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## Educational Note

# Guidance on Considerations of Year 2000 Issues in Property-Casualty Insurance Financial Reporting

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## ***EDUCATIONAL NOTE***

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### **GUIDANCE ON CONSIDERATION OF YEAR 2000 ISSUES IN PROPERTY-CASUALTY INSURANCE FINANCIAL REPORTING**

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**COMMITTEE ON PROPERTY AND CASUALTY  
INSURANCE FINANCIAL REPORTING**

**DECEMBER 1999**

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## MEMORANDUM

**TO:** All Members and Students of the Canadian Institute of Actuaries Interested in Property and Casualty Issues

**FROM:** Brian G. Pelly, Chairperson  
Committee on Property and Casualty Insurance Financial Reporting

**DATE:** December 20, 1999

**SUBJECT:** Educational Note on Y2K Issues

In addition to coping with internal Y2K readiness issues like any other entity, property-casualty insurers also face the potential of Y2K-related claim activity possibly spanning almost every line of business. This presents unique challenges to the accounting and actuarial professions in preparing financial statements which appropriately recognize and/or disclose the nature and extent of an insurer's Y2K exposure.

The Committee on Property and Casualty Insurance Financial Reporting has prepared the attached educational note to provide context for, and guidance on, the appropriate consideration of Y2K issues in a valuation of policy liabilities for a property-casualty insurer. A number of valuable background references have been used in the preparation of this note, and are cited in the introduction. Members are particularly encouraged to read this educational note in conjunction with the Y2K White Paper prepared by the Casualty Actuarial Society.

The Committee on the Adoption of Standards of Practice has reviewed this educational note and concurs with its release.

BGP

## **GUIDANCE ON CONSIDERATION OF YEAR 2000 ISSUES IN PROPERTY-CASUALTY INSURANCE FINANCIAL REPORTING**

Year 2000 or Y2K is the label associated with a broad spectrum of date recognition problems which can arise, and indeed have arisen, in computer-dependent environments. Property-casualty insurers, in addition to having to cope with their own internal Y2K readiness (proprietary and generic software, hardware, equipment, building, suppliers, contingency planning, etc.), also face the potential of Y2K-related claim activity. The purpose of this Educational Note is to summarize the key Y2K issues vis-à-vis this potential claim activity, and to provide guidance in this regard in the specific context of property-casualty insurance financial reporting. All further references to Y2K in this Educational Note are in this context.

A lot of information on Y2K has been published or presented in a variety of forums. In this Educational Note, we make specific reference to some of the following Y2K background material:

- White Paper on Actuarial Considerations Related to Y2K Insurance Exposures and Potential Liabilities – Work Group on Y2K Issues – Casualty Actuarial Society
- Accounting Guideline 10 – The Year 2000 Issue – June 1998, Updated December 1999 – Accounting Standards Board – Canadian Institute of Chartered Accountants
- The Year 2000 Issue – Accounting Guidance for Property & Casualty Insurance Companies – Drafted for December 1999 Newsletter of the Canadian Insurance Accountants Association
- Y2K Special Edition – Between the Lines Bulletin – Insurance Bureau of Canada – November 1999
- Putting a Price Tag on the Millennium – Bhagwatula, Murphy and Ross – Best's Review P/C – June 1999
- Year 2000 Issues for the P&CAA – Kingley, Racine, Townsend – Seminar for the Appointed Actuary – September 1999

The balance of this Educational Note is organized under four broad topic headings, as follows:

1. COVERAGE AND QUANTIFICATION
2. ACCOUNTING TREATMENT AND DISCLOSURE
3. REGULATORY EXPECTATIONS
4. ACTUARIAL TREATMENT AND DISCLOSURE

## 1. COVERAGE AND QUANTIFICATION

Y2K claims may conceivably arise on almost any line of business, and policyholders may seek indemnification for a broad spectrum of types of damages. The purpose of this section is to supplement the CAS White Paper discussion with a Canadian perspective by addressing the nature and characteristics of Y2K claims, and the basis for coverage or non-coverage of Y2K claims, both direct and indirect. This section has been prepared with the expectation that it will be used in conjunction with the CAS White Paper.

### 1.1 Scope of Y2K Claims

The definition of what constitutes a Y2K claim is far from obvious. It encompasses a variety of possible direct, indirect or consequential damages, as well as claims for efforts to prevent damage. Broadly speaking, any claim that would not have occurred, or that would not have been as large if not for a Y2K problem, should be considered a Y2K claim. Almost every line of insurance could be affected. Following are examples of potential claims in various lines of business:

#### Automobile

- The electronic system of a vehicle fails, causing an accident;
- Traffic lights fail, causing an accident;
- Equipment mounted on a commercial vehicle stops functioning, making the vehicle useless until repaired;

#### Personal Property

- An electronic apparatus fails, causing damage;
- A heating system fails to operate properly, causing fire;
- An alarm system fails to react upon fire or burglary;
- A utility failure causes widespread outages, resulting in freezing and evacuations similar to the Eastern Canadian storm;
- A home/business computer failure results in loss of data;

#### Commercial Property

- A system failure causes business interruption;
- Claims to recover the costs of Y2K remediation efforts;
- Failure of a refrigeration system causes loss of perishable contents;
- Faulty sprinklers cause water damage to premises;
- Defective component forces product recall;
- Hackers use Y2K breakdown to enter system and cause damage;
- Y2K problems require exceptional expenses to prevent business interruption;
- Y2K panic sparks riots and pillage;

### General Liability

- Insured is prevented from fulfilling contractual obligations;
- Insured's product causes damage to third party (such as a wrongful death from a failed pacemaker);
- Erroneous processing of financial transactions (such as pre-authorized debit) financially harms client;
- Y2K failure prevents the timely medical treatment of hospital patients;
- Production of drinkable water is disrupted in some cities;

### Professional Liability

- Systems provider fails to adequately correct Y2K problems or, in the course of correcting it, creates unrelated system failures;
- Consultants fail to properly identify Y2K problems;
- Non-compliant software leads professionals to erroneous conclusions;

### Directors and Officers Liability

- Directors and officers fail to properly address Y2K problems;
- Y2K remediation expenses become prohibitive due to failure to act early;
- Incomplete disclosure of Y2K exposures leads to a class action suit by shareholders;

### Aviation

- Electronic system failure causes airplane to crash;
- Air traffic control system fails, causing planes to be rerouted;
- Navigational satellite becomes inoperative due to electronic system failure;
- Safety concerns force flight cancellations;
- Unexpected delays cause loss of cargo or failure to fulfill delivery commitments;

### Marine

- Navigational system fails, causing ship to run aground;
- Faulty systems cause damage to offshore installations;
- Claims to recover the costs of Y2K remediation efforts by a harbour authority;

### Surety

- Y2K problems interrupt the supply of certain materials or equipment, preventing a contractor from fulfilling its contracts;
- Widespread Y2K damage causes price surge in materials or skilled people;

### Fidelity

- System failure enables employee to circumvent controls and to defraud employer.

The following excerpt from the CAS White Paper aptly describes the nature of what could be represented as Y2K claims:

*The types of damages related to the Y2K problem cover a broad spectrum, potentially triggering insurance claims in several lines of insurance. Examples of the types of damages that might be claimed include:*

- *The cost of Y2K remediation*
- *The extra cost of staying in business after a failure has occurred*
- *Loss of profits or reduction in income due to a total or partial shutdown*
- *Bodily injury or property damage*
- *Loss of value in the company's stock*
- *Damage to the business of a client*

*Damages could be caused as a result of the failure of something directly controlled by the insured or they may be caused indirectly, such as from non-performance of a supplier.*

## 1.2 Components of Y2K Claim Costs

The unique nature of the Y2K problem implies that significant amounts could potentially be incurred in the form of each of the various types of claim-related costs, namely:

- cost of opening and processing claims;
- cost of establishing or denying coverage;
- cost of defending the insured against third party claimants;
- cost of indemnities to insureds or third parties;
- cost of attempting recovery through subrogation or from reinsurers.

In the event of substantial damage caused by the Y2K problem, the cost of settling other claims could be affected by conditions such as post-event inflation, delays in obtaining materials or manpower, court congestion, etc...

### Cost of Opening and Processing Claims

Assuming widespread damage does occur, the number of claims to be expected would be enormous, and the time span over which they would remain active could be extensive, as:

- surveys have shown that most insureds (individuals and businesses) expect that malfunction or damage from Y2K will be covered in their policies;
- the diversity of applicable coverages, and of specific policy and exclusion wordings, means that legal precedent on coverage issues will not be universally applicable;
- the variety of the potential nature and circumstances of alleged damage will prevent routine handling of claims.

### Cost of Establishing or Denying Coverage

Many people believe that this cost (so-called “declaratory judgments”) will constitute a major component of the Y2K claim costs. In addition to the intricacies of the Y2K problem itself, this issue is further complicated by the recent introduction of new Y2K endorsements and exclusions, as well as by the undefined “reasonable expectation” criterion often used by the courts in interpreting strict policy wording.

There are several facets to the question of coverage, for example:

- Is Y2K damage an accident or a foreseeable and preventable event? Courts may consider whether the insured had knowledge and control of the existence and limitations of embedded chips or of software tools that were in use;
- Is remediation cost an expense that was incurred for the purpose of preventing a covered claim?;
- Has the Y2K link been proven on claims alleged to be Y2K-related?;
- What policy applies (for example, basic liability vs broader umbrella policy)?;
- What policy period applies, i.e., date of software/chip design-manufacture-installation, of critical failure to act, of start/continuation of remediation efforts, of negligent disclosure, of first malfunction, of manifestation of damage, or a combination of the above?;
- How do multiple problems affect deductible and policy limits?

The CAS White Paper contains a detailed discussion of some of these questions, in particular the issues of accidental damage and of trigger date.

### Cost of Defending the Insured Against Third Party Claims

Many people believe that defense costs will exceed indemnity costs for Y2K claims. Factors contributing to a potentially high level of defense costs include:

- a variety of parties could be sued, including manufacturers, sellers and users of defective devices or systems, computer specialists, auditors, insurance agents or other professionals, administrators and officers, etc...;
- the duty of care required from each of the above with respect to Y2K has not yet been tested in court;
- insurers could have the duty to defend cases where they could successfully oppose indemnity payments on coverage grounds;
- Y2K exclusions may not exempt insurers from defending their insured until the actual causality of Y2K is proven;
- E&O and D&O policies generally prevent insurers from settling a claim without the insured’s agreement (similar clauses also exist in some product liability and other general liability policies);
- in many instances, several parties may be sued for the same damage, either jointly or in a chain of lawsuits.



### Cost of Indemnities

The amount of indemnity that will be ultimately payable by insurers will depend not only on the actual damages caused by the Y2K problem, but also on the success of insureds in establishing coverage and, for liability claims, on the success of third parties in proving the responsibility of the insured. This means that it may take years before the indemnities are reasonably known and eventually payable. It also means that the actual indemnities may represent only a small fraction of the total Y2K claim costs.

### Cost of Attempting Recovery Through Subrogation or From Reinsurers

While subrogation and reinsurance may represent valuable sources for recovery of certain Y2K claim costs, difficulties may arise in realizing these recoveries.

If large numbers of first-party claims are payable due to Y2K damage, the proportion of such claims for which subrogation would be sought would probably far exceed the usual. As it may take a long time to sort out the liability issues, claims may be pending for years.

Similarly, due to limitations in the definition of an event in connection with Y2K, the effort required to identify claims constituting a single event under a catastrophe treaty and to demonstrate coverage for these would likely be much larger than usual. Furthermore, compatibility in Y2K coverage wording between the direct policy and the reinsurance policy may be a key consideration. Estimated Size of Y2K Claims

## 1.3 Estimated Size of Y2K Claims

The CAS White Paper does not attempt to quantify the size of insured Y2K claim costs for the United States. However, it does assume that most of the claims will fall under commercial insurance policies, more specifically in the following lines:

- Comprehensive General Liability (CGL);
- Directors & Officers Liability (D&O);
- Errors & Omissions Liability (E&O);
- Property/Business Interruption.

Similarly, published estimates of total industry costs, such as those in the Best's Review article and the presentation at the Appointed Actuary Seminar noted earlier, forecast that these lines of business will bear the bulk of the Y2K claim costs, with other lines totaling only 10% to 15% of total Y2K claim costs.

In principle, personal property lines of business could suffer massive claims, for example in the case of failure of a regional utility. Similarly, a single claim could reach millions of dollars in any class of insurance. These are regarded, however, as low probability scenarios which would be of more potential relevance to a DCAT analysis than to a valuation of policy liabilities. General or specific knowledge of Y2K events indicating large claims should nevertheless be considered if known at the time of financial statement preparation, as discussed in Section 2.2.

Estimates published to date suggest that total Y2K claim costs in the United States could range between 1% and 5% of annual insurance premiums. Expected percentages would likely be lower for Canada. Factors listed in the Appointed Actuary Seminar presentation in support of lower percentages in Canada include:

- lower propensity to sue;
- shorter average claim duration;
- fewer public companies (for D&O);
- lower policy limits (especially for D&O);
- lower incidence of coverage for high risk lines, for example, business interruption and product liability.

Whatever the actual total cost of Y2K claims, the impact on individual insurers will vary widely based on their distribution by line of business, and by type and activities of insureds, as well as their specific policy language, any use of specific Y2K exclusions or limitations, and any issuing of specific Y2K coverage policies or endorsements.

#### 1.4 Comparison of the Environments in Canada and the United States

While the nature of the Y2K problem is essentially the same in Canada as it is in the United States, the Canadian context presents a few differences with respect to insurance policies in use, the legal and judicial environment, reporting requirements for insurers, and the role of the actuary.

Differences in the insurance, legal and judicial environments include:

- Canada exhibits a lower propensity to litigation and to the filing of insurance claims;
- The magnitude of commercial insurance relative to other lines is smaller in Canada;
- Since many Canadian companies are subsidiaries of foreign corporations and rely on non-Canadian systems and expertise, a larger portion of damages suffered in Canada could be claimed on non-Canadian insurers;
- Unlike the United States, Canada has not adopted legislation seeking to limit the right of claimants to sue for Y2K damages.

Differences in the reporting requirements and the roles of the actuary include:

- In Canada, both statutory and GAAP accounting require the determination of any premium deficiency as well as the determination of the claim liabilities;
- U.S. GAAP provides that when there exists a range of potential values for a liability, the minimum value in the range should be used. Canadian GAAP, however, provides that any value within the range is acceptable, subject to consideration of year-to-year consistency;
- In the United States, the actuary is not required to provide a claim liability estimate, but rather to opine on the reasonableness of the booked liability, which is often accomplished by defining a reasonable range and by ensuring the booked liability falls within that range. In Canada, the actuary is required to opine on a point estimate for the claim liabilities, as well as for the premium liabilities;

- In Canada, the actuary's point estimate represents the minimum acceptable amount for the booked claim liabilities for statutory purposes. Because of this, management and auditors often adopt the actuary's judgment, provided actuarial standards have been followed;
- In Canada, any premium deficiency is first dealt with by reducing deferred acquisition expenses (a non-admitted asset);
- In Canada, the actuary's point estimate, including discounting and an appropriate provision for adverse deviations, represents the maximum basis for claim liabilities for income tax purposes;
- In Canada, the actuary must report on the company's current financial position and, in most cases, its expected future financial condition (DCAT). The actuary is expected by regulators to consider Y2K exposures in both such reports (DCAT is a separate function from financial reporting and its treatment is not covered in this Educational Note);
- In the United States, any specific Y2K requirement by regulators will come at the state level. In Canada, concerns about financial consequences for insurers may be addressed differently by the federal and provincial authorities, while market conduct issues would be primarily monitored by each province.

The main practical consequences of the above are that:

- Accepted actuarial practice requires the Canadian actuary to determine an amount of claim liabilities which incorporates their best judgment on Y2K claims;
- Accepted actuarial practice requires the Canadian actuary to consider the impact of Y2K exposure on unearned premium adequacy and the need to reduce deferred acquisition expenses and/or to set up a premium deficiency liability amount;
- Under the special circumstances where the Canadian actuary believes that the expected impact of Y2K on claim or premium liabilities is material but not reasonably measurable (i.e., estimable), the actuary should issue a qualified opinion.

### 1.5 Collection of Y2K Claim Data

As discussed earlier, the definition and identification of Y2K claims may prove complex. The CAS White Paper contains an excellent discussion of data requirements, including the following:

*Companies may want to ensure that sufficient information is captured to track Y2K claim activity consistent with the insurer's Y2K underwriting strategy. For instance, if Y2K exclusions were instituted for certain industry classifications (e.g., software companies), then, to test those exclusions, it might be desirable to track how many claims are filed by industry classification. It might also be valuable to know whether claims are filed by industry classifications that didn't have a Y2K exclusion, or whether many claims came in from industries believed to be at low risk for Y2K problems.*

*It may be appropriate for all affected claim systems to have consistent and adequate coding of Y2K activity. Companies may have distinct direct claim handling systems, reinsurance systems, subrogation & salvage systems, deductible systems, coverage litigation systems, etc. Higher level systems such as reserving, ratemaking and possibly even accounting systems may also need to track Y2K impacts. These other systems may be just as important as the direct claim handling system.*

*Setting up codes to track Y2K claims, and the existence of Y2K exclusions, may not be sufficient. How actual claims will be coded under these systems may also need to be thought out. For example, should a claim be coded as a Y2K claim if the damage was caused by a fire, which in turn was caused by a Y2K software failure? How would a claim be coded (as to Y2K) if the fire was caused by something not related to Y2K, but the resulting damage was made worse by a Y2K related failure (such as the failure to notify the local fire station)? Finally, if only one code exists to track unusual claims, how should a claim be coded if it involved both Y2K and another attribute being tracked (such as paraplegia). Companies may want to decide issues such as these in advance, and depending upon how they are resolved, there may be some need to adjust non-Y2K data accordingly for reserving and ratemaking purposes.*

*Training will be an issue. How will the claim department (and all other affected departments) train those entering the data to enter the proper Y2K codes? What controls exist to ensure that the coding is correct?*

*Identifying those responsible for the data gathering process in advance could be very helpful. This applies to claim systems support, accounting areas, actuarial areas, etc. If a deluge of claims starts to come in during the beginning of the year 2000, there might not be enough time to find appropriate (data or analysis-related) resources at that late date.*

## **2. ACCOUNTING TREATMENT AND DISCLOSURE**

The accounting profession has a high awareness of Y2K and other date recognition problems. CICA Accounting Guideline 10, which was effective for all companies' 1998 financial statements, recommended minimum note disclosure of the inherent uncertainty that Y2K could cause for an entity's future financial results. Public companies were also required by Canadian Securities regulator's guidance to provide narrative disclosure about Y2K issues in management's discussion and analysis, and a discussion of how those risks and uncertainties are being managed. Some property and casualty insurers may have included a disclosure of potential claims arising for Y2K events in those notes.

Appropriate consideration of the issue and its impact on financial statements will be critically important for 1999 year-end audits, whether the year-ends October 31<sup>st</sup> or December 31<sup>st</sup>. In addition, insurers that publish quarterly statements would be well advised to continue to monitor the issue, due to the potential impact on expense deferability.

It is likely that auditors will ask their clients to make special representations on the impact of Y2K claims on the financial statements, in addition to any special representations related to the company's own internal preparedness. The extent of the representations requested will vary according to the perceived materiality of the issue to the entity, but may well be more extensive than the note disclosures in the financial statements.

## 2.1 Recognition

CICA Handbook Section 1000 provides guidance as to when an item should be recognized directly in the financial statements, as opposed to the notes to the financial statements:

*.44 The recognition criteria are as follows:*

- (a) the item has an appropriate basis of measurement and a reasonable estimate can be made of the amount involved; and*
- (b) for items involving obtaining or giving up future economic benefits, it is probable that such benefits will be obtained or given up.*

*.45 It is possible that an item will meet the definition of an element but still not be recognized in the financial statements because it is not probable that future economic benefits will be obtained or given up or because a reasonable estimate cannot be made of the amount involved. It may be appropriate to provide information about items that do not meet the recognition criteria in notes to the financial statements.*

Management, together with the actuary, will assess, through examination of policy wording, discussions with legal counsel and other means, whether exposure exists, and therefore whether the criteria in CICA 1000.44(b) has been met.

Should it be determined that claims have arisen or will likely arise, the challenge becomes to quantify the exposure to Y2K claim and legal costs in order to satisfy criteria CICA 1000.44(a), and to estimate the expected loss ratios on the unearned premiums for purposes of assessing any premium deficiency and the recoverability of deferred policy acquisition costs. In this regard, while this Educational Note and the CAS White Paper provide guidance on possible approaches to estimating the liability, there is clearly much uncertainty and room for considerable judgment.

Analysis of the various components of the Y2K issue may permit financial statement recognition of some components, even while others remain too uncertain for inclusion anywhere but in the notes.

Depending on the company's analysis of potential coverage triggers, some unreported claims, including occurrences that do not manifest prior to 1 January 2000, may be appropriately classified as claim liabilities in the 1999 financial statements. Together with any known claims, these will be included with the normal claim liabilities in the balance sheet. Disclosure of the quantum of Y2K claim liabilities may be appropriate in the notes to the financial statements.

If the loss date is 1 January 2000 or later, the potential of Y2K claims will affect the deferability of acquisition expenses, and may sometimes result in a premium deficiency reserve.

If an estimate of Y2K is developed and recorded, consideration should be given to establishing a reinsurance recoverable asset, reduced if appropriate to recognize the impact of any potential dispute with the reinsurer on recoveries and costs.

## 2.2 Subsequent Events

CICA Handbook Section 3820 provides guidance as to the recognition of subsequent events:

- .06 Financial statements should be adjusted when events occurring between the date of the financial statements and the date of their completion provide additional evidence relating to conditions that existed at the date of the financial statements.*

Information on the nature and extent of date recognition problems is likely to develop at a rapid rate as we approach and enter into the year 2000. While there is some question as to whether all relevant Y2K activity necessarily reflects conditions that existed at the statement date, it is generally agreed that all relevant Y2K-related claim activity and other developments after the statement date and up to the date of completion of the 1999 financial statements should be used in evaluating the estimates made in the statements, either with respect to the claim liabilities or the premium liabilities. As insurers start to receive notifications of Y2K-related claims, there will be increased information on which to base an estimate of the overall Y2K liability, or portions thereof. Insurers should establish procedures to ensure that the financial statements reflect the best available information on their Y2K exposure.

## 2.3 Contingencies

CICA Handbook Section 3290 defines a contingency as *an existing condition or situation involving uncertainty as to possible gain or loss to an enterprise that will ultimately be resolved when one or more future events occur or fail to occur*. Some clarification is provided in that *the mere fact that an estimate is involved does not of itself constitute the type of uncertainty which characterizes a contingency*. This section goes on to say:

- .12 The amount of a contingent loss should be accrued in the financial statements by a charge to income when both of the following conditions are met:*
- (a) it is likely that a future event will confirm that an asset had been impaired or a liability incurred at the date of the financial statements; and*
  - (b) the amount of the loss can be reasonably estimated.*
- .15 The existence of a contingent loss at the date of the financial statements should be disclosed in notes to the financial statements when:*
- (a) the occurrence of the confirming future event is likely but the amount of the loss cannot be reasonably estimated; or*
  - (b) the occurrence of the confirming future event is likely and an accrual has been made but there exists an exposure to loss in excess of the amount accrued; or*
  - (c) the occurrence of the confirming future event is not determinable.*
- .22 When the existence of a contingent gain, or a contingent loss which has not been accrued, is disclosed in a note to the financial statements, the information should include:*
- (a) the nature of the contingency; and*
  - (b) an estimate of the amount of the contingent gain or loss or a statement that such an estimate cannot be made.*

Disclosure under CICA 3290.15 may be required, for example, in instances where insurers are facing material commercial claims, the basis for which is pending a court decision and the quantification of which is uncertain. In this instance, a portion of the policy liabilities would be recognized as contingent liabilities. Management may wish to have their legal counsel review the note disclosure, not only to ensure its accuracy, but also, in the case of Y2K claims, to avoid prejudicing the defense of its position on these claims.

## 2.4 Measurement Uncertainty

CICA Handbook Section 1508 defines measurement uncertainty as *uncertainty in the determination of the amount at which an item is recognized in financial statements*. This section goes on to say:

*.06 The nature of a measurement uncertainty that is material should be disclosed*

*.12 To assist users in understanding the significance of a material measurement uncertainty, the notes to the financial statements would provide information about its extent when a material change in a recognized amount is reasonably possible in the near term.*

CICA Accounting Guideline 10 states:

*13 Additional financial statement disclosures about the Year 2000 Issue should be factual and verifiable, and consistent with the disclosure of the uncertainty caused by the Year 2000 Issue. Such disclosures should also address any implications that the entity has fully resolved or will fully resolve all aspects of the Year 2000 Issue.*

*26 For financial statements for all periods, the entity would consider the impact of the Year 2000 Issue on the need for disclosure of conditions that jeopardize the entity's ability to continue as a going concern, significant subsequent events, and measurement uncertainty, ... and in addition, the need for disclosure of contingencies and significant contractual obligations.*

Insurers should consider expanding their existing disclosure to specifically address the various uncertainties surrounding Y2K-related policy liabilities.

## 2.5 Going Concern

Financial statements are prepared on the assumption that the entity is a going concern. CICA Accounting Guideline 10 states:

*17 When management concludes that existing conditions caused by the Year 2000 Issue jeopardize the entity's ability to continue as a going concern, the financial statements should draw this fact to the reader's attention explicitly, and state that the entity may be unable to continue realizing its assets and discharging its liabilities in the normal course of operations.*

## 2.6 Premiums

The industry did not generally follow the approach of charging Y2K-specific premiums, so that the issue of the appropriate earnings pattern for these premiums is likely to be very specific to the individual circumstances.

### 3. REGULATORY EXPECTATIONS

In Canada, financial reporting is monitored in the province of registration of provincial companies and at OSFI for federally-registered companies. In addition, provinces where an insurer is licensed to do business also have an interest in the financial reporting of that insurer. However, many provinces delegate to OSFI the monitoring of their licensed insurers. The following comments reflect positions taken by OSFI and by the Quebec regulator up to the time of writing of this Educational Note:

- OSFI expects that only under exceptional circumstances will the actuary provide an opinion with a Y2K-related qualification;
- The Quebec regulator has requested information from insurers on current and expected Y2K costs and carried reserves, and intends to be proactive in gathering additional information and monitoring company activities related to Y2K;
- Both OSFI and the Quebec regulator leave it to the judgment of reserving experts to determine if Y2K-related claim or premium liabilities exist at December 31, 1999.

### 4. ACTUARIAL TREATMENT AND DISCLOSURE

It is the responsibility of the actuary, after independent study and in consultation with management, to assess whether or not the insurer's exposure to Y2K-related claims is material to the financial statements. Having made this determination, the actuary should then address issues of quantification and disclosure, as appropriate.

#### 4.1 Quantification

The approaches described in the CAS White Paper, in conjunction with published or presented information (such as the Best's Review article and the Appointed Actuary Seminar presentation noted earlier) may be instrumental in estimating the magnitude of an insurer's Y2K exposure.

All relevant Y2K-related claim activity and associated costs encountered between the date of the statement and the date of the actuary's opinion on the policy liabilities should be used in evaluating the estimates made in the statements. Any such activity may have a bearing on the estimation of the claim liabilities, depending on the interpretation of coverage triggers, but will have a bearing on the estimation of the premium liabilities, to the extent it affects the expected loss ratios on the unearned premiums.

It is the actuary's responsibility to try and establish a reasonable basis for a best estimate of the amount of the insurer's Y2K exposure, in whole or in part, for recognition in the financial statements. For this reason, it is inappropriate to make such a provision through the Provision for Adverse Deviations, by adjustment of the Claim Development or Reinsurance Recovery margins.

Some insurers have adopted exclusionary policy wording with respect to Y2K-related exposures. These exclusions provide some measure of protection to the insurer, but it is likely that they will be challenged. The actuary should recognize the potential for extraordinary loss adjustment and legal costs to meet these challenges.



As with the determination of policy liabilities in general, it is appropriate to recognize the potential for recovery, either from reinsurers or through subrogation. Reinsurance recoveries may be available under quota share, excess of loss, or even catastrophe covers, but compatibility in Y2K coverage wording between the direct policy and the reinsurance policy may be a key consideration. Subrogation may be available, for example, against a third party manufacturer of equipment, the failure of which gives rise to an insured claim from a first party user of that equipment.

To facilitate quantification, prior to 1 January 2000, the actuary should:

- Follow industry and related publications on Y2K matters, to develop a greater understanding of coverage and trigger issues;
- Discuss with management and the auditor the insurer's position and expectations with respect to Y2K exposure, and its quantification and disclosure;
- Establish if the insurer's exposure to Y2K-related claims is expected to be material;
- Ascertain that the company has established Y2K claim tracking and reporting procedures, as appropriate to the circumstances.

After 31 December 1999, the actuary should:

- Monitor company and any available industry experience to assess the emergence of Y2K claims relative to expectations;
- Continue to refine estimates of the amount of Y2K exposure as experience emerges, up to the date of issuing an opinion on the policy liabilities;
- After the date of issuing an opinion on the policy liabilities, continue to monitor emerging experience, to assess the appropriate treatment of the Y2K exposure in subsequent valuations.

#### 4.2 Disclosure – Opinion

It is the actuary's responsibility to carry out the valuation of the policy liabilities in accordance with accepted actuarial practice, which includes making a best estimate provision for the effect of Y2K on the policy liabilities. It would be appropriate to provide an opinion on the valuation of the policy liabilities fully in accordance with normal practice, provided:

- (a) the actuary concluded there is no material Y2K exposure; or
- (b) the actuary concluded there is material Y2K exposure and the amount of such exposure was reasonably measurable and included in the policy liabilities.

Under the exceptional circumstance that the actuary concluded there is material Y2K exposure and the amount of such exposure is not reasonably measurable, the actuary should provide a qualified opinion on the policy liabilities, an illustration of which now follows (assuming a statutory financial reporting context, and that the usual discounting reservation also applies):

*I have valued the policy liabilities of [ABC Company] for its [consolidated] balance sheet at [December 31, 1999], and their change in the statement of income for the year then ended, in accordance with accepted actuarial practice, including selection of appropriate assumptions and methods, except as described in the following two paragraphs.*

*In accepted actuarial practice, the valuation of policy liabilities reflects the time value of money. [Pursuant to the authority granted by the Insurance Companies Act, the Superintendent of Financial Institutions] has directed that the valuation of some policy liabilities not reflect the time value of money. My valuation complies with that directive.*

*Accepted actuarial practice defines policy liabilities in such a way as to encompass consideration of related Year 2000 exposure. I have reviewed the company's exposure to related Year 2000 claims, and I have concluded that this exposure is expected to be material to these financial statements, but is not reasonably measurable. After consultation with company management and the external auditor, my valuation includes no explicit provision for related Year 2000 claims.*

*In my opinion, the amount of the policy liabilities makes appropriate provision for all policyholder obligations, except as noted in the previous two paragraphs, and the financial statements fairly present the results of the valuation.*

In the context of an opinion in published financial statements, it is appropriate to include references in the reservation paragraphs to the relevant notes to the financial statements which more fully address the issues raised in the reservation paragraphs.

#### **4.3 Disclosure – Valuation Report**

The body of the valuation report documents the work of the actuary in the valuation of the policy liabilities. Hence, the actuary should include explanation for the basis of the position taken with respect to the company's Y2K exposure, and if applicable, the estimate included in the valuation of the policy liabilities.

#### **4.4 Disclosure – Notes to Financial Statements**

With the objective of improving the quality of financial reporting, and conforming with the various disclosure requirements of the CICA, it is appropriate to include specific reference in the notes to the financial statements as to the nature and extent of the uncertainty surrounding the company's Y2K exposure, and its recognition in the financial statements, as applicable. The appropriate place for such disclosure is in the Measurement Uncertainty note.

#### **4.5 Consistency**

Some actuaries may be in a position to have knowledge of the Y2K exposure of two or more unrelated insurers. Under such circumstances, in order to protect client confidentiality, each insurer should be considered independently, and there should be no attempt to specifically balance the amounts of Y2K-related policy liabilities nor to specifically standardize disclosure between clients.