

# Employee Future Benefits: A Guide to Understanding and Applying CICA 3461



## To Our Clients and Other Friends

In March 1999, the CICA issued Handbook Section 3461, EMPLOYEE FUTURE BENEFITS, a new accounting standard dealing with the recognition, measurement, presentation and disclosure of benefits payable to employees when they have withdrawn from active service. The Standard applies to such things as: pensions and other retirement benefits; post-employment benefits such as severance, disability payments, job counselling and training; temporary absences from employment such as parental leave and sabbaticals; and termination benefits.

The following are the highlights of the Standard:

- ◆ Generally, an employer must accrue an expense and liability for the estimated cost of providing employee future benefits as employees earn entitlements to the benefits. While this method of accounting has been required for pensions for many years, it has not been required for other employee future benefits. Often, these benefits are expensed only when paid.
- ◆ The rules for accounting for pensions have been substantially revised. For many employers, the most significant change will be the requirement to discount pension obligations using a market rate of interest. Under existing GAAP, many employers have discounted pension obligations using the long-term expected rate of return on plan assets. This rate is not adjusted for temporary market fluctuations and, in the current interest rate environment, will be higher than a market rate of interest. Moving to the latter rate therefore will increase the value of accrued pension obligations. It will also increase the volatility of pension expense as the market rate changes from year to year.
- ◆ Special rules have been established governing the timing of recognition of the cost of employee downsizing. Under existing GAAP such costs are charged to expense when management commits the entity to reduce staff levels. Under the new rules, the timing of recognition depends on whether terminations are voluntary or involuntary, and whether the benefits are “one time benefits” paid at the discretion of management or required by a pre-existing benefit plan. If terminations are voluntary, the expense is recognized only when employees accept the offer. If terminations are involuntary and the benefits are one time in nature, the expense is recognized when employees are advised of the details of the arrangement. If the benefits are required by an existing plan, expense is charged when management commits the entity to reduce staff levels.
- ◆ Disclosure requirements are significantly enhanced.
- ◆ The rules may be implemented on a retroactive or prospective basis. Retroactive implementation means adjusting retained earnings as of the date the Standard is first applied for the difference between balances calculated under the old and the new rules. Prospective implementation means amortizing the adjustment against future years’ earnings over a long period.

Section 3461 is effective for years commencing on or after January 1, 2000. For a public calendar year company, the rules must be implemented no later than the first quarter of 2000. Restatement of prior years' financial statements, including comparative financial statements, is encouraged but not mandatory.

Section 3461 is based on the applicable standards in the United States for employee future benefits. However, there are some differences between Section 3461 and US GAAP. It is not clear whether the CICA will eliminate some or all of these differences by amending the Standard. We have identified these differences in our guide.

The rules are complex. We have prepared this guide to help you understand and apply the rules. As always, our experts stand ready to assist you. Please contact your local engagement partner or other PricewaterhouseCoopers contact for help. Alternatively you may contact the following members of our National office team directly: Gord Cetkovski, (416-814-5716; e-mail: [gord.cetkovski@ca.pwcglobal.com](mailto:gord.cetkovski@ca.pwcglobal.com)), Doug Isaac (416-941-8413; e-mail: [douglas.c.isaac@ca.pwcglobal.com](mailto:douglas.c.isaac@ca.pwcglobal.com)) and Sean Cable (416-814-5734; e-mail: [sean.c.cable@ca.pwcglobal.com](mailto:sean.c.cable@ca.pwcglobal.com)).

PricewaterhouseCoopers LLP  
August 1999

# TABLE OF CONTENTS

	Page	CICA 3461 Paragraph Reference
<b>1 Definitions and Scope</b>	<b>1</b>	.005 – .006
Scope Exclusions	1	.008
<b>2 Benefit Plans – The Starting Point</b>	<b>3</b>	.007, .009, .033
Present Commitments to Amend Plan Terms	3	.009, .058
Defined Benefit and Defined Contribution Plans	4	.010 – .013
Defined benefit plans	4	
Defined contribution plans	4	
Classification of plans	4	
<b>3 The Basic Model – Defined Benefit Pension Plans</b>	<b>7</b>	
The Benefits Approach	7	.002, .029
<i>Table One: A Simplified Illustration of the Benefits Approach</i>	7	
Key Section 3461 Terminology	8	.009, .024, .047– .048, .071 – .073
Estimating Benefits Expected to be Paid	8	.037, .047 – .049, .057
Discounting Expected Future Benefits	9	.050 – .055
Measurement Date for Estimates	10	.044 – .046
Calculating Pension Expense	10	.070
Current Service Cost	10	.071
The attribution period	11	.024, .038 – .040
Attributing benefits to individual years of service within the attribution period	12	.042 – .043
Interest Cost on the Accrued Benefit Obligation	12	.034, .075
Expected Return on Plan Assets	13	.076
Expected long-term rate of return on plan assets	13	.076 – .077
The value of plan assets	13	.066 – .068
Plan assets	14	.024, .026
Amortization of Past Service Cost	14	.079 – .080
Minimum amortization requirements	14	.060
Alternative amortization patterns	15	.081 – .083
Negative plan amendments	15	.084
Actuarial Gains and Losses	15	.087, .090, .091
Recognition of actuarial gains and losses – the “corridor approach”	16	.088 – .089
Examples of the Calculation of Pension Expense	16	
<i>Table Two: Illustrating the Calculation of the Basic         Components of Pension Expense</i>	17	
Balance Sheet Amounts	18	.024
Impairments in the Value of Plan Assets	19	.101 – .110
The expected future benefit	19	
<i>Table Three: Calculating the Expected Future Benefit</i>	20	
Comparison of Pension Accounting Rules under CICA 3460 and CICA 3461	21	
<i>Table Four: Comparing the Basic Requirements of         Section 3460 to Section 3461</i>	21	

	Page	CICA 3461 Paragraph Reference
<b>4 Postretirement Benefits Other than Pensions</b>	<b>23</b>	
Estimating the Cost of Health Care and Similar Benefits	23	.064 – .065
Steps to be followed in estimating benefits	23	.74
Per capita claims cost	24	
Health care cost trend rates	25	.59
Benefit coverage by governmental programs and other providers	26	.063
Cost sharing with plan participants	26	.056, .061 – .062
Attributing Benefits to Employee Service	27	
The attribution period	27	.038 – .040
Attribution to specific years and service to date	28	.042
Past Service Cost	28	.079
Temporary Deviations from the Substantive Plan	29	.094 – .095
Actuarial Gains and Losses	29	.093
<b>5 Post-employment Benefits and Compensated Absences</b>	<b>31</b>	.005
Recognition and Measurement	31	.009, .031
Benefits which vest or accumulate	31	.029, .031, .041, .093
Benefits which do not vest or accumulate	32	.029, .032, .086, .092-.093
Meaning of “Vest” or “Accumulate”	32	.009
<b>6 Settlements and Curtailments</b>	<b>35</b>	
Settlements	35	.111 – .112, .121
Full and partial settlements	35	
Remeasurement of plan assets and the accrued benefit obligation	35	.113
Gain or loss recognition on settlements	36	.113 – .118, .120
<i>Table Five: Accounting for a Partial Settlement</i>	36	
Use of insurance contracts to effect settlements	37	.122 – .124
Participating insurance contracts	37	.125 – .126
Withdrawals of excess assets from a plan	38	
Curtailments	38	.111 – .112
Gain or loss on curtailment	38	.127 – .128
Past service cost	38	.129 – .131
Change in the accrued benefit obligation	39	.132 – .133
<i>Table Six: Recognition of the Effects of a Curtailment</i>	40	
<i>Table Seven: Accounting for a Curtailment</i>	41	
Settlements and Curtailments Combined	41	.134
<b>7 Termination Benefits</b>	<b>43</b>	
Contractual Termination Benefits	43	.135, .138 – .140
Special Termination Benefits	43	.135 – .137
Benefits Other than Contractual or Special Termination Benefits	44	.005, .029
Combined Termination Plans	44	.142
Cost of Termination Benefits	45	.141

	Page	CICA 3461 Paragraph Reference
<b>8 Defined Contribution Plans</b>	<b>47</b>	.014 – .017
Contributions Required in Future Periods	47	.018
Past Service Costs	47	.019 – .021
Interest Income on Plan Surplus	47	.022 – .023
<b>9 Other Matters</b>	<b>49</b>	
Entities with Two or More Plans	49	
Combining for measurement purposes	49	.024, .096 – .099
Offsetting accrued benefit assets and accrued benefit liabilities in the balance sheet	49	.100
Multiemployer Benefit Plans	49	.145 – .149
Multiple-Employer Plans	50	.145 – .149
Interim Periods – Defined Benefit Pension and OPEB Plans	50	
Business Combinations	51	1580.45(g)
Discontinued Operations and Disposal of a Portion of a Business Segment	51	.143 – .144
<b>10 Disclosure</b>	<b>53</b>	.152, .158
Significant Accounting Policies	53	.153
Defined Benefits Plans	53	
Minimum required disclosures	54	.155 – .156
Additional disclosures	54	.157, .160, .163
<i>Table Eight: Illustrative Disclosures for Entities Other than         Public Enterprises, Cooperative Organizations, Deposit-taking         Institutions or Life Insurance Enterprises</i>	56	
<i>Table Nine: Illustrative Disclosures for Public Enterprises,         Cooperative Organizations, Deposit-taking Institutions or         Life Insurance Enterprises</i>	57	
Defined Contribution Plans	58	.154
Multiemployer Plans	59	.161 – .162
<b>11 Transition</b>	<b>61</b>	.164 – .165
Transition Amounts	61	.024, .166, .168
Retroactive Implementation	61	.172
Prospective Implementation	61	.119, .167, .170 – .171,
Special Implementation Rules	62	.169
Changes in Valuation Allowance at the Date of Implementation	63	



# Definitions and Scope

Section 3461 describes employee future benefits as “... benefits earned by active employees and expected to be provided to them when they are no longer providing active service, pursuant to the terms of an undertaking to provide such benefits”. It divides benefits into four main categories:

- ◆ Benefits such as pensions, health care, life insurance and other miscellaneous benefits provided to employees during retirement;
- ◆ Benefits provided after employment but before retirement such as long- and short-term disability income (including workers’ compensation), severance, salary continuation, supplemental unemployment benefits, job training and counselling, and continuation of benefits such as health care and life insurance. The Standard describes these benefits as “post-employment benefits”;
- ◆ Benefits provided to current employees when active service has been suspended, such as parental leaves, sabbaticals that provide compensated, unrestricted time off for past service and certain vacation and sick day benefits. The Standard describes these benefits as “compensated absences”; and
- ◆ Termination benefits – benefits provided to employees on their voluntary or involuntary termination.

## Scope Exclusions

The Standard excludes any benefits payable to employees during their “active employment”. It does not define the meaning of the term but gives the following as examples of benefits provided during active employment:

- ◆ Salaries, wages, bonuses, fringe benefits, and similar items that are provided by an employer in the current reporting period, or within 12 months thereafter, in exchange for services rendered by employees in the current reporting period.
- ◆ Occasional sick days and vacation days that do not vest, or do not accumulate beyond 12 months after the current reporting period.
- ◆ Benefits provided under stock-based compensation arrangements. A stock-based compensation arrangement is a compensation arrangement under which one or more employees receive shares of stock, stock options, or other equity instruments, or an entity has an obligation to employees for amounts based on the value of the entity’s shares.

The first example illustrates the concept that an “employee future benefit” exists if and only if payment of the benefit is conditional upon the employee leaving active employment. To illustrate this concept further, assume an employee earns a bonus under a plan which requires the bonus to be paid two years after it is earned. If payment of the bonus is also contingent on the employee retiring or otherwise withdrawing from active service, Section 3461 would apply. However, if payment must be made regardless of whether the employee is active or inactive, the Standard would not apply.

The second example illustrates that benefits provided during brief absences from employment, such as vacations, ordinarily are not considered to be employee future benefits. In effect, these benefits are deemed to be current compensation. However, if the benefits for these absences vest, or if they accumulate 12 months after the period in which they are earned, they are considered to be future benefits to which the Standard applies.

The third example eliminates any benefits payable under stock compensation arrangements that might otherwise be caught by the Standard.



# Benefit Plans – The Starting Point

One of the defining elements of an employee future benefit is that benefits are provided pursuant to the “terms of an entity’s undertaking to provide such benefits”. Section 3461 describes these undertakings as “benefit plans” and defines them to include:

“... any arrangement that is mutually understood by an entity and its employees whereby the entity undertakes to provide its employees with benefits after active service in exchange for their services. Benefits may commence immediately upon termination or suspension of active service or may be deferred until an employee attains a specified age.”

The most common way of achieving a mutual understanding is by written, formal communications between employer and employees. However, the Standard stresses that a substantive plan can be established in other ways. For example, an employer might communicate the terms of a plan orally or by a well defined past practice of paying benefits.

Section 3461 says that unless evidence exists to the contrary, an employer currently providing benefits to employees should be presumed to have a commitment to provide benefits over their remaining service lives. The presumption applies even if a written plan stipulates that the employer does not have an obligation to provide benefits beyond a certain date. For example, a collective bargaining agreement may imply or explicitly state that benefits are subject to re-negotiation upon the expiration of the current agreement. In accounting for these benefits, the employer must assume that benefits will continue to be provided beyond the period covered by the agreement. The presumption can be overcome only if the agreement explicitly states that the benefits will be discontinued upon the contract’s expiration and this is the expectation of the parties to the agreement.

## Present Commitments to Amend Plan Terms

For a written plan, a determination must be made whether an employer has made a commitment to provide benefits for services greater than those stipulated by the plan. If so, the accounting for the plan should be based on the presumption that the commitment forms part of the substantive plan.

Section 3461 says that evidence of an entity’s commitment to amend a plan includes:

- ◆ Past practices of amending the plan, for example, a history of regular increases in future benefits defined in monetary terms;
- ◆ Identification of strategies to effect future changes; and
- ◆ The likelihood of making those changes in light of expected economic and social costs.

All the evidence should be carefully weighed in determining whether a mutual understanding exists that the plan will be amended.

Section 3461 refers only to anticipated amendments of monetary benefits (e.g. a defined dollar amount of benefit or a defined percentage of salary). While not stated specifically in the Standard, we do not believe that it would be appropriate to anticipate amendments of benefits provided “in kind” such as health care services. This interpretation is consistent with the requirements of FAS 106, *Employer’s Accounting for Postretirement Obligations*.

## Defined Benefit and Defined Contribution Plans

Section 3461 divides benefit plans into two basic types: defined benefit and defined contribution plans, and specifies different accounting requirements for each plan.

### Defined benefit plans

A defined benefit plan is one that specifies either the benefits to be received by an employee or the method of determining those benefits. Usually, the benefit is expressed as a function of one or more factors such as age, years of service, or compensation, such as a benefit of \$10,000 of life insurance or an annual pension benefit equal to 1½% of the average of the final five years' salary times the total years of service. In these plans, the employer is subject to the uncertainty about the amount of the periodic benefits to be paid to employees in the future and the duration of the payments (actuarial risk). For funded plans, the employer is also subject to the uncertainty that returns on assets set aside to pay for the benefits will not be sufficient to pay for the benefits (investment risk).

### Defined contribution plans

A defined contribution plan is one that specifies how the employer's contributions to the plan are determined rather than the benefits to be received by the employee. For example, a defined contribution plan will require that an employer contribute 3% of pre-tax income to a plan which will be allocated to participants in a manner specified by the plan. Participants will receive the amount contributed, adjusted for any allocated income (or expenses) earned on the contribution to the plan between the date of the contribution and the date the benefits are paid. In a defined contribution plan an employer assumes neither the actuarial nor investment risk.

### Classification of plans

Plans should be classified as defined benefit or defined contribution based on an evaluation of the substantive risks assumed by the employer with respect to the plan. The following discusses the classification of plans where the classification may not be apparent from the legal form.

#### *Target plans*

A target plan has a benefit formula that the employer uses to determine a target benefit. Contributions are made in an amount necessary to fund the target without an actual commitment to provide the benefit. Although the form of the plan is a defined contribution plan, the plan may be a defined benefit plan in substance. Factors which indicate that it may be appropriate to classify a target plan as a defined benefit plan include the following:

- ◆ The employer effectively controls the plan's investment policy so that employees have no say on how the balances in their individual accounts are to be invested (e.g. no choice exists among investment options such as an equity fund, a fixed income fund, or a money market fund).
- ◆ The employer periodically adjusts the target benefit level or takes other actions effectively designed to transfer the risk of investment losses to the employer rather than leaving it with the employees.
- ◆ A low discount rate assumption is used in establishing the target benefit level so as to constitute, in substance, a guarantee of a minimum benefit level.

### *Cash balance and other hybrid plans*

Cash balance plans, sometimes also known as “hybrid plans”, “guaranteed individual account plans”, or “lump sum pension plans”, have the following characteristics:

- ◆ Benefits are intended to be paid primarily in lump sum form.
- ◆ Employer contributions to “separate accounts” and account balances are communicated periodically to employees. However, separate investment accounts are not actually maintained – the “separate accounts” are on paper only and are credited with a guaranteed rate of investment earnings.
- ◆ Actual plan earnings below the guaranteed rate are required to be made up by the employer. Earnings in excess of the guaranteed rate serve to reduce the employer’s cost.

These plans qualify as defined benefit plans because the employer has the actuarial and investment risks associated with the plan benefits.

### *Floor offset plans*

Certain arrangements may link two legally separate plans – a defined contribution plan and a defined benefit plan that guarantees a minimum level of benefits. Under such arrangements, generally referred to as “floor offset plans”, benefits are required to be paid from the defined benefit plan only if the balance in the defined contribution plan is insufficient to cover the minimum benefit under the defined benefit plan. Furthermore, the terms of the defined benefit plan may specify that the employer’s obligation under that plan is reduced to the extent that a participant’s account balance in the defined contribution plan is used to pay benefits covered by the defined benefit plan.

The fact that the plans are linked raises the question whether they should be treated as a single plan for accounting purposes (either as defined benefit or a defined contribution plan). However, the dissimilar nature of an employer’s obligation under each type of plan, including how these obligations are satisfied, and the fact that plan assets of a defined contribution plan would not be legally available to pay the benefits due under a defined benefit plan (and vice versa) makes it inappropriate to consider the two plans to be a single plan for accounting purposes.

### *Combined defined benefit and defined contribution plans*

A single benefit plan may be both a defined benefit and a defined contribution plan. This most often occurs when an employer changes a defined benefit plan to allow employees the choice of remaining in the defined benefit plan or switching to a defined contribution plan. The defined contribution plan is not set up separately but remains combined with the defined benefit plan for plan funding purposes. In these circumstances, the defined benefit component is accounted for as a defined benefit plan and the defined contribution component is accounted for as a defined contribution plan.



# The Basic Model – Defined Benefit Pension Plans

In this Section we review the basic model that Section 3461 uses to account for defined benefit plans. We do this by considering the model in the context of the most common form of employee future benefits – pensions. While the model also applies to all other defined benefits, such as postretirement benefits other than pensions and certain post-employment benefits and compensated absences, these benefits have special features which require separate consideration. These are discussed in later chapters.

## The Benefits Approach

The fundamental concept in Section 3461 is a simple one – benefits promised to employees in future periods when they are no longer working represent a form of deferred compensation. This compensation should be accrued as an expense and a liability in the period in which employees earn their entitlement. Other forms of accounting, such as the cash basis, are not permissible.

The Standard applies the so called “benefits” approach to the recognition and measurement of benefits. Under this approach, the pension expense for any particular period is equal to the benefits earned by employees in the period and expected to be paid, discounted for the time value of money. A simplified example of the benefits approach is provided in Table One.

**Table One: A Simplified Illustration of the Benefits Approach**

The pension plan of Company A provides a benefit of \$500 for each year of service, payable in full at the date of retirement. The following table illustrates the calculation of Company A’s pension liability and expense for years 14, 15 and 16 for an employee expected to provide 20 years of service (i.e. earn a benefit of \$10,000). A rate of 6% is used to discount benefits.

	14	Year 15	16
PV of \$10,000 discounted at 6%, start of year	\$6,651	\$7,050	\$7,473
Benefits earned through service to date	65%	70%	75%
Liability, start of year	4,323	4,935	5,605
Present value of benefits earned for year *(being \$500 discounted at 6% or, alternatively, 1/20 <sup>th</sup> of present value at the end of the year of total expected payment of \$10,000)	353	374	396
Interest on liability, at 6%	259	296	336
Expense for the year	612	670	732
Liability, end of year	\$4,935	\$5,605	\$6,337

\* For ease of illustration, it has been assumed that benefits have been earned on the last day of the year.

Section 3461 replaces Handbook Section 3460, PENSION COSTS AND OBLIGATIONS. While both Standards use the basic model illustrated in Table One, there are significant differences in its application. These are summarized at the end of this chapter in Table Four.

## Key Section 3461 Terminology

Section 3461 uses the following terms to describe key concepts:

**Obligation for employee future benefits** – the present value as of a particular date of benefits expected to be paid to current employees and retirees under a plan. In Table One, the obligation for future employee benefits is the present value of \$10,000 discounted at 6%.

**Accrued benefit obligation** – the present value of benefits attributed to employee services rendered as of a particular date. In Table One, the accrued benefit obligation has been labelled as the “Liability, start of year” and “Liability, end of year”.

**Current service cost** – the pro rata portion of the obligation of employee future benefits attributed to a specific year of service reduced to reflect employee contributions. In Table One, the current service cost is described as the “present value of benefits earned for year”.

**Actuarial assumptions** – estimates of future events that will determine the extent to which an employer will be required to provide benefits (e.g. mortality, termination rates, disability, rates of turnover, retirement age, mortality, future compensation levels, etc.). Actuarial assumptions include the rate at which expected future benefits are discounted and the expected rate of return on plan assets. In Table One, the only actuarial assumptions made are the length of employee service and the discount rate.

**Actuarial gains and losses** – changes in the value of the accrued benefit obligation and plan assets resulting from experience different from that assumed and changes in actuarial assumptions. In Table One, these are assumed to be nil.

## Estimating Benefits Expected to be Paid

As illustrated in Table One, employers must estimate benefits expected to be provided to employees and to discount these benefits by an appropriate discount rate in order to calculate their pension expense and liability.

The calculation of benefits expected to be provided is determined by making actuarial assumptions (see definition in the preceding Section) about each future event affecting the amount and timing of an employer’s benefit obligations. While actuaries undoubtedly will be involved in the process of selecting assumptions, the final responsibility for assumptions rests with management. Actuaries also will perform the detailed calculations required by the Section.

Estimating benefits by making specific assumptions about future events usually is called the “explicit approach”. Other estimation approaches are not appropriate. For example, it would not be appropriate to look to the aggregate effect of two or more assumptions that individually do not represent the best estimate of the plan’s future experience with respect to those assumptions. The explicit approach must be applied even if it is likely that the aggregate approach will yield approximately the same results.

Assumptions generally are given effect by applying the assumptions to each participant in the plan rather than to the aggregate of all participants. This is done by making “decrements” to the gross benefits expected to be earned by individual participants. For example, if it is assumed that 40% of all participants will receive retirement benefits under the plan, the actuary’s valuation would be based on each participant receiving 40% of his or her estimated benefit.

In making best estimates, management must keep assumptions internally consistent to the extent that each assumption incorporates expectations of the same future economic conditions. For example, assumptions about future compensation levels should include an estimate of actual future compensation levels for the individuals involved, including changes due to productivity, seniority and promotion, and general inflation. If changes in an employer's labour costs over time have been, and are expected to continue to be, highly correlated with changes in inflation rates, assumptions about future compensation should change with changes in expectations about inflation inherent in current interest rates.

Estimates should be derived from formal actuarial valuations of the pension plan based on assumptions and census data appropriate as of the measurement date. In years between actuarial valuations, estimates should be determined by extrapolating the most recent valuation, taking into account matters such as changes to the plan, actuarial assumptions, changes to the employee group and the rate of return on plan assets. If the effect of any change is significant, a new actuarial valuation must be performed.

## Discounting Expected Future Benefits

The Standard permits one of two rates to be used to discount expected future benefits:

- ◆ The market interest rate at the measurement date on high quality debt instruments with cash flows matching the timing and amount of the expected payments; or
- ◆ The interest rate inherent in annuity or other insurance contracts under which the insurer assumes the significant risks associated with the accrued benefit obligation, provided that settlement is practicable in the circumstances ("the settlement rate").

The objective in using a market interest rate on high quality bonds is to measure the single amount that, if invested at the measurement date in a portfolio of high quality debt instruments, would provide the necessary pre-tax cash flows to pay the accrued benefits when due. The ideal discount rate would be based on a portfolio of zero coupon bonds. If other than zero coupon bonds are used, the calculation of the discount rate needs to incorporate the reinvestment rates expected to be available in the future. These are to be derived from the existing yield curve.

Registrants of the US Securities and Exchange Commission ("SEC") should note that SEC staff have stated that fixed income debt securities that receive one of the two highest ratings given by a recognized ratings agency should be considered high quality. The SEC guidance has resulted in most companies in the United States looking to published AA-rated bond indexes to help them in selecting the discount rate.

Interest rates generally vary depending on the maturity of the obligation. Therefore, a weighted average or "blended" rate should be calculated based upon individual discount rates applicable to the varying periods until the benefits are due. Depending on the yield curve, a discount rate for a plan covering only retired employees would differ from the discount rate used for a plan covering a relatively young work force.

If the maturity dates of high quality bonds do not extend far enough to cover the entire period during which benefit payments are expected, the rates on government bonds should be used for this period. If benefits are expected to be paid beyond the maturity of government bonds, the rate prevailing on the last maturing bond available should be used to discount these benefits.

If interest rates change, the discount rate also should change. It would not be permissible to adopt policies which minimize the impact of interest rate changes. For example, it would not be appropriate to carry forward last year's rate if it falls within a range of current rates or to arbitrarily select the discount rate from within that range.

Employers may use the settlement rate to discount benefits if settlement of the accrued benefit obligation is practicable in the circumstances. The settlement rate generally will be less than the interest rate calculated by reference to high quality bonds. This is because the settlement rate will include the insurer's cost and a profit margin reflecting the actuarial and interest rate risk assumed.

Changes in the basis of estimating assumed discount rates (e.g. by using high quality bond rates for one year and an annuity rate the following year) generally would not be appropriate, absent a change in circumstances. An example of such a change would be a general decline in interest rates that has not, as yet, been reflected in the rates implicit in the price of annuity contracts. Changing methods solely to avoid the impact of movements in interest rates is not appropriate.

## Measurement Date for Estimates

Estimates of the discounted value of expected future benefits must be made as of the employer's year end or, if the entity so elects as a matter of accounting policy, at a date not more than three months prior to the year end. For example, a calendar year company may estimate expected future benefits as of a date no earlier than September 30. Once selected, the measurement date must be used consistently from year to year.

The selection of the "measurement date" is an accounting policy. Changing the measurement date from the financial statement date to an earlier date may be hard to justify unless using an earlier measurement date will produce more accurate results (e.g. if more accurate asset and obligation values are available at September 30 than at December 31).

Certain plan information can be prepared prior to the measurement date and projected through to that date. For example, the obligation may be measured by rolling forward data based upon a valuation prior to the measurement date. The "roll-forward" would include benefits earned, benefit payments, contributions and changes in the work force.

## Calculating Pension Expense

Section 3461 adopts a "components" approach to the calculation of pension expense. Pension expense for any period is the sum of the following items:

- ◆ Current service cost;
- ◆ The interest cost on the accrued benefit obligation;
- ◆ The expected return on plan assets;
- ◆ Amortization of past service costs;
- ◆ Amortization of any net actuarial gain or loss;
- ◆ Changes in valuation allowances necessary to adjust any pension asset to its recoverable amount; and
- ◆ Amortization of the transitional amount (see Chapter 11).

The calculation of these components is illustrated in Table Two.

## Current Service Cost

As previously explained, current service cost for a particular period of service represents the actuarial present value of expected future benefits attributed to that period. Current service cost is calculated at the beginning of the period based on estimates and actuarial assumptions in effect as of that date.

Section 3461 prescribes a two step approach to attributing benefits:

- ◆ First, establishing the portion of an employee’s service life over which to accrue all of the benefits expected to be provided to the employee during retirement (i.e. in technical terms, the period over which to expense the “obligation for employee future periods”). The Standard calls this period the “attribution period”. It is important to note that the rules do not automatically spread the obligation over an employee’s entire service life. As explained further below, it is quite possible that some years of service will not be allocated any cost, thereby compressing total pension expense over a period which is less than an employee’s total service life.
- ◆ Second, attributing the cost to each individual year of service within the attribution period.

The general rule in the Standard is that benefits should be attributed based on the “plan formula”, i.e. the provisions of the plan which stipulate how employees become entitled to benefits – the years of service, the age to be obtained while in service or some combination of both. The rationale for this requirement is that the plan formula provides the best evidence of the deal struck between the employee as to how and when benefits are earned. Therefore, the plan formula should be followed unless it is clearly not indicative of the substance of the arrangement.

## The attribution period

Section 3461 states that the attribution period begins on the date of hire unless the plan’s formula grants credit for service only from a later date. The attribution period ends on the “full eligibility date” – the date on which the employee has rendered all of the service necessary to earn all of the benefits expected to be received by the employee. For pension plans, the full eligibility date usually will end on the expected retirement date of an employee. However, if an employee is expected to have satisfied the full eligibility requirements of the plan before retirement, the full eligibility date is the date on which full eligibility is attained.

In the simplified example in Table One, the attribution period was 20 years – the expected service life of the employee. This is because the plan attributed a benefit of \$500 for every year of service. However, if the pension plan did not grant credit for service until two years after the hire date, no expense would be attributed to the employee’s first two years of service. Alternatively, if the employee was expected to provide 25 years of service but the plan capped benefits at 20 years of service, the estimated benefits of \$10,000 would be expensed over 20 years. No portion of the cost would be allocated to the last five years of service.

Some plans give credit for service for periods which are insignificant in relation to the total years of service expected to be provided prior to the full eligibility date. For example, assume the benefit plan in Table One stipulates that no benefit is earned for the first 19 years of service but a benefit of \$10,000 is earned for the 20th year of service. Such a plan substantively is the same as one which attributes \$500 per year for each of 20 years and requires 20 years of service before benefits vest. For such plans, the attribution period begins on the date of hire.

When is the credited service period insignificant? The Section does not provide any answers. Such determinations are a matter of judgment.

Plans may provide additional benefits to employees because of the way benefits are measured. For example, assume an employee earns a pension benefit equal to 1% of final pay for each year of service up to a maximum of 20 years and the employee obtains full eligibility five years before his or her

expected retirement. To the extent that compensation increases in the last five years of service, the employee will receive higher benefits even though the employee did not earn any additional entitlements under the plan during this period. If incremental benefits are significant, Section 3461 permits but does not require employers to extend the full eligibility date to include periods where incremental benefits are earned.

***Observation.** Under FAS 87, Employers' Accounting for Pensions, incremental benefits are not taken into account in attributing pension benefits.*

## Attributing benefits to individual years of service within the attribution period

Once the attribution period is established, current service cost is determined by attributing the present value of benefits expected to be provided to individual periods of service.

As a general rule, benefits are to be attributed according to the plan formula. For example, if the formula specifies that a benefit of \$500 will be earned for each year of service, and it is expected that the employee will provide 20 years of service, then the actuarial present value of \$500 will be attributed to each year of service within the attribution period (see example in Table One). On the other hand, if the formula stipulates that a benefit of \$400 will be earned for each year of service for the first ten years of service, and a benefit of \$600 will be earned for the last ten years, the annual benefit attributed to each year of service in the first ten years will be different than the annual benefit attributed in the last ten years.

There are some exemptions to the “follow the plan formula” rule. Attribution should be on a straight line basis if the plan does not ascribe benefits to specific years and an annual attribution cannot be inferred from the plan. The straight line method also should be applied if a plan attributes a significantly higher level of benefits to later years of service than earlier years (e.g. \$1 per year credited for the first 19 years of service and \$9,981 for the 20th year). In other words, the plan significantly “back-end loads” benefits.

Judgment will be required to determine whether benefits are back-end loaded. If the increase in benefits attributed to an employee’s later years of service reflects the increased value of an employee’s service in these periods, we would not consider the benefits to be back-end loaded.

There are no special rules in the Standard if benefits are front-end loaded; that is, the plan allocates significantly more benefits to the early years of service than to the later years. Plans which front-load benefits must be accounted for in accordance with the pension formula.

## Interest Cost on the Accrued Benefit Obligation

The accrued benefit obligation represents the present value of future benefits attributed to service to date. As this is a discounted number, it is necessary to “unwind the discount” by charging pension expense with an interest cost each period, as illustrated in Table One. Interest cost is calculated at the beginning of the period based on estimates and assumptions in effect at that date.

Interest cost is determined by applying the discount rate as of the beginning of the period to the “accrued benefit obligation for the period”. The accrued benefit obligation for the period is the accrued benefit obligation at the start of the year adjusted on a weighted average basis for current and past service cost and contributions and benefit payments expected during the period.

Section 3461 says that employers should determine the accrued benefit obligation using one of two actuarial methods. The “projected benefits method pro rated on services” is to be used when future salaries affect the amount of employee future benefits provided. The “accumulated benefit method” is to

be used when future salaries do not affect employee future benefits. The former method is defined as a method which assigns an equal portion of the total estimated future benefit, with salary projection, to each year of service. The latter method is a method where benefits earned to date are based on the plan formula, the employee's history of pay, service, and other factors as of the date of determination.

The requirement to use the projected method pro rated on service to determine the accrued benefit obligation conflicts with the requirement in the Standard to attribute benefits to individual years of service based on the plan formula (unless the plan formula attributes benefits on a straight line basis over the employee's entire service life). From discussions with CICA staff, we understand that the accrued benefit obligation should be calculated on the same basis as the benefits are attributed to individual years of service. In other words, the accrued benefit obligation at any date is the sum of benefits attributed to individual years of service provided up to that date.

## Expected Return on Plan Assets

The expected return on plan assets is the product of the "expected long-term rate of return on plan assets" and the "value of plan assets" for the period. The expected return on plan assets for a particular period is calculated at the beginning of the period based on estimates and assumptions in effect at that date.

### Expected long-term rate of return on plan assets

The expected long-term rate of return on plan assets is an estimate of the rate of return to be earned over the period until all benefits under the plan have been paid. The estimate should be based on a consideration of the nature of the plan's investments, the plan's investment strategy, past rates of return in excess of inflation, and expected future inflation rates.

Several rates may be used, based on the nature of the assets in the plan, to develop a composite rate of return. For example, bonds based on market values having an effective yield of 8% may constitute 60% of the portfolio and the remaining 40% may consist of common stocks that are expected to have a long-term dividend plus an appreciation rate of 12%. The composite rate of 9.6% would be appropriate as the expected long-term rate of return on plan assets.

### The value of plan assets

The value of plan assets is the value of assets at the beginning of the period adjusted on a weighted average basis for contributions and benefit payments expected for the period.

The value of plan assets is either the fair value of the assets or "their market-related value". Section 3461 defines fair value as the amount of consideration that would be agreed upon in an arm's-length transaction between knowledgeable, willing parties who are under no compulsion to act. The fair value of plan assets is normally market value. When market values are not readily available for assets such as real estate, methods that approximate market values, such as independent appraisals or reviewing market values of similar assets, should be applied. The Standard says that in computing fair value, one should look to the rules in Handbook Section 3860, FINANCIAL INSTRUMENTS – DISCLOSURE AND PRESENTATION.

A market-related value is a calculated amount that recognizes changes in the fair value of plan assets in a systematic and rational manner over a period not exceeding five years. Section 3461 provides market-related value as an alternative to fair value in measuring the expected return on plan assets in response to concerns about the volatility on pension expense that might arise from valuing assets at fair value. Market-related values must reflect only changes in the fair value of plan assets between various dates (i.e.

mixing in the effects of other pension related amounts, such as the effects of changes in discount rates to smooth their income effect, is not appropriate).

Different ways of calculating market-related values may be used for different classes of assets. For example, an entity may use fair value as the basis for valuing bonds and a five year moving average for equity investments. There is no limitation on the number of classes into which plan assets might be divided. However, once a method is selected for each class, it should be applied consistently. Any change in classification or valuation method represents a change in accounting policy.

An employer that has several different pension plans with similar plan assets should apply the same classification and asset valuation methods to each plan. Using different methods is appropriate only if the inherent facts and circumstances justify different methodology.

## Plan assets

Plan assets are restricted to assets that have been segregated and restricted in a trust or other legal entity separate from the employer. To qualify as plan assets, the following criteria must be satisfied:

- ◆ The assets of the separate entity are to be used only to settle the related accrued benefit obligation, are not available to the reporting entity's own creditors, and either cannot be returned to the reporting entity or can be returned to the reporting entity only if the remaining assets of the trust are sufficient to meet the plan's obligations.
- ◆ To the extent that sufficient assets are in the separate entity, the reporting entity will have no obligation to pay the related benefits directly.

Plan assets include any financial instruments issued by the employer and held by the trust or other legal entity. They do not include amounts held by the employer and not yet paid into the plan.

## Amortization of Past Service Cost

Past service cost arises from plan amendments (including the initiation of a plan). It is measured by the increase in the accrued benefit obligation arising from an employee's past service.

### Minimum amortization requirements

As a minimum, past service cost should be amortized by assigning an equal amount to each remaining service period up to the full eligibility date of each employee active at the date of the plan initiation or amendment who was not yet fully eligible for benefits at that date. Amortization of the cost of plan amendments is justified on the basis that the employer will realize economic benefits in future periods from granting the amendment. Amortization begins at the date of adoption of the plan amendment (not the effective date of the amendment) even if it occurs during a fiscal year. Costs arising from each plan amendment should be amortized separately.

**Observation.** *There is a conceptual difference between Section 3461 and FAS 87 with respect to the amortization of past service costs. Whereas Section 3461 requires amortization over the period to the full eligibility date, FAS 87 requires amortization over the remaining service lives of employees. In addition, FAS 87 states that costs should be allocated only to employees who are expected to receive benefits under the plan. It is not clear whether a similar requirement applies in Section 3461. In our view, it is appropriate to calculate the amortization by considering only participants expected to receive benefits.*

Once established, the amortization schedule should not be adjusted for routine changes in estimated service lives of employees. An adjustment will be required, however, for events which substantially reduce the expected years of future service or benefits expected to be earned by employees (see discussion of curtailments in Chapter 6).

## Alternative amortization patterns

The amortization required by Section 3461 results in a declining method of amortization (because the expected service life of employees gradually will decline). Section 3461 permits any method that, mathematically, will result in a more rapid amortization than the procedure described above, e.g. straight line amortization over the average remaining service period of active employees up to the full eligibility date. Once selected, a method should be used consistently.

Section 3461 requires amortization over a shorter period if the economic benefit from the plan amendment will be realized on a faster basis than the remaining service lives of affected employees (e.g. a history of regular plan amendments as part of union negotiations). In those situations, past service costs should be amortized over the period benefited. Plan history and other evidence should be evaluated to determine the period during which an employer expects economic benefit.

When all, or almost all, of the employees are no longer active, an entity should amortize past service cost on a straight line basis over the average remaining life expectancy of the former employees. There is no specific threshold for using this as the basis for amortization – the determination is a judgment based on the facts and circumstances of the particular plan. Generally, however, we would expect that at least 90% of participants would be inactive in order to use this alternative amortization period.

## Negative plan amendments

A plan amendment may reduce rather than increase the accrued benefit obligation. In those situations, the reduction should be applied first to reduce any unamortized past service cost and second to reduce any unamortized transitional obligation (see Chapter 11).

A company may have had several prior past service amendments whose unamortized cost exceeds, in the aggregate, the amount of the negative plan amendment. Unless the negative amendment effectively undoes a previous amendment, any systematic and rational method of allocating the effect of the negative amendment may be followed (e.g. FIFO, LIFO or pro rata).

***Observation.** FAS 87 does not require that a portion of the reduction in the accrued benefit obligation be applied to reduce any unamortized transitional obligation.*

## Actuarial Gains and Losses

Inevitably actual experience will be different from that assumed for accounting purposes and assumptions will change. Section 3461 labels changes in the value of the accrued benefit obligation and plan assets resulting from these factors as “actuarial gains and losses”. As explained further below, the Section requires these gains and losses to be recognized as an adjustment of pension expense if certain criteria are met.

An actuarial gain or loss on the accrued benefit obligation is the difference between the accrued benefit obligation measured at the end of the period using assumptions in effect at the most recent measurement date and the accrued benefit obligation expected at that date based on actuarial assumptions in effect at the beginning of the period.

An actuarial gain or loss on plan assets is the difference between the actual return on plan assets derived from the fair value of plan assets at the measurement date, and the expected return on plan assets for the period. The actual return on plan assets is computed by reference to the fair value of plan assets even if the expected return on plan assets is determined using a market-related value.

### **Recognition of actuarial gains and losses – the “corridor approach”**

Recognition of actuarial gains and losses for accounting purposes is required only if they fall outside of a “corridor” defined as the greater of (a) 10% of the accrued benefit obligation; and (b) 10% of the fair value or market-related value of plan assets as of the beginning of the year. The corridor approach was introduced to mitigate the volatility resulting from short-term market and other swings by providing a reasonable opportunity for gains and losses to offset over time.

If actuarial gains and losses fall outside the corridor in a period, an entity is required to amortize the excess commencing in the year following their identification. The minimum amortization is determined by dividing the excess by the average remaining service period of active employees expected to receive benefits under the plan. If all or almost all of employees are no longer active, the minimum amortization should be based on the average remaining life expectancy of the former employees. Generally, we consider “all or almost all” to be 90% or more of the plan participants.

As explained above, actuarial gains and losses on plan assets represent the difference between the actual return on plan assets for the period and the expected return. The actual return on plan assets is derived from the fair value of plan assets. If an employer uses a market-related value to determine the expected return on plan assets, the actuarial gain or loss not yet reflected in the market-related value of plan assets is amortized only when it is included in the market-related value of plan assets.

As an alternative to the corridor approach, any systematic method of amortization of actuarial gains and losses may be used provided the following criteria are satisfied:

- ◆ The minimum amortization is used in any period in which it exceeds the amortization determined using the alternative approach;
- ◆ The method is applied consistently (a change in the methodology would be a change in accounting policy);
- ◆ The method is applied similarly for both gains and losses; and
- ◆ The method is disclosed.

Recognition of the full amount of actuarial gains and losses in the year they arise is permitted. Implementation of such a policy, however, would expose the employer to the risk of significant volatility in the measurement of pension expense.

## **Examples of the Calculation of Pension Expense**

A detailed example of the calculation of pension expense is set out in Appendix A of Section 3461. A simplified example highlighting the calculation of the components of pension expense is provided in Table Two.

**Table Two: Illustrating the Calculation of the Basic Components of Pension Expense**

Company X initiates a pension plan on January 1, 2000. At that date, the company granted past service benefits to employees having an actuarial present value of \$10 million that was immediately funded by the Company. This past service cost is being amortized on a straight line basis over 20 years (i.e. \$500,000 per year). During 2000 and 2001, no employee or employer contributions were made to the plan and no benefits were paid. The company recognizes in pension expense the minimum required annual amortization of actuarial gains and losses. The expected return on plan assets is calculated using the fair value of plan assets. The measurement date is December 31. Other assumptions and calculations are as follows:

	2000	2001
Discount rate, start of year	6%	5%
Expected rate of return on assets, start of year	7%	7%
Current service cost	\$1.0	\$1.5
Actuarial gains (losses) – Plan assets		
Actual rate of return, assumed	\$1.2	\$1.0
Expected return (a)	0.7	0.8
	\$0.5	\$0.2
Accrued benefit obligation –		
At December 31, assumed	\$12.0	\$15.0
Expected (b)	11.6	14.1
	\$(0.4)	\$(0.9)
The calculation of pension expense for 2000 and 2001 is as follows:		
Pension expense:		
Current service cost	\$1.0	\$1.5
Amortization of past service costs	0.5	0.5
Expected return on plan assets (a)	(0.7)	(0.8)
Interest cost on obligation (c)	0.6	0.6
Amortization of actuarial gains and losses (d)	--	--
	\$1.4	\$1.8

(a) Plan assets at the start of the year multiplied by the expected rate of return on assets.

(b) Accrued benefit obligation at the start of the year plus current service cost and interest cost on obligation.

(c) Accrued benefit obligation for the year multiplied by the discount rate. The accrued benefit obligation for the year is the weighted average of the accrued benefit obligation expected for the year (i.e. accrued benefit obligation at the start of the year plus one-half of current service cost for the year).

(d) The following table presents a continuity of the unamortized net actuarial gains and losses:

	2000	2001
Balance, beginning of year	\$--	\$0.1
Actuarial gain on assets	0.5	0.2
Actuarial loss on accrued benefit obligation	(0.4)	(0.9)
Current year amortization	--	--
Balance, end of year	\$0.1	\$(0.6)

It is necessary to amortize actuarial gains and losses only if unamortized net actuarial gains and losses at the beginning of the year are in excess of 10% of the greater of the accrued benefit obligation and the fair value of plan assets. As no actuarial gains or losses existed before December 31, 2000, this calculation does not apply in Year 2000. In 2001, the opening balance of unamortized actuarial gains and losses of \$0.1 is compared to the accrued benefit obligation as it is the greater amount, and 10% would be 1.2. Since the unamortized net actuarial gains and losses at December 31, 2000 are \$0.1, no amortization is required for 2001.

*continued*

Table Two: Illustrating the Calculation of the Basic Components of Pension Expense

*continued*

	Jan.1, 2000	Dec.31, 2000	Dec. 31, 2001
<b>Reconciliation of deficiency in plan to balance sheet amount:</b>			
Plan assets at fair value	\$10.0	\$11.2	\$12.2
Accrued benefit obligation	(10.0)	(12.0)	(15.0)
Deficiency	--	(0.8)	(2.8)
Unrecognized past service cost	10.0	9.5	9.0
Unrecognized net actuarial (gain)/loss	--	(0.1)	0.6
Balance sheet amount	\$10.0	\$8.6	\$6.8

The following journal entries would be required:

	2000	2001
Dr. Accrued benefit asset	\$10.0	--
Cr. Cash		--
To record the funding of past service cost at January 1, 2000	\$10.0	--
Dr. Pension expense	\$1.0	\$1.5
Cr. Accrued benefit asset		\$1.5
To record current service cost	\$1.0	\$1.5
Dr. Pension expense	\$0.5	\$0.5
Cr. Accrued benefit asset		\$0.5
To record amortization of past service cost	\$0.5	\$0.5
Dr. Pension expense	\$0.6	\$0.6
Cr. Accrued benefit asset		\$0.6
To record expected interest cost on accrued benefit obligation	\$0.6	\$0.6
Dr. Accrued benefit asset	\$0.7	\$0.8
Cr. Pension expense		\$0.8
To record expected return on plan assets	\$0.7	\$0.8

## Balance Sheet Amounts

The amount reported on the balance sheet represents the difference between the sum of current and prior years' pension expense and accumulated contributions made by an employer to the plan. An "accrued benefit liability" results if current and prior years' expenses exceed accumulated contributions. An "accrued benefit asset" results if the reverse occurs.

**Observation.** Under FAS 87 if the fair value of plan assets is less than the accrued benefit obligation (excluding the effects of future compensation), the difference must be reported on the employer's balance sheet as a liability. If following the other provisions of FAS 87 results in a lesser liability or a pension asset, it is necessary to record an adjusting entry to make up the deficiency. This is done by debiting intangible assets to the extent of any unrecognized past service cost. Any amount over and above that is charged directly to equity (comprehensive income). There are no such requirements in Section 3461.

## Impairments in the Value of Plan Assets

As explained above, an accrued benefit asset arises when an entity's accumulated cash contributions exceed the accumulated pension expense. Conceptually, an accrued benefit asset consists of two components: (a) any surplus in a plan (i.e. an excess of the value of plan assets over the accrued benefit obligation); and (b) the net of all unamortized balances for past service costs, actuarial gains and losses and any transitional asset or transitional obligation.

Pension assets comprised entirely of net unamortized balances present no special problems. Eventually the asset will be eliminated through the normal application of the expensing provisions of the Standard. Pension assets which include a plan surplus, however, are a different matter. In these situations, the employer effectively has set up a receivable from the plan. Because of the possibility that legal and other restrictions may affect the employer's access to plan assets, the Standard requires that any time a surplus is recognized as an asset, it should be reviewed for impairment.

The impairment test consists of three parts:

- ◆ The first step is to isolate the portion of the accrued benefit asset that actually relates to the plan surplus. This is done by reducing the accrued benefit asset by (a) the aggregate of unamortized past service costs, unamortized actuarial losses and any unamortized transitional obligation over (b) the aggregate of unamortized gains and any unamortized transitional asset (see Chapter 11). Section 3461 describes this amount as the "adjusted benefit asset".
- ◆ The second step is to determine the portion of the plan surplus from which the employer can derive benefit. Section 3461 describes this amount as the "expected future benefit". The calculation of the expected future benefit is discussed below.
- ◆ The final step is to compare the expected future benefit with the adjusted benefit asset. If the latter exceeds the former, a valuation allowance is necessary. Allowances and changes to allowances are charged fully to earnings in the periods they arise.

### The expected future benefit

The expected future benefit is the sum of (a) the present value of an employer's expected future annual accruals for service for the current number of active employees, less the present value of required employee contributions and minimum contributions the entity is required to make regardless of any surplus; and (b) the amount of the plan surplus that can be withdrawn in accordance with the existing plan and any applicable laws and regulations.

Component (a) of the expected future benefit recognizes that an employer can benefit from a surplus by reducing or eliminating contributions that it would be obligated to make absent the surplus. The present value of the employer's expected future annual accruals for service represents a measure of this benefit. Accruals are to be determined on a basis consistent with that used to establish the accrued benefit obligation at the measurement date and are discounted using the expected return on plan assets. If administration expenses are paid by the plan, they should be taken into account in determining the expected future benefit.

In calculating component (a) of the expected future benefit, an employer may assume that the current number of active employees and the demographic composition of the employee group stay constant. In other words, the assumption can be made that participants exiting from the plan will be replaced by new employees. However, when an entity has existing plans to make significant reductions in the workforce, the entity must reflect these planned reductions in the number of employees in computing the expected future benefit. The old pension accounting rules (as interpreted in Opinion 1 of the CICA Emerging Issues Committee) did not permit an assumption as to the replacement of employees.

In calculating component (b) of the expected future benefit, an employer includes amounts that it is capable of withdrawing from the plan in the estimated future benefit amount if the employer (i) has a legally enforceable right to withdraw the surplus; and (ii) is not required or does not intend to share the surplus with employees. If withdrawal requires the approval of employees, a regulatory authority or a court, the amount subject to restriction is excluded from the expected future benefit until approval is received, even if there is substantial precedent which indicates that the employer will receive approval.

The Section contains an illustrative example of the impairment test in paragraph .110. Table Three illustrates the calculation of the expected future benefit assuming that the employer is not permitted to withdraw excess assets from the plan.

### Table Three: Calculating the Expected Future Benefit

Company Z has recorded a plan surplus of \$4 million. The discount rate assumed for accounting purposes is 6%. At the most recent measurement date, the present value of accruals for service for each year in the next five years amounts to \$1 million per year. The expected rate of return on plan assets is 8%.

The expected future benefit, assuming the company is not obligated to make contributions to the plan over the next five years, would be as follows:

Year	Expected Accrual for Service	PV at start of Year 1 discounted at 8%
1	\$1,060	\$981
2	1,124	963
3	1,191	945
4	1,262	928
5	1,338	910
		<u>\$4,727</u>

The calculation of the expected future benefit has been limited to the first five years because the accruals for service cost for the period are sufficient to recover the asset.

## Comparison of Pension Accounting Rules under CICA 3460 and CICA 3461

The following table compares the requirements of CICA 3461 with the requirements of the old pension rules in CICA 3460.

	CICA 3460	CICA 3461
Value of plan assets	Market value or market-related value	Fair value or market-related value
Assumptions	Best estimate – explicit approach	Best estimate – explicit approach
Discount rate	Discount rate compatible with other economic assumptions	Current rate on high quality bonds or “settlement rate”
Actuarial methods	Projected benefit method pro-rated on services	Projected benefit method pro-rated on services
Attribution period	Service life of employees	Credited service period
Basic method for attributing benefits to individual years of service	Straight line	Plan formula
Past service costs	Amortize over expected average remaining service life of the employee group (EARSL) or shorter period if appropriate	Amortize an equal amount to each remaining service period up to the full eligibility date of each active employee at the date of the amendment expected to receive benefits
Experience gains and losses on plan assets and changes in actuarial assumptions	Same as past service costs for experience gains and losses; amortize over EARSL for changes in assumptions	Recognition required only if amounts exceed 10% of value of assets or accrued benefit obligation; accelerated recognition permitted



# Postretirement Benefits Other Than Pensions

In this Section we consider accounting for postretirement benefits other than pensions. “OPEB” is the acronym for other post-employment benefits and is used in this Chapter to describe postretirement benefits other than pensions. Probably the most common OPEB plan is a promise to provide health care services. Such services may consist of a promise either to reimburse retirees for their payments for health care services or directly provide the services to them. Other types of OPEB include life insurance, legal and tax services, tuition assistance, day care services and housing assistance.

Section 3461 requires employers to account for OPEB benefits using the accounting model described for pensions in the preceding chapter. However, some OPEB arrangements have unique features which have unique accounting implications. These include:

- ◆ Estimating the cost of providing benefits which depend on factors other than the passage of time, for example health care benefits;
- ◆ Attributing benefits to specific years of service;
- ◆ Accounting for past service costs;
- ◆ Dealing with temporary deviations from the substantive plan; and
- ◆ Accounting for actuarial gains and losses.

These are discussed below.

## Estimating the Cost of Health Care and Similar Benefits

In accounting for pensions, the objective is to determine the benefits that ultimately will be provided to employees during retirement and to allocate that cost to the periods of service during which the benefits are earned. The objective is the same in accounting for health care and similar benefits but the task is more difficult. Unlike pensions, the amount of benefits to be provided to retirees depends on the incidence of claims made by retirees for coverage. Furthermore, OPEB plans often require plan participants to share in the cost of providing the benefits at a rate which may vary over time. These features substantially complicate the estimation process.

Section 3461 provides little guidance about making estimates of future health care and similar types of benefits. It says only that estimates should be based on per capita claims cost by age and type of benefit. The following is a more detailed guide based on the requirements of FAS 106.

### Steps to be followed in estimating benefits

- ◆ Establish a base year “per capita claims cost” of retirees for each year of age after retirement. For example, if retirement occurs after the age of 60, calculate the average health care claims of 61 year-old participants in the base year, the average claims of 62 year-old retirees, and so on.
- ◆ Estimate annual “health care cost trend rates” for each future year through to the last year the youngest current plan participant or dependent is expected to receive benefits. A health care cost trend rate is an assumption about the annual rate of change in the cost of health care benefits currently provided by the health care benefit plan due to factors other than changes in the

composition of the plan population by age and dependency status. An assumption is made for each year from the measurement date until the end of the period in which benefits are expected to be paid.

- ◆ Apply the health care cost trend rates to the per capita claims cost to calculate an “assumed per capita claims cost” for each year of retirement. This represents the estimated cost of providing future benefits to existing participants for each year of retirement. For example, the cost of providing health care benefits at age 70 to an employee who is 45 years old in 1999 would be determined by applying the health care cost trend rates for 1999 through 2024 to the 1999 base year per capita cost for a 70 year-old.
- ◆ Calculate the aggregate cost of the future benefits expected to be provided to employees during their retirement. The amount is typically called “gross eligible charges”.
- ◆ Calculate the employer’s share of the expected future OPEB by reducing the assumed per capita claims cost at each age for benefit coverage provided by government programs or other providers of health care benefits and the effect of cost sharing provisions of the plan and retiree contributions. This is applied to the population of plan participants to produce the “net incurred claims” cost.
- ◆ Discount the net incurred claims cost to the measurement date to produce the “obligation for future benefits” and allocate the obligation for future employee benefits to each year of service in accordance with the basic attribution rules in the Standard described in Chapter 3.

### Per capita claims cost

The per capita claims cost is the current cost of providing postretirement benefits for one year at each age from the youngest to the oldest age at which plan participants are expected to receive benefits under the plan. For example, if the earliest age at which an employee can retire is 60, then per capita claims costs for each year between age 60 and the end of the expected life span of employees should be estimated.

Materiality considerations will influence the level of detail at which base period per capita claims costs need to be developed. It may be necessary to develop a separate per capita claims cost by sex, geographic location, and type of service (e.g. hospital care, physician services, and drugs).

Developing plan participant demographics is an integral part of estimating the cost of providing OPEBs. It will be necessary for employers to accumulate employee and retiree information in categories consistent with their per capita claims cost data. A complete listing of individuals expected to be eligible for benefits under the plan should be accumulated, including active employees expected to become eligible, former employees who are eligible for benefits under the retiree plan, and retirees. Some of this census data may already have been accumulated for purposes of the pension plan, including:

- ◆ Date of birth
- ◆ Sex
- ◆ Date of hire
- ◆ Business unit
- ◆ Hourly/salary employee
- ◆ Marital status and spouse’s date of birth (if spousal coverage is provided)
- ◆ Retirement date
- ◆ Salary (if plan is pay-related)

Data that may be required and that will probably be unique to OPEBs include:

- ◆ Plan option selected
- ◆ Coverage through spouse's or other plan
- ◆ Dependents and date of birth (if dependent coverage is provided)
- ◆ Geographic location of employees and retirees

Some of the OPEB census data may not be available. For example, companies may not have updated information on dependents or their birth dates, or the existence of coverage through a spouse's plan. Depending on the nature and level of OPEB coverage, such data could be significant to the OPEB calculation. If not currently accessible, actuarial estimates of this data should be made.

## Health care cost trend rates

In order to develop future trend rates, an employer begins with an analysis of historical data based on its own experience. If estimates of the assumed per capita claims cost are made for various categories of health care services, for example, hospital care and dental care, separate trend rates would be developed for each such category. This historical analysis typically would be developed from the same source as that used for developing the base period gross per capita claims cost discussed earlier. However, where base period gross per capita claims costs may require the accumulation of only several years of data, in analyzing historical trends employers may find it appropriate to review data for additional years. On the other hand, recent plan changes may reduce the usefulness of historical data.

In some cases, for example where historical data is not available or is not considered reliable or indicative of the plan's expected experience, trend rates can be developed from per capita claims costs of other employers, adjusted to best reflect the terms of the employer's plan and the demographics of the participants.

Section 3461 says that historical data should be adjusted when there is reliable evidence that historical trends will not continue. In developing estimates of future trends, it is important that preliminary estimates be tested against general inflation and productivity estimates to ensure that health care remains logically related to other economic sectors.

Rates of increases in health care costs experienced in the past and estimated to occur in the future will vary from employee to employee within each enterprise and from plan to plan depending upon factors, such as the following:

- ◆ Type of health care coverage offered.
- ◆ Specific categories of services covered.
- ◆ Demographics of the covered group (e.g. age, sex and geographic location).
- ◆ Effectiveness of cost and utilization controls (e.g. contracts with specified providers, catastrophic case management).
- ◆ Employer's own interpretation of historical experience and predicted rates of change in future years' costs.

A number of iterations may be required before the most probable health care trend rate assumptions are identified. These alternative scenarios may vary by the length of time the near term trend pattern is expected to continue and the timing and degree of the grading down to the ultimate trend rate. It may be realistic to assume that, at some point, the trend rate would approach the forecasted general inflation rate.

## Benefit coverage by governmental programs and other providers

In making estimates, the benefit coverage by governmental programs is assumed to continue as provided by the present law and by other providers pursuant to their present terms. Enacted changes in the law or amendments to the plans of other health care providers that will take effect in future periods are taken into account only in those future periods.

## Cost sharing with plan participants

Examples of cost sharing provisions in OPEB plans include:

- ◆ Deductibles – the amount a retiree must pay before the plan assumes payment (e.g. \$200 single/\$500 family);
- ◆ Coinsurance – the amount a retiree must pay on each covered charge (after meeting deductible requirements) (e.g. 20% medical, 50% dental);
- ◆ Annual out-of-pocket maximums – the maximum amount a retiree or his or her family must pay during a single year before the plan pays 100% of covered charges;
- ◆ Lifetime maximums – the maximum amount the plan will pay for any retiree (and dependants, if applicable) over his or her lifetime; and
- ◆ Retiree contributions – the amount contributed by retirees for coverage under the plan (e.g. \$20 a month for coverage under age 65).

For plans involving cost sharing arrangements, a determination must be made as to the level of cost sharing that should be assumed in estimating the level of future benefits expected to be provided to plan participants. This may be difficult because the written plan may not be specific and an employer may have the unrestricted right to change the level of cost sharing. For example, a company may have changed from a non-contributory health care plan ten years ago to a plan in which retirees were required to contribute 5% of the total cost five years ago and 7% of the total cost two years ago. Currently, the company pays 90% and retirees pay 10% of the cost of the program but the company has adopted a policy to increase retiree contributions so that the company pays 80% and retirees pay 20% of costs. The company has achieved increased retiree contributions by increasing monthly contributions from retirees, raising the deductibles and setting lifetime maximum payments. The question is: should the existing cost sharing arrangement or the company's new policy be used in estimating future benefits?

Section 3461 states that a cost sharing policy different from the terms of the written plan should be considered as part of the substantive plan only if:

- ◆ The entity has had a practice of maintaining either (a) a consistent level of cost sharing with its employees; or (b) increasing or reducing its share of the covered benefits through changes in employee contributions toward their benefits, deductibles, co-insurance provisions, out-of-pocket limitations, or some combination; or
- ◆ The entity has the ability, and has communicated to affected employees and their beneficiaries its intent, to institute different cost sharing provisions at a specified time or when certain conditions exist (for example, when health care cost increased a certain level).

An entity's past practice of maintaining a consistent level of cost sharing or increasing or reducing its share of the cost of providing the covered benefits, is not part of the substantive plan when accompanied by offsetting changes in other benefits or compensation or when the entity has incurred significant costs, such as work stoppages, to effect the cost sharing policy. For example, a past practice of increasing retiree contributions annually based on a specified index or formula may appear to indicate that the substance of a plan includes a determinable indexing of the retiree's contributions to the plan. However,

if that past practice is accompanied by identifiable offsetting changes in other benefits or compensation, those offsetting changes would indicate that the substantive plan incorporates the current level of cost sharing provisions. Therefore, future increases or decreases in the cost sharing provisions would not be incorporated in estimates.

Further, an employer's communication of intent to institute different cost sharing provisions should not be regarded as part of the substantive plan when employees are unwilling to accept the change, thereby creating the potential for adverse consequences to the entity's operations, or when some compensation, including other modifications to plan benefits, is required in order to get the employee's acceptance.

Changes in terms of other plan provisions, such as those that alter the type of benefits covered by the plan or the eligible participants, should not be anticipated in estimating benefits. For example, an employer may have an established practice of limiting its annual increase in the cost of retiree health coverage to 5%, accomplished by various methods, including limiting hospital room coverage costs, eliminating surgical benefits for certain procedures, reducing dependant coverage, and changing cost sharing provisions of the plan. The ability of the employer to maintain this level of cost increase in the future through these means is not reasonably predictable because reductions in coverage and eligible participants cannot be made indefinitely. Therefore, in calculating the OPEB obligation, a presumption could not be made that the annual increase in the employer's cost of providing health care coverage would always be limited to 5%.

## Attributing Benefits to Employee Service

### The attribution period

As with pensions, an employer will recognize the cost of providing OPEB to an employee over the attribution period. The attribution period begins on the date of hire unless the plan formula grants credit for service after this date, and ends on the "full eligibility date", the date on which an employee has rendered all of the service necessary to receive all of the benefits expected to be received by that employee.

While the attribution period for pensions typically starts at the date of hire or shortly thereafter, this may not be the case for OPEB. For example, if a plan provides benefit coverage to employees who render at least 20 years of service after age 35, the expected cost of providing OPEB will be attributed to the participant's first 20 years of service after age 35 or after the date of hire if later than 35. However, if the credited service period is insignificant in relation to years of service, the Standard requires that the attribution period start on the date of hire.

In some cases, the plan formula will not specify the date on which it begins to grant credit for service and it therefore will be necessary to use the date of hire as the basis for attributing benefits. For example, assume an employer modifies the eligibility requirements by changing the plan's credited service period from 25 years of service after age 40 to 15 years of service after both (a) reaching age 50; and (b) rendering 10 years of service. Before the modification, the attribution period would start at age 40 for employees hired before the age of 40. After the modification, the attribution period would start on the date of hire because the plan, as amended, no longer defines the particular period of service to which benefits may be attributed. It grants credit for 10 years of service before age 50 and those years of service are not defined. The effect is to lengthen the attribution period for employees hired before the age of 40.

In contrast to the pension accounting rules, plan terms that provide incremental benefits because of the way benefits are measured extend the attribution period unless those benefits are insignificant. To illustrate, assume an employee is eligible for postretirement life insurance benefits after rendering 10 years of service and attaining age 55, but the amount of insurance benefits earned under the plan are based on final salary at retirement. The employee is expected to retire at age 62. Even though an employee has met the age and service requirements at age 55, the full eligibility date is not reached until age 62 since the employee effectively earns additional benefits under the plan for each year for salary increases until retirement.

## Attribution to specific years and service to date

The rules for attributing the expected cost of benefits to specific years of service are the same for OPEB as for pensions: use the plan formula unless it is not possible to attribute benefits this way or the formula attributes significantly more benefits to later years of service than earlier years. In cases where the plan formula cannot be used, the expected cost should be allocated to individual years on the straight line basis.

For many postretirement health care plans it is particularly difficult to attribute benefits to years of service following the plan formula. Plan terms may be ambiguous and quite difficult to apply at dates between the start and end of the attribution period. Nevertheless, Section 3461 imposes a positive obligation on employers to determine whether benefits can be attributed using the plan formula.

**Observation.** *FAS 106 requires that benefits should be allocated on a straight line method irrespective of the plan formula. (The sole exception is for plans which attribute a disproportionate share of the benefits expected to be provided to an employee's early years of service; for these plans, the plan formula must be followed). A straight line method was introduced primarily to eliminate the complexity that comes from using the benefit formula.*

## Past Service Cost

Under Section 3461, past service costs are accounted for in the same way as for pensions, i.e. if an employer amends benefits, the past service cost is the increase in the accrued benefit obligation relating to past service. Amendments affecting future service are included in the calculation of current service cost and thus do not affect the calculation of past service cost. As explained below, this differs from the requirements of FAS 106.

**Observation.** *Under FAS 106, if an employer improves benefits relating to future service, the effect of the improvement on a plan participant must be attributed to each year of service in that plan participant's attribution period, including years of service already rendered by the participant. Increases in future benefits, therefore, automatically result in past service cost. If a plan is initiated that grants benefits solely in exchange for employee service after the date of the plan initiation or a future date, no portion of the obligation is attributed to prior service because, in that case, the credited service period for the current employees who are expected to receive benefits under the plan begins at the date of the plan initiation or future date.*

## Temporary Deviations from the Substantive Plan

Section 3461 contains provisions which generally are not applicable to pension plans under which an employer temporarily deviates from the provisions of the substantive plan to increase or decrease benefits related to past or current periods. For example, some OPEB plans include terms (either written or substantive) that provide for shortfalls resulting from benefit payments in excess of the employer's share of incurred claims cost and participant contributions to be recovered through the subsequent years' participant contributions, i.e. a retrospective adjustment. If an employer forgives a retrospective charge on a one-time basis, that decision is required to be recognized as a current period loss rather than deferred and amortized. If the change is other than temporary, for example, if facts and circumstances indicate that the employer has made a decision to continue to bear the shortfall in future years as well, the effect of the change on the accumulated benefit obligation would be calculated and accounted for as a plan amendment.

## Actuarial Gains and Losses

Under Section 3461 actuarial gains and losses may be recognized immediately in income. If an employer follows this approach in accounting for OPEB, the following special rules apply:

- ◆ Any gain that does not offset a loss previously recognized in income is applied to reduce any unamortized transitional obligation; and
- ◆ Any loss that does not offset a gain previously recognized in income is applied to reduce any transitional asset.

Transitional assets and obligations are discussed in Chapter 11. The above treatment ensures the underlying accrued benefit obligation is recognized in the financial statements before the corresponding gains and losses are reflected in income.



# Post-employment Benefits and Compensated Absences

Post-employment benefits are defined in Section 3461 as benefits expected to be provided to employees after employment but before retirement. Examples of post-employment benefits include long- and short-term disability income benefits, including workers' compensation; severance benefits (see Chapter 7); salary continuation; supplemental unemployment benefits; job training and counselling; and continuation of benefits such as health care benefits and life insurance.

Compensated absences represent benefits provided for temporary absences which are not considered as part of active employment. Examples include parental leave, disability benefits, and vacation days or occasional sick days that vest or accumulate beyond 12 months of the period in which they are earned. Sabbaticals, which provide unrestricted time off for past service, qualify as compensated absences. However, sabbaticals granted only for an employee to perform research or public service to enhance the reputation of the employer, or otherwise benefit the entity, do not.

## Recognition and Measurement

Accounting for post-employment benefits and compensated absences depends on whether the benefits "vest or accumulate". Briefly, a benefit vests if the employee has the right to receive the benefit on leaving employment. A benefit accumulates if the employee has the right to carry the benefit forward and use it in future periods (see further discussion about the meaning of vest or accumulate below).

### Benefits which vest or accumulate

If a benefit vests or accumulates, the basic model described in Chapter 3 applies, i.e. the expected cost of providing the benefits is accrued as employees earn their entitlement to the benefits. The sole exception is for sick day benefits which accumulate but do not vest. For practical reasons, the Standard permits employers to account for these benefits in the same way as benefits which do not vest or accumulate.

All features of the basic model apply, namely:

- ◆ The amount to be accrued is based on the benefits expected to be provided, discounted at a current settlement rate or current market rate on high quality bonds. For this purpose, benefits expected to be provided are those where payment of the benefit is probable and the amount can be reasonably estimated.
- ◆ Expected benefits are accrued over the "attribution period". Generally, accrual of the expected cost of vesting or accumulating benefits will begin on the date the plan starts to grant credit for service. Accrual will end on the expected date of the event giving rise to the payment. For example, the expected cost of providing sabbaticals for unrestricted time off, which an employee earns by providing six years of service, would be accrued over the six year service period.
- ◆ The special rules for the delayed recognition of past service costs and actuarial gains and losses apply. If an employer elects to recognize actuarial gains and losses in income immediately, any gain that does not offset a loss previously recognized is first applied to reduce any unamortized

transitional obligation and any loss that does not offset a gain previously recognized is first applied to reduce any unamortized transitional asset. Transitional assets and obligations are discussed in Chapter 11.

## Benefits which do not vest or accumulate

If a benefit does not vest or accumulate, the expected cost of providing benefits is charged to expense in full when the event occurs that obligates the entity to provide benefits. For example, benefits provided to employees in the event of an accident would be accrued when the accident occurs. It is not permissible to accrue the expected cost over employees' service lives, even if it is probable that some benefits will be paid and the amount can be reasonably estimated.

Other than the timing of recognition, the basic accounting model set out in Chapter 3 applies except for the following:

- ◆ As a practical matter, we believe that the expected cost does not need to be discounted in situations where benefits will be paid shortly after the obligating event occurs.
- ◆ Section 3461 requires that changes in estimates (i.e. actuarial gains and losses) be recognized either in the period in which they arise or amortized over the period linked to the type of benefit. Deferring recognition of changes on the basis that they are expected to offset over time (i.e. the corridor approach) is not permitted. Once a method of recognizing actuarial gains and losses is adopted, it must be applied consistently from year to year. If actuarial gains and losses are recognized in income immediately, it is necessary to first reduce the transitional asset or obligation to the extent they do not offset previously recorded actuarial gains and losses.

## Meaning of "Vest" or "Accumulate"

Technically, an employee future benefit vests if, after a specific or determinable date, the entitlement ceases to be conditional on an employee remaining in the service of an entity. In other words, the employee is entitled to receive the benefit regardless of which party initiates the action that leads to termination of employment. For example, a plan which provides employees with the right to a benefit for unused vacation days, if the employee decides to leave employment, is a plan which vests benefits.

An employee future benefit accumulates if the right to the benefit is earned but unused and may be carried forward to one or more periods subsequent to the date in which they are earned, even though there may be a limit to the amount earned. Generally, benefits that accumulate are any benefits that vary with additional employee service. For example, if a ten year employee receives a larger benefit than a nine year employee, and that employee has a larger benefit than an eight year employee, the benefit accumulates. However, benefits based strictly on compensation levels do not accumulate. For instance, if a five year employee earning \$50,000 would receive the same benefit as a three year employee who also earns \$50,000, there is no accumulating benefit.

In determining whether a benefit accumulates, it is not important that the increase in benefits results from an unused benefit that is carried forward. Not all accumulating benefits are unused in the sense that employees had a right to receive a benefit but did not take it. An example would be sabbatical leaves, which are required to be accrued over the period the employee earns the benefit if the leave is granted to provide unrestricted time off for past service. An employee who must work six years to take a one year sabbatical does not have the right to take a two month sabbatical after working one year. Thus, although the required accrual after one year of service might be measured as one-sixth of the cost of a 12 month sabbatical, it does not represent an unused benefit (a two month sabbatical) that is being carried forward to a subsequent year.

It is also not important that benefits increase more than once, i.e. in a series of increments as more years of service are rendered, to qualify as an accumulating benefit. The important thing is that there must be an increase in benefits due to the length of service. That increase could only occur once. For example, the incremental benefit could occur only after a stated minimum service period (e.g. after five years of service, there is a 10% increase in present benefit) without any further increases for additional year of service.

Some plans may contain eligibility criteria expressed in terms of years of service. Eligibility criteria do not result in an accumulating benefit. For example, if an employee is eligible for a flat severance benefit after five years of service, the benefit does not accumulate because it does not increase with each additional year of service.

**Observation.** *FAS 43, Accounting for Compensated Absences, and FAS 112, Employers' Accounting for Post-employment Benefits, do not provide specific guidance regarding measuring obligations for post-employment benefits and compensated absences. FAS 112, however, states that to the extent that similar issues apply to post-employment benefits, employers may refer to Statements 87 and 106 for guidance in measuring their obligations. As neither FAS 43 nor FAS 112 require employers to follow the guidance in FAS 87 and FAS 106, other methodologies that reasonably estimate the obligation can be used. In particular, it is not obligatory to discount expected benefits.*

*The SEC have stated that the guidance in FAS 87 and 106, including the guidance on discounting, should be referred to only when measuring accumulating post-employment benefits. In addition, Staff Accounting Bulletin 92, Accounting and Disclosures Relating to Loss Contingencies, should be used for guidance relating to discounting non-accumulating benefits. SAB 92 calls for the use of a settlement rate, i.e. a rate that would result in an amount that could be paid currently to settle the liability, or a risk free rate (i.e. a rate that reflects no risk of default) if a settlement rate is not readily determinable). The risk free rate would be a lower rate than the rate on high quality investments in debt securities permitted in FAS 87, FAS 106 and Section 3461. Finally, accounting for non-accumulating benefits should not utilize the FAS 87 and FAS 106 methodologies that allow for deferral of prior service costs and gains and losses.*



# Settlements and Curtailments

One of the essential features of the CICA 3461 model is the delayed recognition of actuarial gains and losses and the cost of plan amendments (and transition amounts – see Chapter 11) for pension, OPEB, and other plans. For example, gains and losses arising from the difference between actual and expected rate of return on pension plan assets are not required to be recognized unless they exceed a certain size. The cost of amending plans is amortized over time rather than recognized in earnings in full in the period of the amendment.

The Standard limits the application of the delayed recognition concept by requiring the immediate recognition in earnings of unrecognized amounts when obligations are settled or a curtailment occurs (i.e. an event takes place which significantly reduces the expected years of future service of present employees or eliminates the accrual of defined benefits for some or all of their future services). In these circumstances, the basic presumption which justifies delayed recognition – that the plan will continue indefinitely in the future – has been eliminated.

## Settlements

A settlement is an irrevocable action relieving the employer (or plan) of primary responsibility for a benefit obligation so that the employer (or plan) has eliminated the risks related to the obligation. Section 3461 views settlement of all or a portion of an employer's accrued benefit obligation as the final realization of past actuarial gains and losses associated with the settled obligation because of the elimination of this risk.

Settlements typically are achieved by making direct cash payments to employees or purchasing insurance contracts where the insurer assumes the unconditional obligation to provide benefits to plan participants.

### Full and partial settlements

An accrued benefit obligation may be either fully or partially settled. A full settlement occurs when the entire accrued benefit obligation is irrevocably settled.

A partial settlement occurs when the employer has settled the full amount of its obligations with respect to some of the plan's participants. For example, an employer may settle its accrued benefit obligation for existing retirees, but not active employees. Alternatively, an employer may settle the full amount of the portion of the accrued benefit obligation which is vested. A partial settlement does not occur if only a portion of the payment obligations for all plan participants is satisfied because the employer remains liable for the balance of the payments. For instance, it would not be appropriate to apply settlement accounting if an employer purchases limited term annuities that pay only a portion of a participant's pension benefits.

### Remeasurement of plan assets and the accrued benefit obligation

Section 3461 requires that the accrued benefit obligation and plan assets be remeasured immediately before giving effect to settlement accounting. The accrued benefit obligation is adjusted to reflect the current settlement rate and plan assets are adjusted to their then fair value. Other assumptions are revised as appropriate. The resulting adjustment (i.e. the increase or decrease in the accrued benefit obligation and plan assets) is included in the unrecognized actuarial gain or loss and factored into the calculation of the gain or loss on the settlement as discussed below.

## Gain or loss recognition on settlements

In a full settlement, the employer recognizes the following amounts as a gain or loss in the period of the settlement:

- ◆ Any unamortized actuarial gain or loss immediately before the remeasurement discussed above;
- ◆ Any gain or loss arising from remeasuring the accrued benefit obligation using the current settlement rate and plan assets at their current fair value; and
- ◆ Any unamortized transitional asset at the date of settlement – such amounts are deemed to represent an actuarial gain or loss. Transitional assets are discussed in Chapter 11.

In a partial settlement, an employer recognizes a pro rata portion of each of the amounts included in a full settlement based on the percentage reduction in the accrued benefit obligation. Section 3461 contains an example of partial settlement accounting as part of paragraph .126. An additional example is set out in Table Five.

### Table Five: Accounting for a Partial Settlement

Company Y sponsors a final-pay non-contributory defined benefit plan. On December 31, 2003, the plan settled the vested benefit portion of the accrued benefit obligation through the purchase of non-participating annuity contracts at a cost of \$1,500. As a result, Company Y recognized a gain of \$330, determined as follows:

	Before Settlement <sup>(1)</sup>	Effect of Settlement	After Settlement
Accrued benefit obligation	\$(2,500)	\$1,500 <sup>(2)</sup>	\$(1,000)
Plan assets at fair value	2,750	(1,500)	1,250
Unamortized past service cost	200	--	200
Unamortized transitional asset	(300)	180 <sup>(3)</sup>	(120)
Unamortized net actuarial gain subsequent to transition	(250)	150 <sup>(4)</sup>	(100)
Accrued benefit (obligation)/asset	\$(100)	\$330	\$230

(1) The “before settlement” balances include the effect of remeasuring the accrued benefit obligation and the plan assets using current assumptions.

(2) The accrued benefit obligation was reduced by \$1,500 which represents 60% of the total obligation.

(3) 60% of \$300.

(4) 60% of \$250.

Unrecognized past service cost does not enter into the calculation of the gain or loss on settlement. The assumption underlying the delayed recognition of past service cost – that the employer receives future economic benefits from plan amendments – is unaffected by the decision to transfer payment responsibilities and risks for all, or a portion of, the accrued benefit obligation to a third party.

Section 3461 does not require (but permits) recognition of a settlement gain or loss if the cost of all settlements in the year equals or is less than the sum of current service cost and interest cost on the accrued benefit obligation for that plan for the year. If an employer elects not to recognize the settlement in income, payments made to effect the settlement should be treated as benefit payments. Adjustments relating to the employer’s obligation effectively would be treated as actuarial gains and losses. The approach followed by an employer must be consistently applied from year to year.

Generally, gains or losses from settlements are recognized in earnings when they occur. However, for settlements of obligations other than pension plans, any settlement gain is applied first to eliminate any

unrecognized transitional obligation with any excess being recorded in earnings. This treatment ensures that an employer does not recognize a gain from remeasuring an accrued benefit obligation before that obligation has been recognized in the accounts. The transitional obligation relating to a pension plan is assumed to be an unamortized past service cost and thus does not affect the amount to be recognized.

## Use of insurance contracts to effect settlements

Often obligations are settled through the purchase of insurance contracts such as annuities. An insurance contract is defined as a policy in which an insurance enterprise assumes an unconditional legal obligation to provide specified benefits to specific individuals in return for a fixed consideration or premium.

The transfer of risk under an insurance contract must be irrevocable before settlement accounting can occur. For example, it would not be appropriate to recognize a settlement when an employee purchases annuity contracts that can be rescinded if regulatory approval for the termination of the plan is not obtained.

If an insurance enterprise is a captive insurer (i.e. does business primarily with the employer and related parties) or if there is any reasonable doubt that the insurance enterprise will meet its obligations under the policy, the policy is not considered an insurance contract. If an arrangement does not qualify as an insurance contract, it is included as part of the assets of the plan and accounting for the employer's obligation to provide benefits is unaffected by the transaction.

## Participating insurance contracts

A participating insurance contract is one in which the purchaser participates, by way of dividends, in the insurer's experience subsequent to purchasing the contract. The participation may relate to a return on investment better or worse than anticipated, or to mortality or other actuarial experience deviating from expectations. Thus, the purchaser is still exposed, to some degree, to the same risks and rewards related to future experience that existed prior to purchasing the contract.

If the substance of the participating contract causes the employer (or plan) to remain subject to most or all of the risks and rewards associated with the pension benefit obligation or plan assets used to purchase the annuity contract, the purchase of the participating annuity does not constitute a settlement. However, if the purchaser of a participating contract does not retain significant risk, a settlement has occurred. The cost of the participation right, which is measured as the difference between the cost of the participating annuity contract and a non-participating annuity contract providing the same benefit value, represents a plan investment rather than part of the cost of settling the obligation. Dividends on the annuity contract are included in the return on plan assets.

**Observation.** *Because the employer is still at risk for the participation right, FAS 88, Employers' Accounting for Settlements and Curtailments of Defined Benefit Pension Plans and for Termination Benefits, requires that an unrecognized net gain (but not an unrecognized net loss) first be reduced by the cost of the participation right before calculating and recognizing a settlement gain or loss. There is no such requirement in Section 3461.*

No quantitative criteria are provided for assessing the qualification of a participating annuity contract for settlement accounting. However, if the value of the participation right exceeds 10% of the premium that would have been paid if the same obligation was settled by a non-participating annuity contract, we believe that the significant risks and rewards associated with the benefit obligation generally will not have been transferred. Such transactions should be accounted for as plan investments in their entirety.

## Withdrawals of excess assets from a plan

The withdrawal of excess assets from a plan by an employer does not constitute a settlement. Instead, the transaction should be accounted for as a negative plan contribution, i.e. the employer should record a debit to cash and a credit to the accrued benefit asset or liability.

## Curtailments

A curtailment is an event that will significantly reduce the expected years of future service of present employees covered by the plan (e.g. a reduction in the work force from a reduction in operations) or eliminates for a significant number of employees the accrual of defined benefits for some or all of their future services (e.g. a plan termination or suspension).

Judgment will be required in determining what constitutes a significant portion of the expected years of future service and a significant number of employees. Section 3461 does not provide quantitative guidelines. Absent other considerations, we believe that a 10% or greater reduction would be significant while a reduction of 5% or less would not. Reductions between 5% and 10% should be evaluated based on specific facts and circumstances. Whatever quantitative threshold is determined to be significant, such a practice should be followed on all subsequent curtailments with similar circumstances. The significance determination is based on plan related employee information, not on the potential impact of the event on the income statement.

A curtailment does not have to involve a permanent reduction in the number of employees or a permanent suspension of benefits. So long as the basic criteria are satisfied, temporary layoffs of employees or temporary suspensions of benefit plans qualify as curtailments.

A curtailment does not occur if an employer terminates a plan, settles its obligations, withdraws excess assets and establishes a successor benefit plan that provides defined benefits. The substance of these types of arrangements would be viewed as a settlement only. If the successor plan establishes a different plan formula, a plan amendment or negative amendment has occurred, but not a curtailment.

## Gain or loss on curtailment

The gain or loss to be recognized in respect of a curtailment is the sum of two elements:

- ◆ A pro rata portion of unamortized past service costs associated with the years of service no longer expected to be rendered; and
- ◆ The change in the amount of the accrued benefit obligation arising because of the curtailment, adjusted for gains and losses whose recognition has been deferred for accounting purposes (i.e. unamortized actuarial gains and losses).

It is the combined effect of these two elements – the net gain or loss – that dictates the timing of recognition. A net curtailment loss is recorded when it is probable that a curtailment will occur and the effect of the curtailment is reasonably estimatable. A net curtailment gain is deferred until realized (e.g. until the terminations have occurred). If an employer cannot unilaterally terminate its plan because regulatory approval is required, the net gain should be recognized when approval is received rather than when the amendment is adopted.

## Past service cost

The unrecognized past service cost included in a curtailment gain or loss is determined by applying the percentage reduction in the service lives of employees as the result of the curtailment to the unamortized past service cost at the date of the curtailment. The percentage is calculated by dividing (a) the reduction

in the remaining expected years of service to the full eligibility date of employees affected by the curtailment by (b) the expected years of future service of all participants active at the date of the plan amendment giving rise to the past service cost and expected to receive benefits under the plan. The calculation is performed separately for each plan amendment for which there is an unamortized cost.

Section 3461 provides that an entity may use the percentage reduction in the accrued benefit obligation to simplify the calculation of the pro rata portion of the curtailment loss or when sufficient data is not available to determine the amortization period at the date as of which the transitional obligation or asset was determined.

Any unamortized transitional obligation at the curtailment date is deemed to be an unamortized past service cost for the purpose of calculating a gain or loss on curtailment.

## Change in the accrued benefit obligation

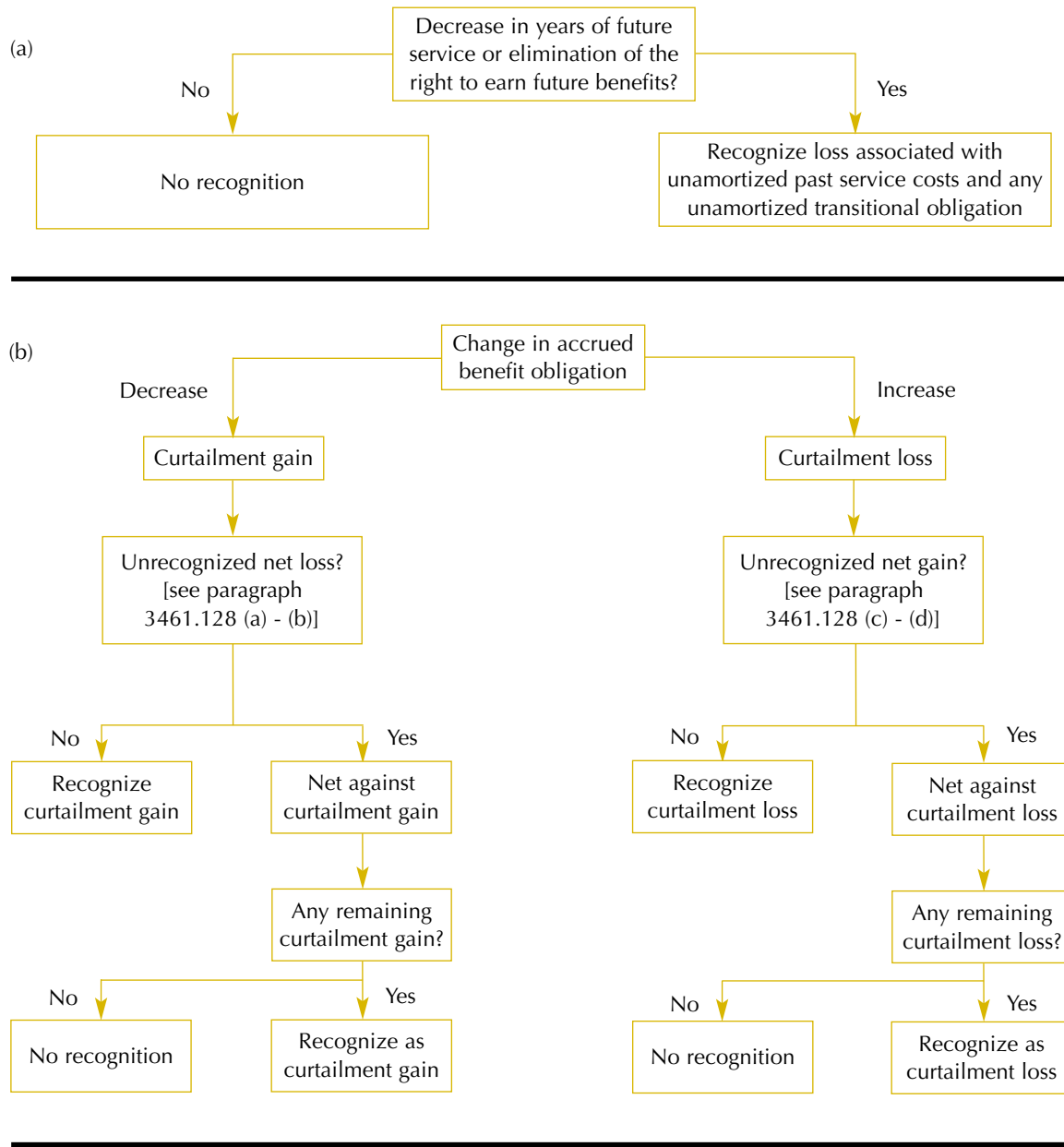
A curtailment may cause the accumulated benefit obligation to decrease (a gain) or increase (a loss). For example, an obligation based on employees' projected final compensation levels normally will be reduced if employees' active services are terminated earlier than expected. On the other hand, if employees' services are terminated, acceptance of early retirement benefits provided by the plan may act to increase the accrued benefit obligation. The remeasurement of the accrued benefit obligation will reflect the net effect on the accrued benefit obligation of both reductions and increases, if applicable.

The treatment of the change in the accrued benefit obligation depends on whether the accrued benefit obligation declines or increases:

- ◆ If the curtailment causes the accrued benefit obligation to decline, the gain is netted against any unrecognized net loss and any excess is a curtailment gain. If an unrecognized net gain (including any remaining unamortized transition asset) exists, the entire decline in the accrued benefit obligation is included in the calculation.
- ◆ If the curtailment causes the accrued benefit obligation to increase, the loss is netted against any unrecognized net gain of the plan (including any remaining unamortized transition asset) and any excess is a curtailment loss. If an unrecognized net loss exists for the plan in the aggregate, the increase in the accrued benefit obligation is included in the calculation of the curtailment gain or loss.

A decision tree outlining the steps that need to be followed in calculating the gain or loss on curtailment is set out in Table Six. An illustrative example of the accounting for a curtailment is included in paragraph .133 of the Section. An additional example follows in Table Seven.

**Table Six: Recognition of the Effects of a Curtailment**



The total amount of curtailment gain (loss) recognized is the sum of the amount from part (a) and the amount from part (b).

### Table Seven: Accounting for a Curtailment

At December 31, 2006, the management of Company G decides to reduce significantly the operations of a line of business products. Although the decision did not result in closing down facilities, it required the termination of a significant number of employees. The terminated employee's portion of the non-vested benefit obligation and the effects of projected future salary increases benefit obligation is \$100 and \$300, respectively. The result is a \$175 curtailment gain, determined as follows:

	Before Curtailment	Effect of Curtailment	After Curtailment
Accrued benefit obligation:			
♦ Vested benefit obligation	\$(1,700)	\$--	\$(1,700)
♦ Non-vested benefit obligation	(500)	100	(400)
♦ Effects of projected future salary increases benefit obligation	(950)	300	(650)
	(3,150)	400	(2,750)
Plan assets at fair value	2,550	--	2,550
Unamortized transitional asset	(60)	--	(60)
Unamortized net actuarial loss subsequent to transition	225	(225)	0
Accrued benefit asset	\$(435)	\$175	\$(260)

## Settlements and Curtailments Combined

When a related series of transactions involves both a partial settlement and a curtailment, the settlement gain or loss to be recognized will differ depending on the order of applying settlement and curtailment accounting. This is because the pro rata factor for settlement gain or loss recognition is based upon the accrued benefit obligation settled. For example, assume the accrued benefit obligation before effecting settlement and curtailment accounting is \$2 million, the curtailment causes a \$0.2 million reduction in the accrued benefit obligation and accrued benefits of \$1.2 million are settled. If curtailment accounting is applied first, the accrued benefit obligation would decline to \$1.8 million and 67% (calculated as \$1.2 million divided by \$1.8 million) of any net gain or loss would be recognized on settlement. If the settlement is applied first, 60% (calculated as \$1.2 million divided by \$2 million) of any net gain or loss would be recognized.

Assume the company had a \$150,000 net actuarial gain and a \$300,000 unamortized net asset at transition. The curtailment gain would be \$200,000 in either case but the settlement gain would be \$300,000 (calculated as 67% of the sum of \$300,000 plus \$150,000) if the curtailment were recorded first and \$270,000 (calculated as 60% of the previous sum) if the settlement were recorded first.

Section 3461 does not specify the order of recording curtailment and settlement events. When both a settlement and a curtailment occur, the employer decides which of these events to account for first and applies the same sequence in the future in similar situations.



# Termination Benefits

Termination benefits may take various forms, including lump sum payments, periodic future payments (e.g. through enhanced retirement benefits), or both. They may be paid directly by the employer, from an existing benefit plan or a new benefit plan or a combination of each of these sources. Generally, termination benefits qualify as post-employment benefits and are accounted for in accordance with the rules for these benefits (see Chapter 5). However, Section 3461 provides specific guidance for two types of termination benefits:

- ◆ Contractual termination benefits – benefits required to be provided to employees when a specified event such as a plant closing occurs; and
- ◆ Special termination benefits – benefits that are not contractual termination benefits and that are offered to employees for a short period of time, normally not exceeding 12 months, in exchange for an employee’s voluntary or involuntary termination of employment. Special termination benefits are “one time” benefits, i.e. they are provided at the discretion of management rather than pursuant to a pre-existing defined benefit plan.

## Contractual Termination Benefits

The cost of providing contractual termination benefits is accrued only when it is probable that employees will be entitled to benefits and a reasonable estimate can be made of the amount involved. Typically, this will be at the date management makes the decision to cause the event which causes the obligation to provide the benefits (e.g. a plant closing).

## Special Termination Benefits

The accounting for special termination benefits depends on whether the terminations are voluntary or involuntary. If terminations are involuntary, an accrual for the expected cost should be made only when all of the following conditions have been satisfied:

- ◆ Management having the appropriate level of authority approves and commits the entity to a plan of termination and establishes the benefits that employees will receive upon their termination of employment. In the case of large work force reduction, the approval of the Board of Directors may be necessary before an accrual can be made;
- ◆ The benefit arrangement is communicated to employees in sufficient detail to enable them to determine the type and amount of benefits they will receive when their employment is terminated;
- ◆ The plan of termination specifically identifies the target level of reduction in the number of employees, the job classifications or functions and their locations; and
- ◆ The period of time to complete the plan of termination indicates that significant changes to the plan of termination are not likely.

If termination is voluntary, the benefits should be accrued only when employees accept the offer, assuming the amounts can be reasonably estimated.

## Benefits Other than Contractual or Special Termination Benefits

Termination benefits other than contractual or special termination benefits (e.g. severance) are accounted for as post-employment benefits. If benefits vest or accumulate, the benefits expected to be paid are accrued as employees earn their entitlement to the benefits. If benefits do not vest or accumulate, the benefits are accrued when the event occurs which obligates the entity to provide the benefits (e.g. the employer decides to reduce staff levels).

If a plan exists to provide vested benefits, the accrual should take into consideration factors such as the employee's expected length of service, future compensation levels and rates of forfeiture (i.e. rate of which employees leave employment before benefits vest).

If a plan exists to provide non-vesting, accumulating severance benefits, the accounting will depend on whether the employer actually expects to make payments, i.e. whether payment of the benefits is probable and the amount can be reasonably estimated. Typically, employers will fall into one of three categories:

- ◆ Severance benefits occur from time to time and are not probable and reasonably estimatable. In this instance, no recognition is required until some event occurs which makes payment both probable and reasonably estimatable.
- ◆ Minimum levels of severance can be predicted with reasonable accuracy. If the severance benefits vary with additional service, they should be accrued over the related service period. Severance arising from unusual events (e.g. from a restructuring) would be accrued when probable and reasonably estimatable.
- ◆ Some very large companies may have so many work locations that the natural evolution of their businesses results in a reasonably predictable pattern of workforce reductions, e.g. through small reorganizations, plant shutdowns and other actions. In some situations, overall severance costs could be considered to be probable of payment and reasonably estimatable even though a decision has not been made to take any action which results in a workforce reduction. In such circumstances, severance benefits should be accrued over employee service periods.

## Combined Termination Plans

Often special termination benefits are offered in conjunction with other termination plans. For accounting purposes, it will be necessary to apportion the cost between the two types of plans because of the different recognition criteria for these plans.

For example, assume an entity adopts a plan to effect a 15% reduction in workforce by (a) offering special termination benefits (deferred payments with a present value of \$10,000 to each employee) for a period of 60 days to certain employees who elect early retirement; and (b) terminating, at the end of 90 days, sufficient employees to achieve the planned reduction (\$8,000 lump sum per terminated employee payable pursuant to an existing defined benefit plan). Because it is clear that the employer has incurred a minimum liability at the date it commits to effect the staff reduction program, a minimum liability of \$8,000 per employee termination planned should be recorded at the decision date. An incremental \$2,000 per employee should be recognized when employees accept the offer.

The decision to reduce staff levels may result in the recognition by an employer of an expense for special termination benefits and a curtailment loss or gain. For accounting purposes, the special termination

benefits and the curtailment should be accounted for separately. The cost of voluntary special termination benefits is recognized only when employees accept the offer; a loss from a curtailment is recognized when it is probable and a gain is recognized when the curtailment occurs.

## Cost of Termination Benefits

The cost of providing termination benefits will equal the amount of any lump sum payments at termination plus the present value of expected future payments.

If an employee accepts an offer for special termination benefits through a pension or OPEB plan, the cost is measured as the difference in the accrued benefit obligation with and without consideration of those benefits.



# Defined Contribution Plans

An employer's obligation to provide benefits in a defined contribution plan is limited to the amount required to be contributed each period under the plan. As a result, the accounting for contribution plans generally is far easier than accounting for defined benefit plans – the contributions required for any period are charged to expense in that period. Section 3461 provides guidance on the following special situations.

## Contributions Required in Future Periods

If the plan requires an employer to make a defined contribution in a future period in exchange for current services, an expense and a liability for the future contribution should be recognized in the period in which the services are provided. The amount to be recognized is the present value of the contribution discounted at a current interest rate as determined for defined benefit plans. Discounting is not required if the contribution is to be paid within 12 months. Thereafter, interest would be accrued on the unpaid amount.

## Past Service Costs

Contributions required in respect of past service when a plan is initiated or amended should be recognized in a rational and systematic manner over the period during which the entity expects to realize the economic benefits from the plan initiation or amendment. This period may be the average remaining service period of active employees or a shorter period, depending on the circumstances. For example, when an entity negotiates its union contracts every three years and usually agrees to changes in benefit entitlements, it may be appropriate to amortize the resulting past service costs over three years.

## Interest Income on Plan Surplus

If an entity converts a defined benefit plan to a defined contribution plan, some plan assets may not be allocated to specific employees. Interest earned on any unallocated surplus should be deducted in determining the expense for the defined contribution plan for the period. Any surplus recognized as an asset by the employer would be subject to the impairment test described for accrued benefit assets recognized for defined benefit plans.



# Other Matters

In this Chapter, we consider the following miscellaneous matters relating to accounting for benefit plans:

- ◆ Entities with two or more plans
- ◆ Multiemployer plans
- ◆ Multiple-Employer plans
- ◆ Interim reporting – defined benefit pension and OPEB plans
- ◆ Business combinations
- ◆ Discontinued operations and disposal of a portion of a business segment

## Entities with Two or More Plans

### Combining for measurement purposes

For entities with two or more defined benefit plans, the measurement of these plans depends on whether the plans are funded or unfunded. A funded plan is one in which the employer sets aside assets to pay benefit costs as they become due. The assets are set aside in a separate legal entity, generally a trust, and the employer cannot use these assets for its own purposes. When benefits become payable to employees, they are paid directly from the trust. An unfunded plan is one in which the employer pays all of the costs of benefits directly to employees, their beneficiaries or their estate, or to a third party service provider on behalf of the employees, as the amounts become due.

Funded plans are to be measured separately. Unfunded plans may be aggregated for measurement purposes only if (a) they provide different benefits to the same group of employees and their beneficiaries; or (b) they provide the same benefits to different groups of employees and their beneficiaries.

### Offsetting accrued benefit assets and accrued benefit liabilities in the balance sheet

An accrued benefit asset of one plan may be offset against an accrued benefit liability of another plan only if the employer (a) has the right to use the assets of one plan to pay for the benefits to be provided to the other plan; and (b) intends to exercise that right.

## Multiemployer Benefit Plans

These are defined benefit plans to which two or more unrelated entities contribute, usually pursuant to one or more collective bargaining agreements. Unrelated parties are those that do not meet the definition of related parties in Handbook Section 3840.

Typically, multiemployer plans have the following characteristics:

- ◆ Assets contributed are not segregated by contributor in a separate account or restricted to provide benefits only to employees of the contributor;
- ◆ Participating entities usually have a common industry bond or at least the same labour union; and

- ◆ The plan usually is administered by a board of trustees composed of management and labour representatives.

Multiemployer plans should be accounted for as defined contribution plans unless sufficient information is available to apply the requirements for defined benefit plans.

If entities within a consolidated group, such as a parent company and its subsidiaries, share a benefit plan that otherwise meets the definition of a multiemployer plan, the rules for multiemployer plans should be followed in the separate financial statements of each of the related parties participating in the plan. However, the rules for defined benefit plans apply in the preparation of the consolidated financial statements.

## Multiple-Employer Plans

Multiple-employer plans are defined benefit plans maintained by more than one entity that is not a multiemployer plan. In contrast to multiemployer plans, a multiple-employer plan maintains separate accounts for each entity so that contributions provided benefits only for employees of the contributing entity. In addition, multiple-employer plans generally are not collectively bargained and are intended to allow participating entities, generally in the same industry, to pool their plan assets for investment purposes, and to reduce the cost of plan administration. Multiple-employer plans may have features that allow participating entities to have different benefit formulas, with the entity's contributions to the plan based on the benefit formula specified by the entity.

Such plans are considered to be single-employer plans and each employer accounts for its respective interest in the assets of the plan as a defined benefit plan.

## Interim Periods – Defined Benefit Pension and OPEB Plans

Pension and OPEB costs for interim reporting generally are based upon actuarial assumptions as of the most recent measurement date. Remeasurement of both assets and obligation at an interim date is not prohibited, provided both are measured at the same date. However, as a practical matter, the actuarial valuation necessary to derive these amounts may not be available on a timely enough basis.

Pension and OPEB costs generally should be allocated evenly over the four quarters in a manner that reflects actual costs. However, where the employer has a consistent practice of completing a new beginning-of-the-year actuarial valuation after the first quarter, it may “true up” actual costs and the quarterly allocation in the period when the valuation is completed. For example, a calendar year-end company may base its first quarter expense for year 2003 on a roll-forward of its January 1, 2002 valuation. If a new January 1, 2003 valuation is completed in the second quarter of 2003, pension cost for the second quarter will include an adjustment of first quarter pension cost.

Under Section 3461, an employer generally must perform an interim measurement (i.e. at a date other than its regular annual measurement date), if a significant plan event occurs, such as a plan amendment, curtailment, settlement, or offer of special termination benefits. A change in the general level of interest rates is not the type of event that would require an employer to remeasure its costs and obligations at an interim date. However, an employer is not prohibited from doing so and may choose to perform an interim measurement to reflect the impact of a change in rates on costs and obligations prior to its regular annual measurement. Regular interim measurements that are performed because interest rates have changed since the last measurement date would be indicative of a policy of performing interim measurements whenever interest rates subsequently fall or rise by the same or a greater margin. For

example, if an employer regularly performs an interim measurement when interest rates rise by 100 basis points, the employer would be deemed to have adopted a policy of performing interim measurements whenever there is a change in interest rates (i.e. an increase or decrease) of 100 basis points or more. When performing interim measurements, employers should obtain new asset values, roll-forward census data to reflect population changes, and review the appropriateness of all assumptions.

If a new valuation is undertaken during the year, the valuation must form the basis for determining pension expense for the remainder of the year. For example, if a calendar year-end company uses a September 30, 2006 measurement date and a new measurement is performed at July 1, 2006 because of a plan amendment adopted at that date, pension cost for the first three quarters of 2006 would reflect the prior year's (September 30, 2005) measurement and actuarial assumptions, and cost for the fourth quarter of 2006 would reflect the more recent measurement, including the selection of a new discount rate at July 1, 2006.

These principles also would apply to post-employment benefits and compensated absences which vest or accumulate.

## Business Combinations

Section 1580 requires recognition of an asset or liability in respect of a defined benefit plan in connection with recording assets and liabilities of a business combination accounted for as a purchase. A liability is recorded for the excess of the accrued benefit obligation over the fair value of plan assets. An asset is recorded for the excess of the fair value of plan assets over the accrued benefit obligation.

For a single-employer plan, the accrued benefit obligation and the fair value of plan assets should be remeasured at the acquisition date using current discount rates and assumptions.

The amount recorded for the asset or obligation on the purchase of a business essentially reflects a "fresh start" approach. Accordingly, expenses subsequently recognized for employee future benefits should not include amortization of the acquired business' unrecognized past service cost, net gain or loss, or transition amount. At acquisition, it is also generally appropriate to restart the calculation of market-related value of plan assets (i.e. use fair value and phase into a new computed market-related value). The methodology used to compute market-related value of the acquired plan should generally be consistent with the acquiring company's methodology.

Special consideration should be given to the accounting when the acquirer includes in its benefit plans employees of an acquired business and grants them credit for past service. If the granting of the credit is required by the terms of the acquisition agreement, such amount should be considered as part of the cost of the acquisition. Otherwise, the past service credit should be accounted for as a plan amendment and amortized over the remaining service period of the employees.

## Discontinued Operations and Disposal of a Portion of a Business Segment

Gains and losses arising from a settlement, a curtailment and contractual and special termination benefits related to the disposal of a business segment as defined in Section 3475 (or a portion of a business segment) should be included with and recognized as part of the gain or loss on the disposal. Thus, for example, if a gain is expected to result from a curtailment or settlement directly associated with a disposal, the estimated gain would offset any estimated loss to be provided at the measurement date for the discontinued operation.



# Disclosure

The disclosure requirements of Section 3461 can be broken into three main categories:

- ◆ Significant accounting policies;
- ◆ Information about defined benefit plans; and
- ◆ Information about defined contribution plans.

Separate disclosure is required for pension benefits and all other benefits. Illustrative examples of the required disclosures are provided in Tables Eight and Nine.

**Observation.** *The disclosure requirements for defined benefit and defined contribution plans parallel those contained in FAS 132, Employers' Disclosure about Pensions and Other Postretirement Benefits. However, there is an important difference. The FAS 132 requirements are limited to pensions and other postretirement benefits. There are no specific disclosure requirements for post-employment benefits and compensated absences (other than a requirement to disclose when an amount cannot be reasonably estimated). In contrast, Section 3461 requires amounts relating to post-employment benefits and compensated absences to be included in the "all other" benefit disclosures.*

## Significant Accounting Policies

Disclosure is required for any significant accounting policy necessary to give effect to the Standard. Examples of such disclosures include the following:

- ◆ Valuation basis chosen for plan assets for the purpose of calculating the expected return on plan assets;
- ◆ Method chosen for recognizing past service costs;
- ◆ Method chosen for recognizing actuarial gains and losses;
- ◆ Ordering when simultaneous settlement and curtailment occurs; and
- ◆ Use of defined contribution plan accounting by an entity that is part of a multiemployer plan for which the entity has insufficient information to apply defined benefit accounting or that is part of a multiemployer plan of a related group of companies.

## Defined Benefits Plans

The Standard adopts a "two-tiered" disclosure approach with respect to disclosures about defined benefit plans. All employers are required to make a minimum level of disclosure. Supplementary disclosures are required for public enterprises, cooperative organizations, deposit-taking institutions, and life insurance enterprises.

Public enterprises are those that have issued debt or equity securities that are traded in a public market (a domestic or foreign stock exchange or an over the counter market, including local or regional markets), that are required to file financial statements with a securities commission or that provide financial statements for the purpose of issuing any class of securities in a public market.

## Minimum required disclosures

The minimum required disclosures are:

- ◆ The accrued benefit obligation at the end of the period, as determined by actuarial valuation;
- ◆ The fair value of plan assets at the end of the period;
- ◆ The resulting plan surplus or deficit at the end of the period;
- ◆ The amount recognized in the balance sheet at the end of the period as an accrued benefit liability or accrued benefit asset, indicating separately the amount of any valuation allowance;
- ◆ The expense for the period;
- ◆ The amount of contributions by the entity during the period;
- ◆ The amount of contributions by employees during the period;
- ◆ The amount of benefits paid during the period;
- ◆ The nature and effect of each significant non-routine event occurring during the period, including an amendment, curtailment or settlement of a plan, an event giving rise to contractual termination benefits or a business combination or divestiture;
- ◆ The weighted average of amounts assumed in accounting for the plan for (a) the discount rate, (b) the expected long-term rate of return on plan assets, and (c) the rate of compensation increase for pay-related plans;
- ◆ The assumed health care cost trend rate(s) for the next year used to measure the expected cost of benefits covered by the plan (gross eligible charges) and a general description of the direction and pattern of change in the assumed trend rates(s) thereafter, together with the ultimate trend rate(s) and when each such rate is expected to be achieved; and
- ◆ The amounts and types of the securities of the entity and related parties included in plan assets, the approximate amount of future annual benefits covered by insurance contracts issued by the entity or related parties, and transactions between the entity and the plan during the period.

An employer that has aggregated disclosures for its single-employer defined benefit pension plans, or for its other defined benefit plans, should disclose the accrued benefit obligation and fair value of plan assets separately for the aggregate of all plans with accrued benefit obligations in excess of plan assets.

In addition to these disclosures, Section 3461 encourages additional disclosures about the actuarial assumptions underlying the reported amount of an entity's accrued benefit obligation when changes in assumptions would have a significant impact on an employer's financial condition or operating results. An example of such disclosures would be the effects of a 1% increase and decrease in discount rates, the expected long-term rate of return on plan assets and the assumed rate of compensation increase.

## Additional disclosures

Additional disclosures for public enterprises, cooperative organizations, deposit-taking institutions or life insurance enterprises are:

- ◆ A reconciliation of the beginning and the ending balances of the accrued benefit obligation for the period, showing separately:

- contributions by employees;
  - benefits paid;
  - current service cost for the period;
  - interest cost for the period on the accrued benefit obligation;
  - the effect of each significant non-routine event, including an amendment, settlement or curtailment of a plan, an event giving rise to contractual termination benefits, or a business combination or divestiture;
  - the actuarial gains and losses arising during the period; and
  - the effect of foreign currency exchange rate changes.
- ◆ A reconciliation of the beginning and ending balances of the fair value of plan assets for the period, showing separately:
    - contributions by the employer;
    - contributions by the employees;
    - benefits paid;
    - the effect of each significant non-routine event, including a settlement of a plan, an event giving rise to contractual termination benefits, or a business combination or divestiture;
    - the actual return on plan assets during the period; and
    - the effect of foreign currency exchange rate changes.
  - ◆ The balance of unamortized amounts not recognized in the financial statements at the end of the period, showing separately the amounts of:
    - unamortized past service costs;
    - unamortized net gain or loss, which comprises unamortized actuarial gains and losses and the asset gains and losses not yet reflected in a market-related value of plan assets; and
    - unamortized transitional obligation or transitional asset.
  - ◆ The expected return for the period on plan assets;
  - ◆ The amortization of past service costs for the period;
  - ◆ The amortization of net actuarial gain or loss for the period;
  - ◆ The amortization of a transitional asset or transitional obligation for the period; and
  - ◆ The amount of special terminations expense recognized for the period and a description of the nature of the related event or events that resulted in these benefits being provided.

Illustrative examples of disclosures are set out in Appendix B of Section 3461. Table Eight and Table Nine provide additional examples (other than the accounting policies disclosures). The rates and assumptions used in the examples are not intended to be representative of an employer's actual experience.

### Table Eight: Illustrative Disclosures for Entities Other than Public Enterprises, Cooperative Organizations, Deposit-taking Institutions or Life Insurance Enterprises

The following illustrates the 2002 financial statement disclosures for an employer with multiple defined benefit pension and other employee future benefit plans.

	Pension Benefits		Other Benefits <sup>(1)</sup>	
	2002	2001	2002	2001
Benefit obligation at December 31	\$2,326	\$1,266	\$1,420	\$738
Fair value of plan assets at December 31	2,047	1,068	329	206
Funded status	\$(279)	\$(198)	\$(1,091)	\$(532)
Prepaid (accrued) benefit cost recognized in the statement of financial position	\$ 64	\$--	\$(447)	\$68
	Pension Benefits		Other Benefits <sup>(1)</sup>	
	2002	2001	2002	2001
<b>Weighted-average assumptions as of December 31</b>				
Discount rate	9.25%	9.00%	9.00%	9.00%
Expected return on plan assets	10.00	10.00	10.00	10.00
Rate of compensation increase	5.00	5.00	--	--

For measurement purposes, a 10% annual rate of increase in the per capita cost of covered health care benefits was assumed for 2003. The rate was assumed to decrease gradually to 4% for 2009 and remain at that level thereafter.

	Pension Benefits		Other Benefits <sup>(1)</sup>	
	2002	2001	2002	2001
Benefit cost	\$111	\$114	\$111	\$117
Employer contributions	75	114	171	152
Plan participants' contributions	--	--	20	13
Benefits paid	125	114	90	70

The company acquired FV Industries on December 31, 2002, increasing the pension benefit obligation by \$900 and pension plan assets by \$1,000 and increasing the other postretirement benefit obligation by \$600 and related plan assets by \$25. Amendments during the year to the company's plans increased the pension benefit obligation by \$120 and the other postretirement benefit obligation by \$75.

(1) Since FAS 132 only applies to FAS 87 and 106 benefits, entities that want to comply with both Canadian and US GAAP will need to segregate the "other benefits" disclosures into two categories "other benefits – postretirement other than pensions" and "other benefits".

### Table Nine: Illustrative Disclosures for Public Enterprises, Cooperative Organizations, Deposit-taking Institutions or Life Insurance Enterprises

The following illustrates the 2002 financial statement disclosures for an employer with multiple defined benefit pension and other employee future benefit plans.

	Pension Benefits		Other Benefits <sup>(1)</sup>	
	2002	2001	2002	2001
<b>Change in benefit obligation</b>				
Benefit obligation at beginning of year	\$1,266	\$1,200	\$738	\$700
Service cost	76	72	36	32
Interest cost	114	108	65	63
Plan participants' contributions	--	--	20	13
Amendments	120	--	75	--
Actuarial gain	(25)	--	(24)	--
Acquisition	900	--	600	--
Benefits paid	(125)	(114)	(90)	(70)
Benefit obligation at end of year	2,326	1,266	1,420	738
<b>Change in plan assets</b>				
Fair value of plan assets at beginning of year	1,068	880	206	87
Actual return on plan assets	29	118	(3)	24
Acquisition	1,000	--	25	--
Employer contribution	75	114	171	152
Plan participants' contributions	--	--	20	13
Benefits paid	(125)	(114)	(90)	(70)
Fair value of plan assets at end of year	2,047	1,068	329	206
Funded status	(279)	(198)	(1,091)	(532)
Unrecognized net actuarial loss	83	38	59	60
Unrecognized prior service cost	260	160	585	540
Prepaid (accrued) benefit cost	\$64	\$0	\$(447)	\$68
<b>Weighted-average assumptions as of December 31</b>				
Discount rate	9.25%	9.00%	9.00%	9.00%
Expected return on plan assets	10.00	10.00	10.00	10.00
Rate of compensation increase	5.00	5.00	--	--

(1) Since FAS 132 only applies to FAS 87 and 106 benefits, entities that want to comply with both Canadian and US GAAP will need to segregate the "other benefits" disclosures into two categories "other benefits – postretirement other than pensions" and "other benefits".

For measurement purposes, a 10% annual rate of increase in per capita cost of covered health care benefits was assumed for 2003. The rate was assumed to decrease gradually to 4% for 2009 and remain at that level thereafter.

*continued*

## Table Nine: Illustrative Disclosures for Public Enterprises, Cooperative Organizations, Deposit-taking Institutions or Life Insurance Enterprises *continued*

The company's net benefit plan expense is as follows:

	Pension Benefits		Other Benefits <sup>(1)</sup>	
	2002	2001	2002	2001
Current service cost	\$76	\$72	\$36	\$32
Interest cost	114	108	65	63
Expected return on plan assets	(107)	(88)	(21)	(9)
Amortization of prior service cost	20	20	30	30
Recognized net actuarial loss	8	2	1	1
	<u>\$111</u>	<u>\$114</u>	<u>\$111</u>	<u>\$117</u>

The company acquired FV Industries on December 31, 2002, including its pension and postretirement benefit plans. The company's plans were amended on December 31, 2002, to establish parity with the benefits provided by FV industries.

The company has multiple non-pension postretirement benefit plans. The health care plans are contributory, with participants' contributions adjusted annually; the life insurance plans are non-contributory. The accounting for the health care plans anticipates future cost-sharing changes to the written plan that are consistent with the company's expressed intent to increase retiree contributions each year by 50% of the excess of the expected general inflation rate over 6%. On December 31, 2002, the company amended its postretirement health care plans to provide long-term care coverage.

Assumed health care cost trend rates have a significant effect on the amounts reported for the health care plans. A one-percentage-point change in assumed health care cost trend rates would have the following effects:

	1-Percentage-Point Increase <sup>(2)</sup>	1-Percentage-Point Decrease <sup>(2)</sup>
Effect on total of service and interest cost components	\$22	\$(20)
Effect on postretirement benefit obligation	173	(156)

(2) The health care trend rate changes are desired disclosures under Section 3461, and are required disclosures under FAS 132.

## Defined Contribution Plans

For a defined contribution plan, an employer should disclose:

- ◆ The expense recognized for the period; and
- ◆ A description of the nature and effect of each significant change during the period affecting the comparability of expenses for the current and prior periods, such as a change in the rate of employer contributions, a business combination, or a divestiture.

## Multiemployer Plans

For a multiemployer plan, an employer should disclose:

- ◆ The expense recognized for the period; and
- ◆ A description of the nature and effect of each significant change during the period affecting the comparability of expenses for the current and prior periods, such as a change in the rate of employer contributions, a business combination, or a divestiture.



# Transition

Section 3461 is effective for fiscal years beginning on or after January 1, 2000. Earlier adoption is encouraged. Employers have the choice of implementing the Standard retroactively or prospectively. If an employer adopts the Standard retroactively, restatement of financial statements for comparative periods is encouraged but not mandatory. For example, a calendar year company adopting the Standard on a retroactive basis in 2000 does not have to restate its 1999 comparative financial statements.

An employer must choose the same method of adoption for each benefit plan; for example, it would not be possible to use a retroactive basis of accounting for OPEB plans and a prospective basis for pensions.

Special transition rules are available for SEC registrants and other entities who prepare financial information in accordance with US GAAP.

## Transition Amounts

Regardless of whether a Standard is implemented retroactively or prospectively, implementation involves calculating a “transitional asset” or a “transitional liability” for each plan affected by the rules. The transitional amount is calculated by determining the fair value of any plan assets and the accrued benefit obligation at the beginning of the year in which the Standard is implemented, and comparing the net balance to the accrued carrying value of the asset (excluding any valuation allowance) or liability recorded for that plan. The transitional asset or liability is the difference between the two.

The implication of calculating a transitional amount is that previously unamortized balances relating to the former basis of accounting (e.g. unamortized past service costs, actuarial gains and losses, and transition amounts relating to the adoption of previous methods of accounting) are included in the transition amount. For example, assume a calendar year company amended a pension plan in 1999 and as a result incurred a significant past service cost which was being amortized over EARSL in accordance with Section 3460. Under Section 3461, the unamortized balance would be included in the transition amount. The former amortization schedule no longer applies.

If a company already has been applying all of the provisions of Section 3461 to a particular plan, it is not permissible to calculate a transitional amount.

## Retroactive Implementation

Under Section 3461, retroactive implementation means charging or crediting retained earnings at the effective date of adoption for the full amount of the transition asset or liability. Effectively therefore, all unamortized balances relating to previous methods of accounting are charged to retained earnings at the beginning of the year the Standard first is applied.

## Prospective Implementation

Prospective implementation means amortizing the transitional amount in a rational and systematic manner over an appropriate period of time.

For pension and OPEB plans, normally this period will be the average remaining service period of active employees expected to receive benefits under the benefit plan. However, if all or almost all of the employees are no longer active at the date of implementation, the transitional amount should be amortized on a straight line basis over the average remaining life expectancy of the former employees.

If an employer uses the market-related value of plan assets to determine the expected return on plan assets and implements the Standard prospectively, care needs to be exercised not to double-count the difference between the fair value and market-related value of plan assets at the date of initial implementation of Section 3461. For example, assume the following facts for a defined benefit pension plan at the date the Standard first is applied:

Accrued benefit obligation	\$600
Fair value of plan assets	\$1,000
Five year moving average value of plan assets	\$850
Employee average remaining service period	15 years

If the employer implements Section 3461 prospectively, the transitional asset of \$400 ( $\$1,000 - \$600$ ) would be amortized over 15 years. This amount already includes the \$150 difference between the fair value of plan assets and the five year moving average value of plan assets. As the employer adjusts the five year moving average of plan assets over the next five years, that \$150 difference could be erroneously reflected as an actuarial gain or as a return on plan assets. Accordingly, the original \$150 difference that is being amortized as a transitional amount must be excluded from other components of net periodic pension expense.

The transitional amount for post-employment benefits and compensated absences that do not vest or accumulate would be amortized to income on a basis that is appropriate to the type of benefit. For example, a long-term disability benefit may be amortized based on the average period over which benefits are expected to be paid.

If a defined benefit plan previously was accounted for on a cash basis, any transitional obligation must be amortized on a basis which ensures recognition of an expense at least equal to the amount that would have been recognized under the cash basis. An accelerated amortization is most likely to occur for pension and OPEB plans when former employees comprise a significant portion of the participants in a plan.

## Special Implementation Rules

A third implementation option is available to employers who have determined, for every benefit plan, the recognized and unrecognized amounts that result from applying US generally accepted accounting principles. Examples of such employers are SEC registrants who reconcile their Canadian GAAP results to US GAAP and subsidiaries of US companies who prepare this information for their parent for consolidation purposes.

Section 3461 states that an employer may implement Section 3461 in a manner that produces recognized and unrecognized amounts for all of its benefit plans, the same as those determined by the application of US GAAP. In other words, the Standard gives employers the ability to eliminate differences between their Canadian and US GAAP financial statements that might arise solely as the result of applying the transitional rules.

## Changes in Valuation Allowance at the Date of Implementation

For plans for which an employer has recorded an asset before adopting Section 3461, the transitional asset or liability is the difference between the fair value of plan assets net of the accrued benefit obligation and the asset recognized on the employer's balance sheet before deducting any valuation allowance. It therefore does not take into account any adjustment to the valuation allowance that might be necessary as the consequence of adopting Section 3461. We understand the Accounting Standards Board will be issuing an amendment to Section 3461 to provide that changes in valuation allowance arising from the adoption of Section 3461 should be accounted for in the same manner as the transitional asset or liability.



© 1999 PricewaterhouseCoopers. PricewaterhouseCoopers refers to the Canadian firm of PricewaterhouseCoopers LLP and other members of the worldwide PricewaterhouseCoopers organization.

Your worlds  Our people