuation method (see paragraphs 64–66);
 - (b) attribute benefit to periods of service (see paragraphs 67–71); and
 - (c) make actuarial assumptions (see paragraphs 72–91).

Actuarial valuation method

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. 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 67–71) and measures each unit separately to build up the final obligation (see paragraphs 72–91).

Example illustrating paragraph 65

A lump sum benefit is payable on termination of service and equal to 1% of final salary for each year of service. The salary in year 1 is 10,000 and is assumed to increase at 7% (compound) each year. The discount rate used is 10% 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.

Year	1	2	3	4	5
Benefit attributed to:					
– prior years	0	131	262	393	524
current year(1% of final salary)current and prior years	<u>131</u> <u>131</u>	<u>131</u> <u>262</u>	<u>131</u> <u>393</u>	<u>131</u> <u>524</u>	<u>131</u> <u>655</u>
Opening obligation	_	89	196	324	476
Interest at 10%	_	9	20	33	48
Current service cost	89	98	<u>108</u>	<u>119</u>	<u>131</u>
Closing obligation	<u>89</u>	<u>196</u>	<u>324</u>	<u>476</u>	<u>655</u>

Note:

- 1. The opening obligation is the present value of benefit attributed to prior years.
- 2. The current service cost is the present value of benefit attributed to the current year.
- 3. The closing obligation is the present value of benefit attributed to current and prior years.
- An entity discounts the whole of a post-employment benefit obligation, even if part of the obligation falls due within twelve months after the reporting period.

Attributing benefit to periods of service

- 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.
- 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 which 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 68

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

A benefit of 100 is attributed to each year. The current service cost is the present value of 100. The present value of the defined benefit obligation is the present value of 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% 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% 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% 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.

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 certain 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 69

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

A benefit of 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 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 100 is attributed to each subsequent year.

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 70

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

A benefit of 100 (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 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 100 (2,000 divided by 20) 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 20) 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 200 (2,000 divided by 10) 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.

continued...

....continued

Examples illustrating paragraph 70

3. A post-employment medical plan reimburses 40% 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% of those costs if the employee leaves after twenty or more years of service.

Under the plan's benefit formula, the entity attributes 4% of the present value of the expected medical costs (40% divided by ten) to each of the first ten years and 1% (10% 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% 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% 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 68. 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% of the present value of the expected medical costs (50% 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% 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.

- 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 67(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 71

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

Benefit of 3% 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

72 Actuarial assumptions shall be unbiased and mutually compatible.

- 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, both during and after employment;
 - (ii) rates of employee turnover, disability and early retirement;
 - (iii) the proportion of plan members with dependants who will be eligible for benefits; and

LKAS 19

- (iv) claim rates under medical plans; and
- (b) financial assumptions, dealing with items such as:
 - (i) the discount rate (see paragraphs 78–82);
 - (ii) future salary and benefit levels (see paragraphs 83–87);
 - (iii) in the case of medical benefits, future medical costs, including, where material, the cost of administering claims and benefit payments (see paragraphs 88–91); and
 - (iv) the expected rate of return on plan assets (see paragraphs 105–107).
- Actuarial assumptions are unbiased if they are neither imprudent nor excessively conservative.
- Actuarial assumptions are mutually compatible if they reflect the economic relationships between factors such as inflation, rates of salary increase, the return on plan assets and discount rates. For example, all assumptions which 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.
- 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 LKAS 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.
- 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: discount rate

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 high quality corporate bonds. In countries where there is no deep market in such bonds, the market yields (at the end of the reporting period) on government bonds shall be used. The currency and term of the

corporate bonds or government bonds shall be consistent with the currency and estimated term of the post-employment benefit obligations.

- One actuarial assumption which 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.
- 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.
- In some cases, there may be no deep market in 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 corporate or government bonds.
- Interest cost is computed by multiplying the discount rate as determined at the start of the period by the present value of the defined benefit obligation throughout that period, taking account of any material changes in the obligation. The present value of the obligation will differ from the liability recognised in the statement of financial position because the liability is recognised after deducting the fair value of any plan assets and because some actuarial gains and losses, and some past service cost, are not recognised immediately. [Appendix A illustrates the computation of interest cost, among other things.]

Actuarial assumptions: salaries, benefits and medical costs

- Post-employment benefit obligations shall be measured on a basis that reflects:
 - (a) estimated future salary increases;

- (b) 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; and
- (c) 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) past history, or other reliable evidence, indicates 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.
- 84 Estimates of future salary increases take account of inflation, seniority, promotion and other relevant factors, such as supply and demand in the employment market.
- 85 If the formal terms of a plan (or a constructive obligation that goes beyond those terms) require an entity to change benefits in future periods, the measurement of the obligation reflects those changes. This is the case when, for example:
 - (a) the entity has a past 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; or
 - (b) actuarial gains have already been recognised in the financial statements and 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 98(c)).
- 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.

- 87 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 expected changes in such variables, based on past history and other reliable evidence.
- 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.
- 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.
- 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 is adjusted to the extent that the demographic mix of the population differs from that of the population used as a basis for the historical data. It is also adjusted where there is reliable evidence that historical trends will not continue.
- Some post-employment health care plans require employees to contribute to the medical costs covered by the plan. Estimates of future medical costs take account of any such contributions, based on the terms of the plan at the end of the reporting period (or based on any constructive obligation that goes beyond those terms). Changes in those employee contributions result in past service cost or, where applicable, curtailments. The cost of meeting claims may be reduced by benefits from state or other medical providers (see paragraphs 83(c) and 87).

Actuarial gains and losses

In measuring its defined benefit liability in accordance with paragraph 54, an entity shall, subject to paragraph 58A, recognise a portion (as specified in paragraph 93) of its actuarial gains and losses as income or expense if the net cumulative unrecognised actuarial gains and losses at the end of the previous reporting period exceeded the greater of:

- (a) 10% of the present value of the defined benefit obligation at that date (before deducting plan assets); and
- (b) 10% of the fair value of any plan assets at that date.

These limits shall be calculated and applied separately for each defined benefit plan.

- 93 The portion of actuarial gains and losses to be recognised for each defined benefit plan is the excess determined in accordance with paragraph 92, divided by the expected average remaining working lives of the employees participating in that plan. However, an entity may adopt any systematic method that results in faster recognition of actuarial gains and losses, provided that the same basis is applied to both gains and losses and the basis is applied consistently from period to period. An entity may apply such systematic methods to actuarial gains and losses even if they are within the limits specified in paragraph 92.
- 93A If, as permitted by paragraph 93, an entity adopts a policy of recognising actuarial gains and losses in the period in which they occur, it may recognise them in other comprehensive income, in accordance with paragraphs 93B–93D, providing it does so for:
 - (a) all of its defined benefit plans; and
 - (b) all of its actuarial gains and losses.
- 93B Actuarial gains and losses recognised in other comprehensive income as permitted by paragraph 93A shall be presented in the statement of comprehensive income.
- 93C An entity that recognises actuarial gains and losses in accordance with paragraph 93A shall also recognise any adjustments arising from the limit in paragraph 58(b) in other comprehensive income.
- Actuarial gains and losses and adjustments arising from the limit in paragraph 58(b) that have been recognised in other comprehensive income shall be recognized immediately in retained earnings. They shall not be reclassified to profit or loss in a subsequent period.

- Actuarial gains and losses may result from increases or decreases in either the present value of a defined benefit obligation or the fair value of any related plan assets. 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 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;
 - (c) the effect of changes in the discount rate; and
 - (d) differences between the actual return on plan assets and the expected return on plan assets (see paragraphs 105–107).
- 95 In the long term, actuarial gains and losses may offset one another. Therefore, estimates of post-employment benefit obligations may be viewed as a range (or 'corridor') around the best estimate. An entity is permitted, but not required, to recognise actuarial gains and losses that fall within that range. This Standard requires an entity to recognise, as a minimum, a specified portion of the actuarial gains and losses that fall outside a 'corridor' of plus or minus 10%. [Appendix A illustrates the treatment of actuarial gains and losses, among other things.] The Standard also permits systematic methods of faster recognition, provided that those methods satisfy the conditions set out in paragraph 93. Such permitted methods include, for example, immediate recognition of all actuarial gains and losses, both within and outside the 'corridor'. Paragraph 155(b)(iii) explains the need to consider any unrecognised part of the transitional liability in accounting for subsequent actuarial gains.

Past service cost

In measuring its defined benefit liability under paragraph 54, an entity shall, subject to paragraph 58A, recognise past service cost as an expense on a straight-line basis over the average period until the benefits become vested. To the extent that the benefits are already vested immediately following the introduction of, or

changes to, a defined benefit plan, an entity shall recognize past service cost immediately.

Past service cost arises when an entity introduces a defined benefit plan that attributes benefits to past service or changes the benefits payable for past service under an existing defined benefit plan. Such changes are in return for employee service over the period until the benefits concerned are vested. Therefore, the entity recognises past service cost over that period, regardless of the fact that the cost refers to employee service in previous periods. The entity measures past service cost as the change in the liability resulting from the amendment (see paragraph 64). Negative past service cost arises when an entity changes the benefits attributable to past service so that the present value of the defined benefit obligation decreases.

Example illustrating paragraph 97

An entity operates a pension plan that provides a pension of 2% of final salary for each year of service. The benefits become vested after five years of service. On 1 January 20X5 the entity improves the pension to 2.5% of final salary for each year of service starting from 1 January 20X1. At the date of the improvement, the present value of the additional benefits for service from 1 January 20X1 to 1 January 20X5 is as follows:

Employees with more than five years' service at 1/1/X5	150
Employees with less than five years' service at 1/1/X5	
(average period until vesting: three years)	_120
	270

The entity recognises 150 immediately because those benefits are already vested. The entity recognises 120 on a straight-line basis over three years from 1 January 20X5.

98 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 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 (the resulting increase in the obligation is an actuarial loss and not past service cost, see paragraph 85(b));
- (d) the increase in vested benefits 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); and
- (e) the effect of plan amendments that reduce benefits for future service (a curtailment).
- An entity establishes the amortisation schedule for past service cost when the benefits are introduced or changed. It would be impracticable to maintain the detailed records needed to identify and implement subsequent changes in that amortisation schedule. Moreover, the effect is likely to be material only where there is a curtailment or settlement. Therefore, an entity amends the amortisation schedule for past service cost only if there is a curtailment or settlement.
- Where an entity reduces benefits payable under an existing defined benefit plan, the resulting reduction in the defined benefit liability is recognised as (negative) past service cost over the average period until the reduced portion of the benefits becomes vested.
- Where an entity reduces certain 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.

Recognition and measurement: plan assets

Fair value of plan assets

- The fair value of any plan assets is deducted in determining the amount recognised in the statement of financial position under paragraph 54. When no market price is available, the fair value of plan assets is estimated; for example, by discounting expected future cash flows using a discount rate that reflects both the risk associated with the plan assets and the maturity or expected disposal date of those assets (or, if they have no maturity, the expected period until the settlement of the related obligation).
- 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.
- 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, as described in paragraph 54 (subject to any reduction required if the amounts receivable under the insurance policies are not recoverable in full).

Reimbursements

104A 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 recognise its right to reimbursement as a separate asset. The entity shall measure the asset at fair value. In all other respects, an entity shall treat that asset in the same way as plan assets. In the statement of comprehensive income, the expense relating to a defined benefit plan may be presented net of the amount recognised for a reimbursement.

104B 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 7, are plan assets. An entity accounts for qualifying insurance policies in the same way as for all other plan assets and paragraph 104A does not apply (see paragraphs 39–42 and 104).

104C When an insurance policy is not a qualifying insurance policy, that insurance policy is not a plan asset. Paragraph 104A deals with 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 liability recognised under paragraph 54; in all other respects, the entity treats that asset in the same way as plan assets. In particular, the defined benefit liability recognised under paragraph 54 is increased (reduced) to the extent that net cumulative actuarial gains (losses) on the defined benefit obligation and on the related reimbursement right remain unrecognised under paragraphs 92 and 93. Paragraph 120A(f)(iv) requires the entity to disclose a brief description of the link between the reimbursement right and the related obligation.

Example illustrating paragraphs 104A–104C	
Present value of obligation	1,241
Unrecognised actuarial gains	17
Liability recognised in statement of financial position	<u>1,258</u>
Rights under insurance policies that exactly match the amount and timing of some of the benefits payable under the plan. Those benefits have a present value of 1,092.	1 002
The unrecognised actuarial gains of 17 are the net cu actuarial gains on the obligation and on the reimbursement ri	

104D 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, as described in paragraph 54 (subject to any reduction required if the reimbursement is not recoverable in full).

LKAS 19

Return on plan assets

- The expected return on plan assets is one component of the expense recognized in profit or loss. The difference between the expected return on plan assets and the actual return on plan assets is an actuarial gain or loss; it is included with the actuarial gains and losses on the defined benefit obligation in determining the net amount that is compared with the limits of the 10% 'corridor' specified in paragraph 92.
- The expected return on plan assets is based on market expectations, at the beginning of the period, for returns over the entire life of the related obligation. The expected return on plan assets reflects changes in the fair value of plan assets held during the period as a result of actual contributions paid into the fund and actual benefits paid out of the fund.

Example illustrating paragraph 106

At 1 January 20X1, the fair value of plan assets was 10,000 and net cumulative unrecognised actuarial gains were 760. On 30 June 20X1, the plan paid benefits of 1,900 and received contributions of 4,900. At 31 December 20X1, the fair value of plan assets was 15,000 and the present value of the defined benefit obligation was 14,792. Actuarial losses on the obligation for 20X1 were 60.

At 1 January 20X1, the reporting entity made the following estimates, based on market prices at that date:

	%
Interest and dividend income, after tax payable by the fund	9.25
Realised and unrealised gains on plan assets (after tax)	2.00
Administration costs	(1.00)
Expected rate of return	10.25
For 20X1, the expected and actual return on plan assets are as follows:	
Return on 10,000 held for 12 months at 10.25%	1,025
Return on 3,000 held for six months at 5% (equivalent to 10.25% annually, compounded every six months)	150
Expected return on plan assets for 20X1	1,175
Fair value of plan assets at 31 December 20X1	15,000
Less fair value of plan assets at 1 January 20X1	(10,000)
Less contributions received	(4,900)
Add benefits paid	1,900
Actual return on plan assets	2,000

The difference between the expected return on plan assets (1,175) and the actual return on plan assets (2,000) is an actuarial gain of 825. Therefore, the cumulative net unrecognised actuarial gains are 1,525 (760 plus 825 less 60). Under paragraph 92, the limits of the corridor are set at 1,500 (greater of: (i) 10% of 15,000 and (ii) 10% of 14,792). In the following year (20X2), the entity recognises in profit or loss an actuarial gain of 25 (1,525 less 1,500) divided by the expected average remaining working life of the employees concerned.

The expected return on plan assets for 20X2 will be based on market expectations at 1/1/X2 for returns over the entire life of the obligation.

In determining the expected and actual return on plan assets, an entity deducts expected administration costs, other than those included in the actuarial assumptions used to measure the obligation.

Business combinations

- In a business combination, an entity recognises assets and liabilities arising from post-employment benefits at the present value of the obligation less the fair value of any plan assets (see SLFRS 3 Business Combinations). The present value of the obligation includes all of the following, even if the acquiree had not yet recognised them at the acquisition date:
 - (a) actuarial gains and losses that arose before the acquisition date (whether or not they fell inside the 10% 'corridor');
 - (b) past service cost that arose from benefit changes, or the introduction of a plan, before the acquisition date; and
 - (c) amounts that, under the transitional provisions of paragraph 155(b), the acquiree had not recognised.

Curtailments and settlements

- An entity shall recognise gains or losses on the curtailment or settlement of a defined benefit plan when the curtailment or settlement occurs. The gain or loss on a curtailment or settlement shall comprise:
 - (a) any resulting change in the present value of the defined benefit obligation;
 - (b) any resulting change in the fair value of the plan assets;
 - (c) any related actuarial gains and losses and past service cost that, under paragraphs 92 and 96, had not previously been recognised.
- Before determining the effect of a curtailment or settlement, an entity shall remeasure the obligation (and the related plan assets, if any) using current actuarial assumptions (including current market interest rates and other current market prices).

- 111 A curtailment occurs when an entity either:
 - (a) is demonstrably committed to make a significant reduction in the number of employees covered by a plan; or
 - (b) amends the terms of a defined benefit plan so that a significant element of future service by current employees will no longer qualify for benefits, or will qualify only for reduced benefits.

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, or a reduction in the extent to which future salary increases are linked to the benefits payable for past service. Curtailments are often linked with a restructuring. When this is the case, an entity accounts for a curtailment at the same time as for a related restructuring.

- 111A When a plan amendment reduces benefits, only the effect of the reduction for future service is a curtailment. The effect of any reduction for past service is a negative past service cost.
- 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, for example, when a lump-sum cash payment is made to, or on behalf of, plan participants in exchange for their rights to receive specified postemployment benefits.
- 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 39) to pay further amounts if the insurer does not pay the employee benefits specified in the insurance policy. Paragraphs 104A–104D deal with the recognition and measurement of reimbursement rights under insurance policies that are not plan assets.
- A settlement occurs together with a curtailment if a plan is terminated such that the obligation is settled and the plan ceases to exist. However, the termination of a plan is not a curtailment or settlement if the plan is replaced by a new plan that offers benefits that are, in substance, identical.

LKAS 19

Where a curtailment relates to only some of the employees covered by a plan, or where only part of an obligation is settled, the gain or loss includes a proportionate share of the previously unrecognised past service cost and actuarial gains and losses (and of transitional amounts remaining unrecognised under paragraph 155(b)). The proportionate share is determined on the basis of the present value of the obligations before and after the curtailment or settlement, unless another basis is more rational in the circumstances. For example, it may be appropriate to apply any gain arising on a curtailment or settlement of the same plan to first eliminate any unrecognised past service cost relating to the same plan.

Example illustrating paragraph 115

An entity discontinues an operating segment and employees of the discontinued segment will earn no further benefits. This is a curtailment without a settlement. Using current actuarial assumptions (including current market interest rates and other current market prices) immediately before the curtailment, the entity has a defined benefit obligation with a net present value of 1,000, plan assets with a fair value of 820 and net cumulative unrecognized actuarial gains of 50. The entity had first adopted the Standard one year before. This increased the net liability by 100, which the entity chose to recognise over five years (see paragraph 155(b)). The curtailment reduces the net present value of the obligation by 100 to 900.

Of the previously unrecognised actuarial gains and transitional amounts, 10% (100/1,000) relates to the part of the obligation that was eliminated through the curtailment. Therefore, the effect of the curtailment is as follows:

en annien is dis jene ns.	Before curtailment	Curtailment gain	After curtailment
Net present value of obligation	1,000	(100)	900
Fair value of plan assets	(820)		(820)
	180	(100)	80
Unrecognised actuarial gains	50	(5)	45
Unrecognised transitional amount $(100 \times 4/5)$	(80)	8	(72)
Net liability recognised in statement of financial position	150	(97)	53

Presentation

Offset

- 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 realise the surplus in one plan and settle its obligation under the other plan simultaneously.
- The offsetting criteria are similar to those established for financial instruments in LKAS 32 *Financial Instruments: Presentation*.

Current/non-current distinction

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.

Financial components of post-employment benefit costs

This Standard does not specify whether an entity should present current service cost, interest cost and the expected return on plan assets as components of a single item of income or expense in the statement of comprehensive income.

Disclosure

- An entity shall disclose information that enables users of financial statements to evaluate the nature of its defined benefit plans and the financial effects of changes in those plans during the period.
- 120A An entity shall disclose the following information about defined benefit plans:
 - (a) the entity's accounting policy for recognising actuarial gains and losses.

- (b) a general description of the type of plan.
- (c) a reconciliation of opening and closing balances of the present value of the defined benefit obligation showing separately, if applicable, the effects during the period attributable to each of the following:
 - (i) current service cost,
 - (ii) interest cost,
 - (iii) contributions by plan participants,
 - (iv) actuarial gains and losses,
 - (v) foreign currency exchange rate changes on plans measured in a currency different from the entity's presentation currency,
 - (vi) benefits paid,
 - (vii) past service cost,
 - (viii) business combinations,
 - (ix) curtailments and
 - (x) settlements.
- (d) an analysis of the defined benefit obligation into amounts arising from plans that are wholly unfunded and amounts arising from plans that are wholly or partly funded.
- (e) a reconciliation of the opening and closing balances of the fair value of plan assets and of the opening and closing balances of any reimbursement right recognised as an asset in accordance with paragraph 104A showing separately, if applicable, the effects during the period attributable to each of the following:
 - (i) expected return on plan assets,
 - (ii) actuarial gains and losses,

- (iii) foreign currency exchange rate changes on plans measured in a currency different from the entity's presentation currency,
- (iv) contributions by the employer,
- (v) contributions by plan participants,
- (vi) benefits paid,
- (vii) business combinations and
- (viii) settlements.
- (f) a reconciliation of the present value of the defined benefit obligation in (c) and the fair value of the plan assets in (e) to the assets and liabilities recognised in the statement of financial position, showing at least:
 - (i) the net actuarial gains or losses not recognised in the statement of financial position (see paragraph 92);
 - (ii) the past service cost not recognised in the statement of financial position (see paragraph 96);
 - (iii) any amount not recognised as an asset, because of the limit in paragraph 58(b);
 - (iv) the fair value at the end of the reporting period of any reimbursement right recognised as an asset in accordance with paragraph 104A (with a brief description of the link between the reimbursement right and the related obligation); and
 - (v) the other amounts recognised in the statement of financial position.
- (g) the total expense recognised in profit or loss for each of the following, and the line item(s) in which they are included:
 - (i) current service cost;
 - (ii) interest cost;

- (iii) expected return on plan assets;
- (iv) expected return on any reimbursement right recognised as an asset in accordance with paragraph 104A;
- (v) actuarial gains and losses;
- (vi) past service cost;
- (vii) the effect of any curtailment or settlement; and
- (viii) the effect of the limit in paragraph 58(b).
- (h) the total amount recognised in other comprehensive income for each of the following:
 - (i) actuarial gains and losses; and
 - (ii) the effect of the limit in paragraph 58(b).
- (i) for entities that recognise actuarial gains and losses in other comprehensive income in accordance with paragraph 93A, the cumulative amount of actuarial gains and losses recognised in other comprehensive income.
- (j) for each major category of plan assets, which shall include, but is not limited to, equity instruments, debt instruments, property, and all other assets, the percentage or amount that each major category constitutes of the fair value of the total plan assets.
- (k) the amounts included in the fair value of plan assets for:
 - (i) each category of the entity's own financial instruments; and
 - (ii) any property occupied by, or other assets used by, the entity.
- (l) a narrative description of the basis used to determine the overall expected rate of return on assets, including the effect of the major categories of plan assets.

- (m) the actual return on plan assets, as well as the actual return on any reimbursement right recognised as an asset in accordance with paragraph 104A.
- (n) the principal actuarial assumptions used as at the end of the reporting period, including, when applicable:
 - (i) the discount rates;
 - (ii) the expected rates of return on any plan assets for the periods presented in the financial statements;
 - (iii) the expected rates of return for the periods presented in the financial statements on any reimbursement right recognised as an asset in accordance with paragraph 104A;
 - (iv) the expected rates of salary increases (and of changes in an index or other variable specified in the formal or constructive terms of a plan as the basis for future benefit increases);
 - (v) medical cost trend rates; and
 - (vi) any other material actuarial assumptions used.

An entity shall disclose each actuarial assumption in absolute terms (for example, as an absolute percentage) and not just as a margin between different percentages or other variables.

- (o) the effect of an increase of one percentage point and the effect of a decrease of one percentage point in the assumed medical cost trend rates on:
 - (i) the aggregate of the current service cost and interest cost components of net periodic post-employment medical costs; and
 - (ii) the accumulated post-employment benefit obligation for medical costs.

For the purposes of this disclosure, all other assumptions shall be held constant. For plans operating in a high inflation environment, the disclosure shall be the effect of a percentage increase or decrease in the assumed medical cost trend rate of a significance similar to one percentage point in a low inflation environment.

- (p) the amounts for the current annual period and previous four annual periods of:
 - (i) the present value of the defined benefit obligation, the fair value of the plan assets and the surplus or deficit in the plan; and
 - (ii) the experience adjustments arising on:
 - (a) the plan liabilities expressed either as (1) an amount or (2) a percentage of the plan liabilities at the end of the reporting period and
 - (b) the plan assets expressed either as (1) an amount or (2) a percentage of the plan assets at the end of the reporting period.
- (q) the employer's best estimate, as soon as it can reasonably be determined, of contributions expected to be paid to the plan during the annual period beginning after the reporting period.
- Paragraph 120A(b) requires a general description of the type of plan. Such a description distinguishes, for example, flat salary pension plans from final salary pension plans and from post-employment medical plans. The description of the plan shall include informal practices that give rise to constructive obligations included in the measurement of the defined benefit obligation in accordance with paragraph 52. Further detail is not required.
- When an entity has more than one defined benefit plan, disclosures may be made in total, separately for each plan, or in such groupings as are considered to be the most useful. It may be useful to distinguish groupings by criteria such as the following:
 - (a) the geographical location of the plans, for example, by distinguishing domestic plans from foreign plans; or

(b) whether plans are subject to materially different risks, for example, by distinguishing flat salary pension plans from final salary pension plans and from post-employment medical plans.

When an entity provides disclosures in total for a grouping of plans, such disclosures are provided in the form of weighted averages or of relatively narrow ranges.

- Paragraph 30 requires additional disclosures about multi-employer defined benefit plans that are treated as if they were defined contribution plans.
- Where required by LKAS 24 an entity discloses information about:
 - (a) related party transactions with post-employment benefit plans; and
 - (b) post-employment benefits for key management personnel.
- Where required by LKAS 37 an entity discloses information about contingent liabilities arising from post-employment benefit obligations.

Other long-term employee benefits

- Other long-term employee benefits include, for example:
 - (a) long-term compensated 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 payable twelve months or more after the end of the period in which the employees render the related service; and
 - (e) deferred compensation paid twelve months or more after the end of the period in which it is earned.
- 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. Furthermore, the introduction of, or changes to, other long-term employee benefits rarely causes a material amount of

past service cost. For these reasons, this Standard requires a simplified method of accounting for other long-term employee benefits. This method differs from the accounting required for post-employment benefits as follows:

- (a) actuarial gains and losses are recognised immediately and no 'corridor' is applied; and
- (b) all past service cost is recognised immediately.

Recognition and measurement

- The amount recognised as a liability for other long-term employee benefits shall be the net total of the following amounts:
 - (a) the present value of the defined benefit obligation at the end of the reporting period (see paragraph 64);
 - (b) minus the fair value at the end of the reporting period of plan assets (if any) out of which the obligations are to be settled directly (see paragraphs 102–104).

In measuring the liability, an entity shall apply paragraphs 49–91, excluding paragraphs 54 and 61. An entity shall apply paragraph 104A in recognising and measuring any reimbursement right.

- For other long-term employee benefits, an entity shall recognise the net total of the following amounts as expense or (subject to paragraph 58) income, except to the extent that another Standard requires or permits their inclusion in the cost of an asset:
 - (a) current service cost (see paragraphs 63–91);
 - (b) interest cost (see paragraph 82);
 - (c) the expected return on any plan assets (see paragraphs 105–107) and on any reimbursement right recognised as an asset (see paragraph 104A);
 - (d) actuarial gains and losses, which shall all be recognised immediately;
 - (e) past service cost, which shall all be recognised immediately; and

- (f) the effect of any curtailments or settlements (see paragraphs 109 and 110).
- 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 recognized when an event occurs that causes a long-term disability.

Disclosure

Although this Standard does not require specific disclosures about other long-term employee benefits, other Standards may require disclosures, for example, where the expense resulting from such benefits is material and so would require disclosure in accordance with LKAS 1. When required by LKAS 24, an entity discloses information about other long-term employee benefits for key management personnel.

Termination benefits

This Standard deals with termination benefits separately from other employee benefits because the event which gives rise to an obligation is the termination rather than employee service.

Recognition

- An entity shall recognise termination benefits as a liability and an expense when, and only when, the entity is demonstrably committed to either:
 - (a) terminate the employment of an employee or group of employees before the normal retirement date; or
 - (b) provide termination benefits as a result of an offer made in order to encourage voluntary redundancy.
- An entity is demonstrably committed to a termination when, and only when, the entity has a detailed formal plan for the termination and is without realistic possibility of withdrawal. The detailed plan shall include, as a minimum:

- (a) the location, function, and approximate number of employees whose services are to be terminated:
- (b) the termination benefits for each job classification or function; and
- (c) the time at which the plan will be implemented. Implementation shall begin as soon as possible and the period of time to complete implementation shall be such that material changes to the plan are not likely.
- An entity may be committed, by legislation, by contractual or other agreements with employees or their representatives or by a constructive obligation based on business practice, custom or a desire to act equitably, to make payments (or provide other benefits) to employees when it terminates their employment. Such payments are termination benefits. Termination benefits are typically lump-sum payments, but sometimes also include:
 - (a) enhancement of retirement benefits or of other post-employment benefits, either indirectly through an employee benefit plan or directly; and
 - (b) salary until the end of a specified notice period if the employee renders no further service that provides economic benefits to the entity.
- Some employee benefits are payable 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 countries 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. Some entities provide a lower level of benefit for voluntary termination at the request of the employee (in substance, a post-employment benefit) than for involuntary termination at the request of the entity. The additional benefit payable on involuntary termination is a termination benefit.
- 137 Termination benefits do not provide an entity with future economic benefits and are recognised as an expense immediately.

Where an entity recognises termination benefits, the entity may also have to account for a curtailment of retirement benefits or other employee benefits (see paragraph 109).

Measurement

- 139 Where termination benefits fall due more than 12 months after the reporting period, they shall be discounted using the discount rate specified in paragraph 78.
- In the case of an offer made to encourage voluntary redundancy, the measurement of termination benefits shall be based on the number of employees expected to accept the offer.

Disclosure

- Where there is uncertainty about the number of employees who will accept an offer of termination benefits, a contingent liability exists. As required by LKAS 37 an entity discloses information about the contingent liability unless the possibility of an outflow in settlement is remote.
- As required by LKAS 1, an entity discloses the nature and amount of an expense if it is material. Termination benefits may result in an expense needing disclosure in order to comply with this requirement.
- Where required by LKAS 24 an entity discloses information about termination benefits for key management personnel.

144-152 [Deleted]

Transitional provisions

- This section specifies the transitional treatment for defined benefit plans. Where an entity first adopts this Standard for other employee benefits, the entity applies LKAS 8 Accounting Policies, Changes in Accounting Estimates and Errors.
- On first adopting this Standard, an entity shall determine its transitional liability for defined benefit plans at that date as:
 - (a) the present value of the obligation (see paragraph 64) at the date of adoption;

- (b) minus the fair value, at the date of adoption, of plan assets (if any) out of which the obligations are to be settled directly (see paragraphs 102–104);
- (c) minus any past service cost that, under paragraph 96, shall be recognised in later periods.
- 155 If the transitional liability is more than the liability that would have been recognised at the same date under the entity's previous accounting policy, the entity shall make an irrevocable choice to recognise that increase as part of its defined benefit liability under paragraph 54:
 - (a) immediately, under LKAS 8; or
 - (b) as an expense on a straight-line basis over up to five years from the date of adoption. If an entity chooses (b), the entity shall:
 - (i) apply the limit described in paragraph 58(b) in measuring any asset recognised in the statement of financial position;
 - (ii) disclose at the end of each reporting period: (1) the amount of the increase that remains unrecognised; and (2) the amount recognised in the current period;
 - (iii) limit the recognition of subsequent actuarial gains (but not negative past service cost) as follows. If an actuarial gain is to be recognized under paragraphs 92 and 93, an entity shall recognise that actuarial gain only to the extent that the net cumulative unrecognised actuarial gains (before recognition of that actuarial gain) exceed the unrecognised part of the transitional liability; and
 - (iv) include the related part of the unrecognised transitional liability in determining any subsequent gain or loss on settlement or curtailment.

If the transitional liability is less than the liability that would have been recognised at the same date under the entity's previous accounting policy, the entity shall recognise that decrease immediately under LKAS 8.

On the initial adoption of the Standard, the effect of the change in accounting policy includes all actuarial gains and losses that arose in earlier periods even if they fall inside the 10% 'corridor' specified in paragraph 92.

Example illustrating paragraphs 154 to 156

At 31 December 1998, an entity's statement of financial position includes a pension liability of 100. The entity adopts the Standard as of 1 January 1999, when the present value of the obligation under the Standard is 1,300 and the fair value of plan assets is 1,000. On 1 January 1993, the entity had improved pensions (cost for non-vested benefits: 160; and average remaining period at that date until vesting: 10 years).

The transitional effect is as follows:

Present value of the obligation	1,300
Fair value of plan assets	(1,000)
Less: past service cost to be recognised in later periods	(61)
$(160 \times 4/10)$ Transitional liability	236
Liability already recognised	100
Increase in liability	136

The entity may choose to recognise the increase of 136 either immediately or over up to 5 years. The choice is irrevocable.

At 31 December 1999, the present value of the obligation under the Standard is 1,400 and the fair value of plan assets is 1,050. Net cumulative unrecognized actuarial gains since the date of adopting the Standard are 120.

The expected average remaining working life of the employees participating in the plan was eight years. The entity has adopted a policy of recognizing all actuarial gains and losses immediately, as permitted by paragraph 93.

The effect of the limit in paragraph 155(b)(iii) is as follows

Net cumulative unrecognised actuarial gains	120
Unrecognised part of transitional liability (136 $ imes$ 4/5)	(109)
Maximum gain to be recognised (paragraph 155(b)(iii))	11

LKAS 19

Effective date

- An entity shall apply this Standard for annual periods beginning on or after 1 January 2012. Earlier application is encouraged. If an entity applies this Standard for a period beginning before 1 January 2012, it shall disclose that fact.
- 158 [Deleted]
- 159 [Deleted]
- 159A [Deleted]
- 159B [Deleted]
- 159C [Deleted]
- 159D [Deleted]
- 160 [Deleted]
- 161 [Deleted]

Appendix A Illustrative example

The appendix accompanies, but is not part of, LKAS 19.

Extracts from statements of comprehensive income and statements of financial position are provided to show the effects of the transactions described below. These extracts do not necessarily conform with all the disclosure and presentation requirements of other Standards.

Background information

The following information is given about a funded defined benefit plan. To keep interest computations simple, all transactions are assumed to occur at the year-end. The present value of the obligation and the fair value of the plan assets were both 1,000 at 1 January 20X1. Net cumulative unrecognised actuarial gains at that date were 140.

	20X1	20X2	20X3
Discount rate at start of year	10.0%	9.0%	8.0%
Expected rate of return on plan assets at start of year	12.0%	11.1%	10.3%
Current service cost	130	140	150
Benefits paid	150	180	190
Contributions paid	90	100	110
Present value of obligation at 31 December	1,141	1,197	1,295
Fair value of plan assets at 31 December	1,092	1,109	1,093
Expected average remaining working lives of employees (years)	10	10	10

In 20X2, the plan was amended to provide additional benefits with effect from 1 January 20X2. The present value as at 1 January 20X2 of additional benefits for employee service before 1 January 20X2 was 50 for vested benefits and 30 for non-vested benefits. As at 1 January 20X2, the entity estimated that the average period until the non-vested benefits would become vested was three years; the past service cost arising from additional non-vested benefits is therefore recognised on a straight-line basis over three years. The past service cost arising from additional vested benefits is recognised immediately (paragraph 96 of the

LKAS 19

Standard). The entity has adopted a policy of recognising actuarial gains and losses under the minimum requirements of paragraph 93.

Changes in the present value of the obligation and in the fair value of the plan assets

The first step is to summarise the changes in the present value of the obligation and in the fair value of the plan assets and use this to determine the amount of the actuarial gains or losses for the period. These are as follows:

	20X1	20X2	20X3
Present value of obligation, 1 January	1,000	1,141	1,197
Interest cost	100	103	96
Current service cost	130	140	150
Past service cost—non-vested benefits	_	30	_
Past service cost—vested benefits	_	50	_
Benefits paid	(150)	(180)	(190)
Actuarial (gain) loss on obligation (balancing figure)	61	(87)	42
Present value of obligation, 31 December	1,141	1,197	1,295
Fair value of plan assets, 1 January	1,000	1,092	1,109
Expected return on plan assets	120	121	114
Contributions	90	100	110
Benefits paid	(150)	(180)	(190)
Actuarial gain (loss) on plan assets (balancing figure)	32	(24)	(50)
Fair value of plan assets, 31 December	1,092	1,109	1,093

Limits of the 'corridor'

The next step is to determine the limits of the corridor and then compare these with the cumulative unrecognised actuarial gains and losses in order to determine the net actuarial gain or loss to be recognised in the following period. Under paragraph 92 of the Standard, the limits of the 'corridor' are set at the greater of:

- (a) 10% of the present value of the obligation before deducting plan assets; and
- (b) 10% of the fair value of any plan assets.

These limits, and the recognised and unrecognised actuarial gains and losses, are as follows:

	20X1	20X2	20X3
Net cumulative unrecognised actuarial gains (losses) at 1 January	140	107	170
Limits of 'corridor' at 1 January	100	114	120
Excess [A]	40	_	50
Average expected remaining working lives (years) [B]	10	10	10
Actuarial gain (loss) to be recognised [A/B]	4	_	5
Unrecognised actuarial gains (losses) at 1 January	140	107	170
Actuarial gain (loss) for year—obligation	(61)	87	(42)
Actuarial gain (loss) for year—plan assets	32	(24)	(50)
Subtotal	111	170	78
Actuarial (gain) loss recognised	(4)		(5)
Unrecognised actuarial gains (losses) at 31 December	107	170	73

LKAS 19

Amounts recognised in the statement of financial position and profit or loss, and related analyses

The final step is to determine the amounts to be recognised in the statement of financial position and profit or loss, and the related analyses to be disclosed in accordance with paragraph 120A(f), (g) and (m) of the Standard (the analyses required to be disclosed in accordance with paragraph 120A(c) and (e) are given in the section of this Appendix 'Changes in the present value of the obligation and in the fair value of the plan assets'). These are as follows.

	20X1	20X2	20X3
Present value of the obligation	1,141	1,197	1,295
Fair value of plan assets	(1,092)	(1,109)	(1,093)
	49	88	202
Unrecognised actuarial gains (losses)	107	170	73
Unrecognised past service cost—non-vested benefits		(20)	(10)
Liability recognised in statement of financial position	156	238	265
Current service cost	130	140	150
Interest cost	100	103	96
Expected return on plan assets	(120)	(121)	(114)
Net actuarial (gain) loss recognised in year	(4)	-	(5)
Past service cost—non-vested benefits	_	10	10
Past service cost—vested benefits	_	50	_
Expense recognised in profit or loss	106	182	137
Actual return on plan assets			
Expected return on plan assets	120	121	114
Actuarial gain (loss) on plan assets	32	(24)	(50)
Actual return on plan assets	152	97	64

Note: see example illustrating paragraphs 104A-104C for presentation of reimbursements.

Appendix B Illustrative disclosures

This appendix accompanies, but is not part of, LKAS 19. Extracts from notes show how the required disclosures may be aggregated in the case of a large multi-national group that provides a variety of employee benefits. These extracts do not necessarily conform with all the disclosure and presentation requirements of LKAS 19 and other Standards. In particular, they do not illustrate the disclosure of:

- (a) accounting policies for employee benefits (see LKAS 1 Presentation of Financial Statements). Paragraph 120A(a) of the Standard requires this disclosure to include the entity's accounting policy for recognising actuarial gains and losses.
- (b) a general description of the type of plan (paragraph 120A(b)).
- (c) amounts recognised in other comprehensive income (paragraph 120A(h) and (i)).
- (d) a narrative description of the basis used to determine the overall expected rate of return on assets (paragraph 120A(l)).
- (e) employee benefits granted to directors and key management personnel (see LKAS 24 Related Party Disclosures).
- (f) share-based employee benefits (see SLFRS 2 Share-based Payment).

LKAS 19

Employee benefit obligations

The amounts recognised in the statement of financial position are as follows:

	Defined benefit pension plans		Post-employment medical benefits	
	20X2	20X1	20X2	20X1
Present value of funded obligations	20,300	17,400	_	_
Fair value of plan assets	(18,420)	(17,280)		
	1,880	120	_	_
Present value of unfunded obligations	2,000	1,000	7,337	6,405
Unrecognised actuarial gains (losses)	(1,605)	840	(2,707)	(2,607)
Unrecognised past service cost	(450)	(650)		
Net liability	1,825	1,310	4,630	3,798
Amounts in the statement of financial position:				
liabilities	1,825	1,400	4,630	3,798
assets	_	(90)	_	_
Net liability	1,825	1,310	4,630	3,798

The pension plan assets include ordinary shares issued by [name of reporting entity] with a fair value of 317 (20X1: 281). Plan assets also include property occupied by [name of reporting entity] with a fair value of 200 (20X1: 185).

The amounts recognised in profit or loss are as follows:

	Defined benefit pension plans		Post-employment medical benefits	
	20X2	20X1	20X2	20X1
Current service cost	850	750	479	411
Interest on obligation	950	1,000	803	705
Expected return on plan assets	(900)	(650)		
Net actuarial losses (gains) recognised in year	(70)	(20)	150	140
Past service cost	200	200		
Losses (gains) on curtailments and settlements	175	(390)		
Total, included in 'employee benefits expense'	1,205	890	1,432	1,256
Actual return on plan assets	600	2,250		

Changes in the present value of the defined benefit obligation are as follows:

	Defined benefit pension plans		Post-employmen medical benefits	
	20X2	20X1	20X2	20X1
Opening defined benefit obligation	18,400	11,600	6,405	5,439
Service cost	850	750	479	411
Interest cost	950	1,000	803	705
Actuarial losses (gains)	2,350	950	250	400
Losses (gains) on curtailments	(500)	_		
Liabilities extinguished on settlements	_	(350)		
Liabilities assumed in a business combination	_	5,000		
Exchange differences on foreign plans	900	(150)		
Benefits paid	(650)	(400)	(600)	(550)
Closing defined benefit obligation	22,300	18,400	7,337	6,405

Changes in the fair value of plan assets are as follows:

	Defined benefit pension plans	
	20X2	20X1
Opening fair value of plan assets	17,280	9,200
Expected return	900	650
Actuarial gains and (losses)	(300)	1,600
Assets distributed on settlements	(400)	_
Contributions by employer	700	350
Assets acquired in a business combination	_	6,000
Exchange differences on foreign plans	890	(120)
Benefits paid	(650)	(400)
	18,420	17,280

The group expects to contribute 900 to its defined benefit pension plans in $20\mathrm{X}3$.

The major categories of plan assets as a percentage of total plan assets are as follows:	20X2	20X1
Treasury bills	10%	11%
Treasury bonds	12%	13%
Property	5%	5%

Principal actuarial assumptions at the end of the reporting period (expressed as weighted averages):

	20X2	20X1
Discount rate at 31 December	5.0%	6.5%
Expected return on plan assets at 31 December	5.4%	7.0%
Future salary increases	5%	4%
Future pension increases	3%	2%
Proportion of employees opting for early retirement	30%	30%
Annual increase in healthcare costs	8%	8%
Future changes in maximum state healthcare benefits	3%	2%

Assumed healthcare cost trend rates have a significant effect on the amounts recognized in profit or loss. A one percentage point change in assumed healthcare cost trend rates would have the following effects:

	One percentage	One percentage
	point increase	point decrease
Effect on the aggregate of the service cost		
and interest cost	190	(150)
Effect on defined benefit obligation	1,000	(900)

Amounts for the current and previous four periods are as follows:

Defined benefit pension plans

	20X2	20X1	20X0	20W9	20W8
Defined benefit	(22.200)	(10, 100)	(11.600)	(10.500)	(0.1.1.)
obligation	(22,300)	(18,400)	(11,600)	(10,582)	(9,144)
Plan assets	18,420	17,280	9,200	8,502	10,000
Surplus/(deficit)	(3,880)	(1,120)	(2,400)	(2,080)	856
Experience adjustments					
on plan liabilities	(1,111)	(768)	(69)	543	(642)
Experience adjustments					
on plan assets	(300)	1,600	(1,078)	(2,890)	2,777

Post-employment medical benefits

	20X2	20X1	20X0	20W9	20W8
Defined benefit obligation	7,337	6,405	5,439	4,923	4,221
Experience adjustments on plan liabilities	(232)	829	490	(174)	(103)

The group also participates in an industry-wide defined benefit plan that provides pensions linked to final salaries and is funded on a pay-as-you-go basis. It is not practicable to determine the present value of the group's obligation or the related current service cost as the plan computes its obligations on a basis that differs materially from the basis used in [name of reporting entity]'s financial statements. [describe basis] On that basis, the plan's financial statements to 30 June 20X0 show an unfunded liability of 27,525. The unfunded liability will result in future payments by participating employers. The plan has approximately 75,000 members, of whom approximately 5,000 are current or former employees of [name of reporting entity] or their dependants. The expense recognised in profit or loss, which is equal to contributions due for the year, and is not included in the above amounts, was 230 (20X1: 215). The group's future contributions may be increased substantially if other entities withdraw from the plan.

Appendix C Illustration of the application of paragraph 58A

The appendix accompanies, but is not part of, LKAS 19.

The issue

Paragraph 58 of the Standard imposes a ceiling on the defined benefit asset that can be recognised.

- The amount determined under paragraph 54 may be negative (an asset). An entity shall measure the resulting asset at the lower of:
 - (a) the amount determined under paragraph 54 [ie the surplus/deficit in the plan plus (minus) any unrecognised losses (gains)]; and
 - (b) the total of:
 - (i) any cumulative unrecognised net actuarial losses and past service cost (see paragraphs 92, 93 and 96); and
 - (ii) 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 these economic benefits shall be determined using the discount rate specified in paragraph 78.

Without paragraph 58A (see below), paragraph 58(b)(i) has the following consequence: sometimes deferring the recognition of an actuarial loss (gain) in determining the amount specified by paragraph 54 leads to a gain (loss) being recognised in profit or loss.

The following example illustrates the effect of applying paragraph 58 without paragraph 58A. The example assumes that the entity's accounting policy is not to recognise actuarial gains and losses within the 'corridor' and to amortise actuarial gains and losses outside the 'corridor'. (Whether the 'corridor' is used is not significant. The issue can arise whenever there is deferred recognition under paragraph 54.)

Example 1

	A	В	С	D=A+C	E=B+C	F= lower of D and E	G
Year	Surplus in plan	Economic benefits available (paragraph 58(b)(ii))	Losses unrecognized under paragraph 54	Paragraph 54	Paragraph 58(b)	Asset ceiling, ie recognized asset	Gain recognize d in year 2
1	100	0	0	100	0	0	-
2	70	0	30	100	30	30	30

At the end of year 1, there is a surplus of 100 in the plan (column A in the table above), but no economic benefits are available to the entity either from refunds or reductions in future contributions* (column B). There are no unrecognised gains and losses under paragraph 54 (column C). So, if there were no asset ceiling, an asset of 100 would be recognised, being the amount specified by paragraph 54 (column D). The asset ceiling in paragraph 58 restricts the asset to nil (column F).

In year 2 there is an actuarial loss in the plan of 30 that reduces the surplus from 100 to 70 (column A) the recognition of which is deferred under paragraph 54 (column C). So, if there were no asset ceiling, an asset of 100 (column D) would be recognised. The asset ceiling without paragraph 58A would be 30 (column E). An asset of 30 would be recognized (column F), giving rise to a gain in income (column G) even though all that has happened is that a surplus from which the entity cannot benefit has decreased.

A similarly counter-intuitive effect could arise with actuarial gains (to the extent that they reduce cumulative unrecognised actuarial losses).

Paragraph 58A

Paragraph 58A prohibits the recognition of gains (losses) that arise solely from past service cost and actuarial losses (gains).

The application of paragraph 58 shall not result in a gain being recognised solely as a result of an actuarial loss or past service cost in the current period or in a loss being recognised solely as a result of an actuarial gain in the current period. The entity shall therefore

^{*} based on the current terms of the plan.

recognise immediately under paragraph 54 the following, to the extent that they arise while the defined benefit asset is determined in accordance with paragraph 58(b):

- (a) net actuarial losses of the current period and past service cost of the current period to the extent that they exceed any reduction in the present value of the economic benefits specified in paragraph 58(b)(ii). If there is no change or an increase in the present value of the economic benefits, the entire net actuarial losses of the current period and past service cost of the current period shall be recognised immediately under paragraph 54.
- (b) net actuarial gains of the current period after the deduction of past service cost of the current period to the extent that they exceed any increase in the present value of the economic benefits specified in paragraph 58(b)(ii). If there is no change or a decrease in the present value of the economic benefits, the entire net actuarial gains of the current period after the deduction of past service cost of the current period shall be recognised immediately under paragraph 54.

Examples

The following examples illustrate the result of applying paragraph 58A. As above, it is assumed that the entity's accounting policy is not to recognise actuarial gains and losses within the 'corridor' and to amortise actuarial gains and losses outside the 'corridor'. For the sake of simplicity the periodic amortisation of unrecognised gains and losses outside the corridor is ignored in the examples.

Example 1 continued – Adjustment when there are actuarial losses and no change in the economic benefits available

	A	В	С	D=A+C	E=B+C	F= lower of D and E	G
Year	Surplus in plan	Economic benefits available (paragraph 58(b)(ii))	Losses unrecognized under paragraph 54	Paragraph 54	Paragraph 58(b)	Asset ceiling, ie recognized asset	Gain recognized in year 2
1	100	0	0	100	0	0	-
2	70	0	0	70	0	0	0

The facts are as in example 1 above. Applying paragraph 58A, there is no change in the economic benefits available to the entity so the entire actuarial loss of 30 is recognized immediately under paragraph 54 (column D). The asset ceiling remains at nil (column F) and no gain is recognised.

In effect, the actuarial loss of 30 is recognised immediately, but is offset by the reduction in the effect of the asset ceiling.

	Statement of financial position asset under paragraph 54 (column D above)	Effect of the asset ceiling	Asset ceiling (column F above)
Year 1	100	(100)	0
Year 2	70	(70)	0
Gain/(loss)	(30)	30	0

In the above example, there is no change in the present value of the economic benefits available to the entity. The application of paragraph 58A becomes more complex when there are changes in present value of the economic benefits available, as illustrated in the following examples.

Example 2 – Adjustment when there are actuarial losses and a decrease in the economic benefits available

	A	В	C	D=A+C	E=B+C	F= lower of D and E	G
Year	Surplus in plan	Economic benefits available (paragraph 58(b)(ii))	Losses unrecognized under paragraph 54	Paragraph 54	Paragraph 58(b)	Asset ceiling, ie recognized asset	Gain recognized in year 2
1	60	30	40	100	70	70	-
2	25	20	50	75	70	70	0

At the end of year 1, there is a surplus of 60 in the plan (column A) and economic benefits available to the entity of 30 (column B). There are unrecognised losses of 40 under paragraph 54* (column C). So, if there were no

The term 'economic benefits available to the entity' is used to refer to those economic benefits that qualify for recognition under paragraph 58(b)(ii).

The application of paragraph 58A allows the recognition of some actuarial gains and losses to be deferred under paragraph 54 and, hence, to be included in the calculation of the asset ceiling. For example,

asset ceiling, an asset of 100 would be recognised (column D). The asset ceiling restricts the asset to 70 (column F).

In year 2, an actuarial loss of 35 in the plan reduces the surplus from 60 to 25 (column A). The economic benefits available to the entity fall by 10 from 30 to 20 (column B). Applying paragraph 58A, the actuarial loss of 35 is analysed as follows:

Actuarial loss equal to the reduction in economic benefits	10
Actuarial loss that exceeds the reduction in economic benefits	25

In accordance with paragraph 58A, 25 of the actuarial loss is recognised immediately under paragraph 54 (column D). The reduction in economic benefits of 10 is included in the cumulative unrecognised losses that increase to 50 (column C). The asset ceiling, therefore, also remains at 70 (column E) and no gain is recognised.

In effect, an actuarial loss of 25 is recognised immediately, but is offset by the reduction in the effect of the asset ceiling.

	Statement of financial position asset under paragraph 54 (column D above)	Effect of the asset ceiling	Asset ceiling (column F above)
Year 1	100	(30)	70
Year 2	75	(5)	70
Gain/(loss)	(25)	25	0

cumulative unrecognised actuarial losses that have built up while the amount specified by paragraph 58(b) is not lower than the amount specified by paragraph 54 will not be recognised immediately at the point that the amount specified by paragraph 58(b) becomes lower. Instead their recognition will continue to be deferred in line with the entity's accounting policy. The cumulative unrecognised losses in this example are losses the recognition of which is deferred even though paragraph 58A applies.

Example 3 – Adjustment when there are actuarial gains and a decrease in the economic benefits available to the entity

	A	В	С	D=A+C	E=B+C	F= lower of D and E	G
Year	Surplus in plan	Economic benefits available (paragraph 58(b)(ii))	Losses unrecognized under paragraph 54	Paragraph 54	Paragraph 58(b)	Asset ceiling, ie recognized asset	Gain recognized in year 2
1	60	30	40	100	70	70	-
2	110	25	40	150	65	65	(5)

At the end of year 1 there is a surplus of 60 in the plan (column A) and economic benefits available to the entity of 30 (column B). There are unrecognised losses of 40 under paragraph 54 that arose before the asset ceiling had any effect (column C). So, if there were no asset ceiling, an asset of 100 would be recognised (column D). The asset ceiling restricts the asset to 70 (column F).

In year 2, an actuarial gain of 50 in the plan increases the surplus from 60 to 110 (column A). The economic benefits available to the entity decrease by 5 (column B). Applying paragraph 58A, there is no increase in economic benefits available to the entity. Therefore, the entire actuarial gain of 50 is recognised immediately under paragraph 54 (column D) and the cumulative unrecognised loss under paragraph 54 remains at 40 (column C). The asset ceiling decreases to 65 because of the reduction in economic benefits. That reduction is not an actuarial loss as defined by LKAS 19 and therefore does not qualify for deferred recognition.

In effect, an actuarial gain of 50 is recognised immediately, but is (more than) offset by the increase in the effect of the asset ceiling.

	Statement of financial position asset under paragraph 54 (column D above)	Effect of the asset ceiling	Asset ceiling (column F above)
Year 1	100	(30)	70
Year 2	150	(85)	65
Gain/(loss)	50	(55)	(5)

In both examples 2 and 3 there is a reduction in economic benefits available to the entity. However, in example 2 no loss is recognised whereas in example 3 a loss is recognised. This difference in treatment is consistent with the treatment of changes in the present value of economic benefits before paragraph 58A was introduced. The purpose of paragraph 58A is solely to prevent gains (losses) being recognised because of past service cost or actuarial losses (gains). As far as is possible, all other consequences of deferred recognition and the asset ceiling are left unchanged.

Example 4 – Adjustment in a period in which the asset ceiling ceases to have an effect

	A	В	С	D=A+C	E=B+C	F= lower of D and E	G
Year	Surplus in plan	Economic benefits available (paragraph 58(b)(ii))	Losses unrecognized under paragraph 54	Paragraph 54	Paragraph 58(b)	Asset ceiling, ie recognized asset	Gain recognized in year 2
1	60	25	40	100	65	65	-
2	(50)	0	115	65	115	65	0

At the end of year 1 there is a surplus of 60 in the plan (column A) and economic benefits are available to the entity of 25 (column B). There are unrecognised losses of 40 under paragraph 54 that arose before the asset ceiling had any effect (column C). So, if there were no asset ceiling, an asset of 100 would be recognised (column D). The asset ceiling restricts the asset to 65 (column F).

In year 2, an actuarial loss of 110 in the plan reduces the surplus from 60 to a deficit of 50 (column A). The economic benefits available to the entity decrease from 25 to 0 (column B). To apply paragraph 58A it is necessary to determine how much of the actuarial loss arises while the defined benefit asset is determined in accordance with paragraph 58(b). Once the surplus becomes a deficit, the amount determined by paragraph 54 is lower than the net total under paragraph 58(b). So, the actuarial loss that arises while the defined benefit asset is determined in accordance with paragraph 58(b) is the loss that reduces the surplus to nil, ie 60. The actuarial loss is, therefore, analysed as follows:

Actuarial loss that arises while the defined benefit asset is measured under paragraph 58(b):

Actuarial loss that equals the reduction in economic benefits	25
Actuarial loss that exceeds the reduction in economic benefits	35
	60
Actuarial loss that arises while the defined benefit asset is measured under paragraph 54	50
Total actuarial loss	110

In accordance with paragraph 58A, 35 of the actuarial loss is recognised immediately under paragraph 54 (column D); 75 (25 + 50) of the actuarial loss is included in the cumulative unrecognised losses which increase to 115 (column C). The amount determined under paragraph 54 becomes 65 (column D) and under paragraph 58(b) becomes 115 (column E). The recognised asset is the lower of the two, ie 65 (column F), and no gain or loss is recognised (column G).

In effect, an actuarial loss of 35 is recognised immediately, but is offset by the reduction in the effect of the asset ceiling.

	Statement of financial position asset under paragraph 54 (column D above)	Effect of the asset ceiling	Asset ceiling (column F above)
Year 1	100	(35)	65
Year 2	65	0	65
Gain/(loss)	(35)	35	0

Notes

- In applying paragraph 58A in situations when there is an increase in the present value of the economic benefits available to the entity, it is important to remember that the present value of the economic benefits available cannot exceed the surplus in the plan.*
- 2 In practice, benefit improvements often result in a past service cost and an increase in expected future contributions due to increased current service costs of future years. The increase in expected future contributions may

^{*} The example following paragraph 60 of LKAS 19 is corrected so that the present value of available future refunds and reductions in contributions equals the surplus in the plan of 90 (rather than 100), with a further correction to make the limit 270 (rather than 280).

increase the economic benefits available to the entity in the form of anticipated reductions in those future contributions. The prohibition against recognising a gain solely as a result of past service cost in the current period does not prevent the recognition of a gain because of an increase in economic benefits. Similarly, a change in actuarial assumptions that causes an actuarial loss may also increase expected future contributions and, hence, the economic benefits available to the entity in the form of anticipated reductions in future contributions. Again, the prohibition against recognising a gain solely as a result of an actuarial loss in the current period does not prevent the recognition of a gain because of an increase in economic benefits.

Appendix D

- [1] As per paragraph 57 of the Standard, the following entities, if they have a staff of over 100 employees, are required to involve a qualified actuary in the measurement of all material post-employment benefit obligations.
 - Companies listed in a stock exchange licensed under the Securities and Exchange Commission Act No 36 of 1987
 - Companies licensed under the Banking Act No 30 of 1988
 - Companies authorised under the Regulation of Insurance Industry Act No 43 of 2000, to carry out Insurance business
 - Companies carrying out Leasing business
 - Factoring Companies
 - Companies registered under the Finance Companies Act No 78 of 1988
 - Companies licensed under the Securities and Exchange Commission Act No 36 of 1987, to operate Unit Trust
 - Fund Management Companies or
 - Any other company that is regulated by an industry specific prudential regulator.
- [2] As per paragraph 57 of the Standard, the following entities may opt to use a qualified actuary or use the Gratuity Formula Method, as discussed in Appendix E.
 - Companies Licensed under the Securities and Exchange Commission Act No 36 of 1987, to carry on business as stock brokers or stock dealers
 - Companies licensed under the Securities and Exchange Commission Act No 36 of 1987, to operate a stock exchange
 - Public Corporations engaged in the sale of goods or the provision of services

- Other Companies;
 - o Which have a turnover in excess of rupees 500 million
 - Which at the end of the previous financial year had shareholder equity in excess of rupees 100 million
 - o Which at the end of the previous financial year, had gross assets in excess of rupees 300 million
 - o Which at the end of the previous year had liabilities to banks and other financial institutions in excess of rupees 100 million
 - o Which have a staff in excess of 1000 employees
- A group of companies, any one-of-which falls within any of the above categories. For this purpose 'a group of companies' means a holding company and its subsidiaries, the accounts of which have to be consolidated under sections 152 & 153 of the Companies Act No 07 of 2007 and
- Any other Company that were discussed in D [1] above that has a staff of less than 100 employees.

Appendix E

Formula on gratuity

Scope

This Formula may only be appropriate for the Companies, who exactly pay a sum equivalent to the ½ month salary for each completed year of service uniformly & may not be appropriate for any other companies such as the ones which use different rates for different service periods etc. (However, as long as the rate to be applied for each completed year is fixed irrespective of the service period, this may be used after suitable modification.) Also, it should be noted that where the employees can be differently categorised under the assumptions to be made such as the salary increment rates & the staff turnover rates, it may be appropriate to consider those categories separately with different assumptions rather than using the same set of assumptions for the whole group. For example, in Company A, expected average salary increment rate for all the employees may be 10%. However, it might be possible to identify three different groups separately, where the salary increment rate for the three groups takes the values 25%, 8%, and 2.5% respectively. In such circumstances, application of the method to the different groups separately rather than considering all employees as one single group may increase the level of accuracy in calculations.

Requirement of the LKAS 19 Employee Benefits

The paragraph 64 of the LKAS 19 states "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." So, being a Defined Benefit Obligation, in computing the Gratuity, the Projected Unit Credit Method should be used.

The LKAS 19 paragraph 65 defines this method as "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 and measures each unit separately to build up the final obligation." Also the LKAS 19 provides an Illustrative Example on paragraph 65, which is being used as the basis in developing the formula. However, this should not be treated as a substitute to the Actuarial Valuation, and it is encouraged to use the Actuarial Valuation.

Projected unit credit method

This method sees each year of service as giving rise to an additional unit of retirement benefit entitlement and values each unit separately to build up a total retirement benefit obligation.

Past service cost under this method is the present value of any units of future benefit credited to employees for service in periods prior to the commencement or subsequent amendment of the plan.

The annual normal cost for an equal unit of benefit increases each year because the period to the employee's retirement continually shortens, and the probability of reaching retirement increases.

For the employee group as a whole, however, the increasing cost is masked as older employees generating the highest annual cost are continually replaced by new employees generating the lowest. For a mature employee group, the normal cost would tend to be similar each year.

The Gratuity Formulae

The following formulae can be used for the purpose of computing the Gratuity Provision Related Calculations as follows;

Gratuity charge for the year =
$$\frac{SR^n}{2}$$

Gratuity provision at the end of the year =
$$m\frac{SR^n}{2}$$

Where:

m = Past no. of years in service including current year

S = Current Monthly Salary

$$R = \begin{array}{c} (1+r) \\ (1+d) \end{array} = \begin{array}{c} (1+Expected \ Annual \ Average \ Salary \ Increment \ rate \\ expressed \ as \ a \ fraction) \end{array}$$

n = Expected future no. of years in service

The interest on the opening balance can be computed as follows;

Annual Interest = Gratuity Provⁿ at the beginning of the Current Year * d (i.e. discount rate)

Any (Gains)/Losses arising from changes in the assumptions or due to (over)/under provision in the previous years can be computed as follows;

		Amount (Rs.)
	Gratuity Provision at the end of the Current Year	XXXX
(-)	Gratuity Provision at the beginning of the Current Year	(XXX)
(-)	Interest on the Opening Balance	(XX)
(-)	Gratuity Charge for the Current Year	(XX)
	(Gain)/Loss arising from changes in the assumptions	
	or due to (over)/under provision in the previous	
	years	X

Past number of years in service (m)

This is the actual number of years in service by an employee up to and including the current year. Any incomplete year of service should be treated as a full year.

Current salary (S)

This is the final monthly salary drawn by an employee in the financial year concerned. For example, if A has drawn a salary of Rs.25,000 in March 2006, in computing the Gratuity Provision of A for the financial year ending 31st March 2006, the Current Salary of Rs.25,000 should be considered.

Expected annual average salary increment rate (r)

This is the annual average salary increment rate (r) of the employees, expected to prevail in future. In ascertaining this, any factors which may have a material impact on future salary increment rates, salary structures etc. should be taken into consideration. However, if there are no foreseeable changes, which may have a material impact on estimating **r**, it is suggested that the Geometric Mean of annual salary increment rates for some immediate past number of years be considered as an appropriate approximation for **r**. In such an instance, in determining the number of years, judgement should be exercised and factors such as frequency & pattern of salary increments given etc. should be taken into consideration. For example, if a considerable salary increment is given every three years, then in computing the average one should consider only the past three years or any number of past years, which is a multiple of 3. If any other number of years is considered, such an average may not give a reasonably

accurate average. Also, it may be appropriate to leave out the salaries of the employees who have joined or left the Entity during the period under consideration, in the cases where the total salaries are considered in computations; as such data may lead to inaccurate results. For example in the earliest year if it was data of 5 employees' total salary & in the latest year the salary bill contains 6 employees, then the salary of the additional person should not be considered as an increment in total bill. As an alternate method of computation, the following formula can be used in computing the Geometric Mean of the Annual Salary Increment Rate as it also mathematically produces the same results:

Where; b = number of years in the period considered.

For further guidance on ascertaining these Expected Annual Average Salary Increment Rates, please refer to LKAS 19. (With special reference to Paras. 83 to 91)

Discount rate/interest rate (d)

For guidance on ascertaining the appropriate discount rate, please refer to LKAS 19. (With special reference to Paras. 78 to 82) In the Local context, the market yield (at the balance sheet date) of **Long Term Government Bonds** such as Long Term Treasury Bonds may be a reasonably appropriate discount rate to be used. However, in view of heavy fluctuations in short-term rates in the local market, it may not be appropriate to use market yields of any short term securities as the discount rate.

Expected future number of years in service (n)/E(x)

Generally, in Actuarial Valuations, Actuaries take into consideration demographic assumptions such as mortality, staff turnover rates & claim rates under medical plans etc. However, in computing Expected Future Number of Years in Service for use in the Gratuity calculations, it is assumed that application of staff turnover factor to the maximum possible number of years till retirement, will provide a reasonably appropriate estimation of the Future Service Period of the employees. In computing the staff turnover factor for this purpose, termination of service due to any ordinary causes such as resignations, deaths, premature retirements and dismissal of the employees etc, may be appropriate to be considered, but the employees retired after attaining the retirement age (i.e. Normal retirement) and any unusual non repetitive

circumstances such as termination of the employees as part of the Company's restructuring process etc. may be excluded as those will not properly reflect the expected annual average staff turnover of the entity. It may also not be appropriate to add any new recruits to the Numerator as it may result in errors. Also, in computing the staff turnover factor, it may be more appropriate to use the average number of staff over the year than the number of staff as at the balance sheet date as the denominator as that will be more reflective of the average number of staff in the company. The staff turnover factor to be considered should reflect the future behaviour. Therefore this should be computed using the data expected in the future. However, where there will not be significant changes in circumstances, average staff turnover based on past data may be considered to be an appropriate approximation for the future expected staff turnover. The staff turnover factor (t) can be computed as follows;

t = No. of employees whose service is terminated during the year Average No. of staff employed by the entity

It should also be noted that, in using the formula, it is assumed that the staff turnover factor (t) over the future years under consideration is constant.

After computing the staff turnover factor, it is required to compute the maximum possible future number of years in service (i.e. N) as follows;

	<u>Y ears</u>
Normal Retirement Age	XX
Current Age of the Employee	(XX)
Maximum possible future number of years (N)	XX

The expected future service period of an employee can be computed using the Negative Binomial Theory (Truncated) as follows;

If expected future number of years = E(x) = n

$$E(x) = n = \sum_{x=1}^{N} x^*f(x)$$

X	1	2	3	4	5	N
f(x)	t	t (1-t)	$t(1-t)^2$	$t(1-t)^3$	$t(1-t)^4$	$(1-t)^{(N-1)}$

Where:

- x = Each year of future service period up to the normal retirement age. Final year will be denoted by N.
- t = Staff Turnover Rate (i.e. 1 t is the Survival rate of an employee for 1 more year)

Eg. Average Annual Staff Turnover Ratio of ABC & Company is 5%. Maximum no. of years, Mr. B can be in service is 5 years. Using Negative Binomial Theory (Truncated), compute the expected future service period of B.

t =	= 0.05		(1-t) = 0.95	
X	$(1-t)^{(x-1)}$	t	$f(x)=(1-t)^{(x-1)}t$	$\mathbf{x} * \mathbf{f}(\mathbf{x})$
1	0.95^{0}	0.05	0.05	0.05000
2	0.95^{1}	0.05	0.0475	0.09500
3	0.95^{2}	0.05	0.045125	0.13540
4	0.95^{3}	0.05	0.042869	0.17150
5	0.95^4	-	0.814506	4.07253
				E(x) = n = 4.52443

Therefore, the Expected Future Number of Years in Service of Mr. B will be 4.52443 years. However, a Set of Tables are developed, which can be used directly to obtain the Expected Future Number of Years by referencing to Maximum Possible Future Number of Years in Service (N) & the Staff Turnover Factor (t). For example, in making reference to the attached table to find out the Expected Future Service Period of B, one has to go to the row which starts with 5 & then to the column which starts with 5%. At the point of interception the required entry appears as 4.5244.

The following example, illustrates how to perform the Gratuity Calculations using the above formulae;

Compute the Gratuity provision as at 31/03/05 for the following 5 employees of ABC and Company

Name	Age	Past no. of years in	Year end monthly	Gratuity Opening
		service	salary (Rs.)	Balance (Rs.)
Α	25	2	10,000	4,545
В	35	10	5,000	20,455
C	55	20	35,000	302,273
D	40	25	20,000	218,181
Е	60	10	15,000	61,364
				606,818

Maximum retirement age : 60 years

Expected future salary increment rate (r) : Assumed at 10% Discount / Interest rate (d) : Assumed at 15%

Therefore
$$R = \frac{(1+r)}{(1+d)} = \frac{1.10}{1.15} = 0.9565$$

Staff turnover factor : Assumed at 5%

(For the expected future service period obtained using Truncated Negative Binomial Theory, please refer to the attached Table) (Assumed staff turnover at 5%)

Name	Age	Past no. of years in service	Year end monthly salary (Rs.)	Maximum possible Future no. of	Expected future no. of years (n)	Gratuity charge (Rs.)	Gratuity provision (Rs.)	Working
		(m)	3 (3)	years (N)	5 3 2 2 2 7		(,	
Α	25	2	10,000	35	16.678	2,381	4,763	W1
В	35	10	5,000	25	14.452	1,315	13,146	W2
C	55	20	35,000	5	4.524	14,311	286,211	W3
D	40	25	20,000	20	12.830	5,652	141,295	W4
Е	60	10	15,000	0	0	7,500	75,000	W5
						31,159	520,415	

W1) Gratuity provision of A;

m = 2
S = 10,000
R =
$$\frac{(1.10)}{(1.15)}$$
 = 0.9565
n = 16.678 (from Table)

Therefore
$$\frac{\text{m SR}^{\text{n}}}{2} = \frac{2 * 10,000 * 0.9565^{16.678}}{2}$$

$$= \frac{4,763}{2}$$

Gratuity Charge of A;

$$\frac{SR^{n}}{2} = \frac{10,000 * 0.9565^{16.678}}{2} = 2,381$$

W2) Gratuity provision of B;

m = 10
S = 5,000
R =
$$\frac{(1.10)}{(1.15)}$$
 = 0.9565
n = 14.452 (from Table)

Therefore
$$\frac{\text{m SR}^{\text{n}}}{2} = \frac{10 * 5,000 * 0.9565^{14.452}}{2}$$

$$= 13,146$$

Gratuity Charge of B;

$$\frac{SR^{n}}{2} = \frac{5,000 * 0.9565^{14.452}}{2} = \underline{1,315}$$

W3) Gratuity provision of C;

m = 20
S = 35,000
R =
$$\frac{(1.10)}{(1.15)}$$
 = 0.9565
n = 4.524 (from Table)

Therefore
$$\frac{\text{m SR}^{\text{n}}}{2} = \frac{20 * 35,000 * 0.9565^{4.524}}{2}$$

$$= 286,211$$

Gratuity Charge of C;

$$\frac{SR^{n}}{2} = \frac{35,000 * 0.9565^{4.524}}{2} = \underline{14,311}$$

W4) Gratuity provision of D;

m = 25
S = 20,000
R =
$$\frac{(1.10)}{(1.15)}$$
 = 0.9565
n = 12.830 (from Table)

Therefore
$$\frac{\text{m SR}^{\text{n}}}{2} = \frac{25 * 20,000 * 0.9565^{12.830}}{2}$$

= 141,295

Gratuity Charge of D;

$$\frac{SR^{n}}{2} = \frac{20,000 * 0.9565^{12.830}}{2} = \underline{5,652}$$

W5) Gratuity provision of E;

$$\begin{array}{lll} m & = & 10 \\ S & = & 15,000 \\ R & = & \frac{(1.10)}{(1.15)} = 0.9565 \\ n & = & 0 \text{ (from Table)} \end{array}$$
 Therefore mSRⁿ 10 * 15,000 *

Therefore
$$\frac{mSR^n}{2} = \frac{10 * 15,000 * 0.9565^0}{2}$$

$$= \frac{75,000}{2}$$

Gratuity Charge of E;

$$\frac{SR^{n}}{2} = \frac{15,000 * 0.9565^{0}}{2} = \frac{7,500}{2}$$

The interest to be charged to the Income Statement can be computed as follows;

Gratuity Opening Balance = 606,818Discount Rate/Interest Rate used = 15%Therefore interest amount = 91,023

Any (Gains)/Losses arising from changes in the assumptions or due to (over)/under provision in the previous years can be computed as follows;

		Amount (Rs.)
	Gratuity Provision at the end of the Current Year	520,415
(-)	Gratuity Provision at the beginning of the Current Year	(606,818)
(-)	Interest on the Opening Balance	(91,023)
(-)	Gratuity Charge for the Current Year	(31,159)
	(Gain)/Loss arising from changes in the assumptions or	
	due to (over)/under provision in the previous years	(208,585)

So, for Company A, a Summary can be given as follows;

	Amount (Rs.)
Provision as at 01 April '04	606,818
Gratuity Charge for the Year	31,159
Interest Charge for the Year	91,023
(Gain)/Loss arising from changes in the assumptions or due to	
(over)/under provision in the previous years	(208,585)
Provision as at 31 st March '05	520,415