

UNCLASSIFIED



**OFFICE OF THE SUPERINTENDENT  
OF FINANCIAL INSTITUTIONS**

**MEMORANDUM FOR THE ACTUARY'S REPORT  
ON PROPERTY AND CASUALTY INSURANCE BUSINESS**

**2004**

## **1.0 INTRODUCTION**

This Memorandum describes the requirements of the Office of the Superintendent of Financial Institutions (OSFI) and the Financial Services Commission of Ontario (FSCO) with respect to the Appointed Actuary's Report (AAR). Section 5 outlines OSFI review procedures that do not apply to Ontario incorporated companies. Additional special jurisdictional requirements may be included in the covering letter from the regulator to the insurer which accompanies these instructions. Such additional requirements must be considered as part of this memorandum.

Many insurers are required to file an AAR, as part of the Annual Return forms, with more than one regulator, federal or provincial, in Canada. It is the responsibility of the insurer to ensure that the AAR submitted as part of the Annual Return to each regulator complies with the requirements of that regulator.

The term AAR refers to the detailed actuarial report submitted to a regulator. This includes the opinion of the Actuary concerning the fairness and adequacy of the figures for policy liabilities included in the insurer's financial statements, plus a detailed commentary and exhibits of data, and calculations supporting that opinion.

The purpose of the AAR is to give the regulator a comprehensive report documenting the work done by the Appointed Actuary to calculate the policy liabilities. The AAR is a key component in OSFI's review process of the Company's actuarial financial position and profile.

The AAR should not be considered to solely be a report from the company's Appointed Actuary to the regulator's actuaries. It is also read by non-actuaries who are knowledgeable about insurance. It should be a generally understandable presentation that can be used as a key component in the regulator's monitoring of the company's financial results.

This Memorandum:

- sets out the minimum standards used in determining the acceptability of the AAR; and
- provides guidance for actuaries preparing reports in matters relating to presentation, level of detail and nature of the discussions to be included.

## **2.0 NOTE ON REGULATORY REQUIREMENTS**

### **2.1 Application of Professional Standards to Actuary's Report and Valuation**

The Actuary's valuation of all policy liabilities should be in accordance with generally accepted actuarial practice, subject to any additional requirements of the Superintendent.

The Superintendent understands generally accepted actuarial practice to be defined by the professional actuarial Standards of Practice promulgated by the Canadian Institute of Actuaries (CIA), together with the additional requirements and directions of this Memorandum. Any deviations from CIA standards or from the additional requirements of this Memorandum must be reported in the AAR and must be justified.

The actuarial opinions presented to the shareholders and policyholders of an insurance company should be essentially the same as the opinions filed with the regulator. Should this not be the case, the Actuary is required to disclose in writing to the regulator the material differences between the reports, as well as the rationale for such differences.

References to "Annual Return" should be read as referring to "Annual Statement" or whatever term is used in the legislation to describe the annual filing by insurers which includes forms P&C-1 and P&C-2.

## **2.2 Marine Insurance**

Marine insurance business, if transacted, must be included within the scope of the AAR if the report is part of a P&C-1 Annual Return filing.

## **2.3 Accident and Sickness Insurance**

This Memorandum does not deal specifically with accident & sickness insurance valuation.

Companies and their actuaries preparing reports on accident and sickness business should refer to separate instructions (if any) issued by their regulators regarding the valuation of life insurance and accident and sickness business and the AAR covering such business. The opinion described later in this document, included in the report, should cover these related provisions.

## **2.4 Differences (if any) Between Actuary's Valuations and Corresponding Annual Return Liabilities**

Companies are expected to book the Actuary's estimated policy liabilities in the Annual Return. In the circumstances where the booked policy liabilities differ from the estimated policy liabilities, the AAR must include a discussion of the reasons for the differences.

**For federally regulated companies, the provision for policy liabilities in the liabilities shown in the balance sheet of the Annual Return should be greater than or equal to the corresponding estimated policy liabilities on a discounted basis including PfAD calculated by the Actuary.**

The AAR must contain details of policy liabilities included in the Annual Return. For each line of business, the AAR should provide the rationale and justification for the selection of the Actuary's estimate from the range of values calculated by different methods.

## **2.5 Filing of Reports**

Insurers are reminded that the legislation requiring the filing of actuarial reports and opinions with Annual Return forms P&C-1 and P&C-2 requires that each copy of the Annual Return should contain a properly signed copy of the AAR.

**An insurance company that files its Annual Return without including the AAR will not be deemed to have satisfied the requirements of the Act with respect to the filing of its Annual Return. A certificate containing only the opinion of the Actuary will not be accepted in lieu of a full report. Note that, according to regulations, actuarial reports are subject to late or erroneous filing penalties.**

## **3.0 FORMAT AND CONTENT OF THE ACTUARY'S REPORT**

### **3.1 General**

It is expected that each report will be clear and complete. In summary, the report should clearly present and support the determination of the proper amounts of total policy liabilities so derived by the person signing the report and a reconciliation of any differences between such proper amount and the figures shown in the annual P&C-1 and P&C-2 return forms.

One section of the report should deal exclusively with the claims liabilities and another section exclusively with premium liabilities. Each should include all the elements noted in general comments above, as well as any other information needed to support the conclusion reached.

### **3.2 Compliance**

The report should clearly identify any items which might be excluded from the scope of the report or are not treated in compliance with this Memorandum. The rationale for such exclusion or non-compliance should be provided.

### **3.3 Index**

A table of contents or index must be included at the beginning or at the end of the report.

To facilitate the review, the report should have separately identified sections with numbered pages. Reference to such pages should be part of the table of contents or index.

### **3.4 Persons Signing the Actuary's Report**

The report must be signed by a Fellow of the Canadian Institute of Actuaries.

### **3.5 Contents of Report**

The contents of the report should be divided into five sections:

#### **Part 1 - Introduction and Scope**

This section should identify the company involved, the date of valuation, the identity of the author, the author's full address and telephone number, and the author's authority for preparing the report. This section should indicate clearly that the report is an actuarial valuation report or supports an actuarial opinion. The scope of the report should be clearly identified.

A brief description of the company's operations should be given, particularly indicating changes in management or ownership, changes in management policies and claims administration and reserving procedures, and changes in underwriting procedures and type of business written.

The extent of the author's review and verification of the data and the extent of the author's reliance on data prepared by others should be noted. The methods and procedures used to ensure that the valuation data are sufficient, reliable and accurate should be clearly described.

In particular the report should describe:

- the type of data provided and the review and verification procedures applied thereto;
- the procedures and/or methodology used to transform such data into data which may be suitable for the valuation;
- the procedures and steps undertaken to ensure that the valuation data is sufficient, reliable and accurate.

The Actuary may decide to rely on the verification of data based on work done by the External Auditor. This reliance should be mentioned in the introduction.

If the author has relied on a valuation prepared by another Actuary, the scope of such reliance must be disclosed and a justification for such reliance must be presented.

The author must disclose the standard of materiality in the report and briefly describe how it was developed.

The Appointed Actuary should make a disclosure of compensation in the AAR. The form of the statement should be as follows:

<i>Disclosure of Compensation</i>
<i>I attest that all my direct and indirect compensation is derived using the following methodology:</i>
<i>I confirm that I have performed my duties without regard to any personal considerations or to any influence, interest or relationship in respect of the affairs of my client or employer that might impair my professional judgment or objectivity.</i>
<i>I confirm that my ability to act fairly is unimpaired, that there has been full disclosure of the methodology used to derive my compensation to all known direct users of my services.</i>

If the Appointed Actuary is a participant in a bonus plan or a stock option plan which is in addition to a base salary, the value, as a percentage, of the bonus plan or stock option plan to the base salary must be disclosed. The basis used to determine the amount of the bonus or stock options granted must be disclosed.

## **Part 2 - Expression of Opinion**

The Actuary must use the prescribed opinion (see Appendix I). Any different wording will be considered as a qualification.

The opinion wording is as recommended in the CIA Consolidated Standards of Practice – Practice-Specific Standards for Insurers, with the following additions:

- a) The liability figures carried by the company in the Annual Return should be stated in the opinion.**
- b) The liability figures derived by the Actuary should be stated in the opinion.**

**The opinion wording in the AAR should include the following text:**

**"I am satisfied that the data utilized for the valuation of these liabilities are reliable and sufficient. I verified the consistency of the valuation data with the company's financial records."**

This section must contain an original signature of the author of the report, the author's name in type, and the date of signing.

Any qualification or limitation concerning any aspect of the report should be noted in this section. These qualifications or limitations should be similar to the ones included in the opinion for Canadian Annual Returns presented to the shareholders and policyholders. Caveats or any form of disclaimer should be excluded from the opinion. For branches where the External Auditor Report is not available at the time the Actuary has to render his opinion, the opinion should clearly state that it is a qualified opinion, conditional upon receiving an unqualified opinion from the External Auditor.

### **Part 3 - Comparison of Actual Experience with Expected Experience in the Previous Year-End Valuations**

**In order to assess the effect of changes in the estimated claims liabilities, OSFI requires that a comparison of Actual Experience with Expected Experience be provided for the last five years. It should be noted that FSCO requires a minimum of a two years' comparison.**

Actual Experience refers to the ultimate undiscounted estimates selected for each accident year for each line of business **and in total** valued as of year-end 2003<sup>4</sup> [usually December 31, 2003<sup>4</sup>]. Expected Experience in Previous Year End Valuations refers to the ultimate **undiscounted** estimates selected for each accident year for each line of business valued as of year-end ~~1998,~~ 1999, 2000, 2001, ~~and~~ 2002 and 2003. If the ultimate **undiscounted** estimates are not available for a line of business (e.g. tabular reserves) then the ultimate discounted estimates may be used.

In respect of the policy liabilities for unpaid claims (i.e. claims liabilities) valued for each line of business **and in total** in the **five** previous year-end actuarial reports, the Actuary should provide a comparison of the ultimate **undiscounted** estimates selected in the previous year-end actuarial reports, with the ultimate **undiscounted** estimates selected in the 2003<sup>4</sup> year-end actuarial report for each accident year. Whenever material differences in ultimate estimates occur for any accident year, the Actuary should provide commentaries explaining such changes in ultimate estimates for each accident year.

### **Part 4 - Commentary**

This section should provide relevant commentary for each line of business.

Comments on each line should include:

- a full description of the case reserving process, including particularly the reserving of weekly indemnity claims;
- an explanation of how the provisions are supported by the calculations and data contained in the report and the method(s) and/or assumptions applied;
- a reconciliation, if necessary, of the provisions with the amounts shown in the Annual Return;

- any significant changes in assumptions or techniques from the previous valuation report, the financial impact of such changes measured as at the current valuation date and the justification for such changes;
- the principal characteristics of each line of business, including the frequency and severity of large losses;
- any significant change in the company's marketing strategy, mix of business, level of retention, level or type of reinsurance coverage, method of recording data, settlement policies or year-end cut-off dates, to the extent that such changes are relevant to the valuation of the liabilities;
- the expected ultimate claims and claim ratios for each accident year;
- for automobile weekly indemnity claims, trends in the number and type of claims, trends in amount of indemnity, and changes in reserving procedures;
- impact of participation in industry pools;
- impact of inter-company pooling agreements, with a full description of those in which the insurer participates;
- the treatment of mass tort and environmental liabilities in the calculation of the provisions for unpaid liabilities; and
- the provision for adverse deviation (PfAD) and the considerations made in the determination of PfAD.

References to the database and exhibits should be clearly indicated where appropriate.

#### **Part 5 - Database and Exhibits**

This section should include numeric information that will constitute a summary database and a set of derived exhibits for each significant line of business.

It is important that each exhibit and table identify clearly on which basis the figures are presented (direct, assumed and net).

For each line of business, the summary database should include accurate, historical information that can be readily reconciled to the records of the company. More specifically, the summary database of claim information should include, for each line of business, on a direct, assumed and net basis, the following data triangles by accident year:

- the cumulative paid losses, including paid adjustment expenses where appropriate, for each accident year, observed at regular intervals;
- the case reserves, including reserves for adjustment expenses where appropriate, for each accident year, observed at regular intervals;



- the cumulative number of claim units reported, for each accident year, observed at regular intervals; and
- the number of claim units still unsettled, for each accident year, observed at regular intervals.

The Actuary is expected to distinguish between different kinds of loss under the accident benefits coverage for reserving purposes, particularly medical payments-rehabilitation and disability income. If kind of loss data is not available to make the distinction, the AAR should explain why it is not available.

Whenever large retention limits are used (i.e. excess loss, large or aggregate deductibles, self-insured retentions, etc.) the "ground up" loss figures, when available, should be included in the report.

In exceptional cases, the summary database may be different from the situation described here, only to the extent that such differences are necessary for the proper valuation of the policy liabilities.

For each line of business, the derived exhibits should include any necessary modifications, adjustments, combination and analysis, derived from the summary database or from prior exhibits.

Such modifications, adjustments, combination and analysis might include:

- the determination of cumulative incurred losses;
- the calculation of average case reserves;
- the modification necessary to adjust for the strengthening of reserves and changes in the speed of the finalization of claims;
- the recasting of paid or incurred losses at different levels of retention; and
- the determination of appropriate average development factors, of appropriate tail factors, of appropriate inflation trends, and other such calculations.

Important: In all such cases, the modifications should be clearly indicated and justified.

The derived exhibits should also include the calculation of the ultimate values used to determine the proper provisions.

## **Part 6 - Data Reliability and Consistency**

In complying with generally accepted actuarial practice, the Appointed Actuary must meet a standard of care with respect to the data used. The standard of care, specified in the CIA Standards of Practice, requires that the Actuary establish suitable check procedures to verify that the data utilized is reliable and sufficient for the valuation of

policy liabilities. The statutory requirements that the Actuary file a report with the Annual Return, assume that the Actuary has met the standard of care, as required by the CIA.

The CIA/CICA's "Joint Policy Statement" (JPS) states that the Actuary may "consider using the work of the Appointed Auditor with respect to the accuracy and completeness of data used to determine the amounts" of actuarial liabilities contained in the Annual Return. The Superintendent assumes that the Auditor's tests of accuracy and completeness comprise more exhaustive and different checking than would normally arise in the course of the Actuary's own work in complying with the CIA Standards.

The JPS outlines that the Actuary may use the Auditor's work provided that the Actuary "takes reasonable care to determine that there is a basis for such use". This reasonable care includes the establishment of communication between the two professionals and ensuring the Auditor is aware of the intended use of the work and of the Actuary's needs. Discussions on "any problems expected in meeting the needs...on a timely basis" should also form the basis for using the work.

While the JPS offers the Actuary the option to use the Auditor's work, the existence of the JPS does not override the statutory requirement for filing reports with the Annual Return that fulfil the required standard of care. The Actuary of a foreign company must be particularly mindful of this, given the later filing date of the foreign company Auditor's Report. The Actuary must ensure that the required reliability and sufficiency checks have been completed. The Actuary's professional responsibility cannot be deferred to work not yet completed by an Auditor. **In such cases, a qualified opinion, conditional upon receiving an unqualified opinion from the External Auditor, must be issued. The qualification must be removed, if appropriate, when the Auditor's work is completed and the regulator must be informed.**

The extent to which the Actuary uses the work of the Auditor must be discussed in the AAR. Where the Actuary uses the work of the Auditor, the details of the Auditor's work need not be addressed in the AAR.

With respect to any line of business (including more specifically accident & sickness business, pools and facility associations), the Actuary should also indicate any reliance on or use of the work of another Actuary in meeting the statutory requirements. It is expected that whenever such related blocks of business have a material impact on the company business, the Actuary will perform a more in-depth review of the work performed by the relied-on-Actuary. That Actuary's name and qualifications should be provided together with a description of the work performed.

## **4.0 ASSUMPTIONS AND METHODS OF CALCULATION**

### **4.1 General**

Although the exact content of the report is left to the professional judgment of the author, certain principles and assumptions that have a significant effect on the

calculation of the reserves should be clearly stated and appropriately justified. This will help minimize the correspondence necessary to obtain additional information.

The following comments are intended to provide guidance in preparing the report.

## 4.2 Discounting of Reserves

**Discounting of actuarial liabilities is ~~now~~ required for all federally regulated and Ontario incorporated companies.**

With respect to the incorporation of time value of money, the following additional information must be disclosed by line or sub-line:

- the interest rate used for the valuation;
- the payment pattern (paid and incurred) or disability table; and
- disclosure of the provision for adverse deviation.

### 4.2.1 Unpaid Claims And Loss Ratio Analysis Exhibit

The Unpaid Claims and Loss Ratio Analysis Exhibits (see Appendix II) are constructed to allow the presentation and collection of industry loss information in a standard format. The compiled information will allow the analysis of the impact of discounting on claims reserves and the analysis of the evolution of loss trends. In order to achieve these objectives, the exhibits are constructed by class of insurance and by accident year and contain information on a current year and on a cumulative year basis.

The Analysis Exhibits will provide information in detail on an actuary's category basis. Actuary's category represents the category used by the actuary for claims reserves analysis purposes. This category has to be uniquely linked to one and only one exhibit category as listed in Appendix III. For reinsurers, proportional and non-proportional business must be reported separately.

If the actuary's category is a combination of two or more annual return categories, it is up to the actuary to determine in which annual return category to place it to best represent the operations of the company. A "Total" page must also be completed; this exhibit should balance to the Actuary's Report. An individual page does not have to be completed for a category that is not material but the total Discounted Reserves including PfAD for the category must be included in Line 15 ("Other Provisions"), of the "Total" page. The regulator might require that the Analysis Exhibits be completed for certain categories. The data for the category might not be credible for one company but could be useful to the regulator once aggregated with the rest of the industry.

The Analysis Exhibits are expected to be completed on a net basis with net being defined by the Appointed Actuary in the Actuary's Report. For instance, if the Appointed Actuary has completed his or her net analysis gross of inter-company

reinsurance, the Analysis Exhibits should also be completed on this basis. Any adjustments to the net basis as reported in the Actuary's Report (e.g. industry pools or inter-company reinsurance) should be made in Lines 14 and 15 of the "Total" page.

### **Information Contained in the Unpaid Claims and Loss Ratio Analysis Exhibit (by Column)**

The exhibits contain amounts segregated by accident years. These amounts exclude all paid and unpaid unallocated adjustment expenses ("ULAE") for lines 1 to 12; discounted unpaid ULAE including provisions for adverse deviation (PfAD) are entered in line 13 in the "Total" exhibit but excluded entirely from the other exhibits.

The discounted unpaid claims of all automobile pools (e.g. Facility Association, Ontario Risk Sharing Pool and Plan de Répartition des Risques) are entered in line 14 (Facility Association and Plans) of the "Total" exhibit but excluded from all the other exhibits.

The discounted unpaid claims for all other provisions (e.g. non-material lines of business, non-automobile industry pools and inter-company reinsurance) are entered in line 15 (Other Provisions) of the "Total" exhibit.

Columns 02 and 03 must be completed for the past 10 accident years while columns 04 through 12 must be completed for all accident years. Columns 13 through 17 are only required to be completed for accident years 2002 and subsequent.

#### **Column 01 – Accident Year**

Column 01 of the exhibit represents the segregation by accident year. Line 11 represents the most recent accident year, lines 02 to 10 represent the nine prior accident years and line 01 represents all prior years to line 02.

#### **Column 02 – Paid Losses: Current Year**

Column 02 represents the paid claims and paid allocated adjustment expenses for the current calendar year.

#### **Column 03 – Paid Losses: Cumulative**

Column 03 represents the cumulative paid claims and paid allocated adjustment expenses for all calendar years.

#### **Column 04 – Undiscounted Unpaid Claims and Adjustment Expenses: Case Reserves**

Undiscounted case basis reserves of the unpaid claims and allocated adjustment expenses are presented in column 04. If the claims liabilities are case reserved on

a discounted basis (e.g. tabular reserves), the discounted case reserves are to be entered.

Column 05 – Undiscounted Unpaid Claims and Adjustment Expenses: IBNR

Undiscounted incurred but not reported reserves are shown in column 05. These reserves also include any adjustment for the deficiency or redundancy of the case reserves (also known as the broad definition of IBNR) presented in column 04. The undiscounted IBNR includes all amounts related to the undiscounted unpaid allocated adjustment expenses. If the claims liabilities for a line are not available on an undiscounted basis (e.g. tabular reserves), then the discounted IBNR is to be entered.

Column 06 – Undiscounted Unpaid Claims and Adjustment Expenses: Total

This is the total of columns 04 and 05.

Column 07 – Present Value of Unpaid Claims and Adjustment Expenses: Total

Present value case basis reserves and IBNR of the unpaid claims and allocated adjustment expenses are presented in column 07. The underlying rule to be respected with the completion of the Analysis Exhibits is that the amounts shown should correspond to those calculated by the Appointed Actuary in the Actuary's Report. Do not add any PfAD to this column.

Column 08 – Provision for Adverse Deviation (PfAD): Claims

The provision for adverse deviation on claims is presented in column 08.

Column 09 –MfAD: Claims (%)

This column is the margin for adverse deviation and is equal to the ratio of column 08 to column 07.

Column 10 – PfAD: Reinsurance

The provision for reinsurance adverse deviation is presented in column 10.

Column 11 – PfAD: Interest Rate

A provision for interest rate adverse deviation is presented in column 11.

Column 12 – Discounted reserves including PfAD

Column 12 is the result of the following formula:

$$\text{Column (07)} + \text{Column (08)} + \text{Column (10)} + \text{Column (11)}$$

Note that for the “Total” exhibit, amounts for column 12 are entered on line 13 (ULAE – Total), line 14 (Facility Association and Plan) and line 15 (Other Provisions) as well as line 16 (Grand Total). Lines 13 through 16 are included only in the “Total” exhibit.

#### Column 13 – Earned Premiums

Earned premiums are shown separately by accident year; note that only accident years 2002 and subsequent must be completed for this column. Net earned premiums are reported and developed at ultimate where development is possible, for example, where experience rating is used.

#### Column 14 – Investment Income from UPR

Investment income from unearned premium for each accident year is presented in this column; note that only accident years 2002 and subsequent must be completed for this column. The use of the methodology must be consistent with the one used to calculate the discounted reserves presented in the annual statement.

Please refer to the Canadian Institute of Actuaries (CIA) Educational Note *Evaluation of the Runoff of Claims Liabilities when the Liabilities are Discounted in Accordance with Accepted Actuarial Practice* for guidance on the calculation of these amounts.

#### Column 15 – Cumulative Investment Income from Unpaid Claim Reserves

The cumulative investment income from the unpaid claim reserves is presented in column 15; note that only accident years 2002 and subsequent must be completed for this column.

Please refer to the CIA Educational Note *Evaluation of the Runoff of Claims Liabilities when the Liabilities are Discounted in Accordance with Accepted Actuarial Practice* for guidance on the calculation of these amounts.

#### Column 16 – Loss Ratio (%): Undiscounted

The Undiscounted loss ratio is calculated using the following formula:

$$\frac{100 * [\text{Column (03)} + \text{Column (06)}]}{\text{Column (13)}}$$

Only accident years 2002 and subsequent must be completed for this column.

### Column 17 – Loss Ratio– (%): Discounted

The Discounted loss ratio is calculated using the following formula:

$$\frac{100 * [\text{Column (03)} - \text{Column (15)} + \text{Column (12)}]}{\text{Column (13)} + \text{Column (14)}}$$

Only accident years 2002 and subsequent must be completed for this column.

### Claims Reported on Other than an Accident Year Basis

Normally, the exhibits will be completed on an accident year basis (year in which the claim was incurred).

However, some insurers may have used a basis other than accident year when completing the Actuary's Report. This includes reinsurers reporting on an underwriting year basis as well as insurers writing policies on a claims-made basis. These insurers may encounter difficulties in completing the Analysis Exhibits on an accident year basis.

It is recommended that the basis that is most suited to the company's operation be used. Completing the exhibit on other than an accident year basis is subject to the condition that the regulators are advised of the basis used. The Exhibits must be completed so that the total of the amounts entered equals that calculated by the Appointed Actuary in the Actuary's Report.

### Rounding of Data

All amounts entered on the Analysis Exhibits are to be expressed in Canadian dollars and rounded to the nearest thousand dollars.

## **4.3 Separate Commentaries on the Claims Liabilities and Premium Liabilities.**

Commentary in the AAR should deal separately with claims liabilities and premium liabilities. The level of detail required in each commentary must be as indicated in the next section.

### **4.3.1 Claims Liabilities**

The commentary on the claims liabilities must contain details of:

- the derivation of the net, direct and assumed reserve separately **disclosed in the opinion** for unpaid claims and adjustment expenses and other obligations that have been incurred by the company prior to the date of the return, including claims and obligations that arose before that date, but were not reported to the company on or before that date.

In determining these provisions, the author of the report should take into account, among other factors, at least the following:

- the ultimate loss ratio history of the company over the last few years;
- any significant trends in the severity and frequency of claims;
- any important changes in the coverage of the policies;
- the changes in the cost of reinsurance and/or in reinsurance arrangements, including any adjustments for reinsurance premiums subject to swing rates (properly allocated to unearned premiums and unpaid claims liabilities);
- any significant lags in the reporting of claims and in the payment of claims;
- the existence of any significant deficiencies in the run-off of the reserves that had been set up in prior years;
- the existence of any significant amount(s) in respect of salvage and subrogation;
- frequency and severity of large losses; and
- provisions for participation in pools.

The Actuary must also comment on the adequacy of reserves, including IBNR, maintained for Self-Insurance Retention (SIR) plans. SIR represents the portion of a loss that is payable by the policyholder. In some cases, SIRs may be included in the policy declaration or in an endorsement to the policy, stipulating that the policy limit applies in excess of the SIR. When policy wordings are controlled by provincial legislation, the SIR arrangement is usually the subject of a separate agreement between the insurer and the policyholder. These should be included in the opinion as “other net liabilities”. They should be reported net of reinsurance, not net of the supporting assets. These supporting assets are to be included in the opinion as “other amounts to recover”.

Whenever amounts for salvage & subrogation are material, and therefore presented separately in the Annual Return, they must be included in the opinion as “other amounts to recover”.

#### **4.3.2 Premium Liabilities**

The commentary section of the report on the policy reserves must contain details concerning these items:

- (a) the derivation of the gross and net unearned premium liabilities **disclosed in the opinion**;



- (b) on the basis of the gross and net business separately, the derivation of the **provision disclosed in the opinion** for:
- all ultimate claims and other obligations expected to arise after the date of the return under the policies in force at the date of the statement return;
  - all adjustment expenses (including unallocated loss adjustment expenses) expected to be associated with the ultimate claims and other obligations;
  - all expenses relating to the servicing of the policies in force; and
  - all reinsurance costs;
- (c) the existence of any premium deficiency on a net basis;
- (d) the maximum deferrable policy acquisition expenses. This item is the difference between the net unearned premiums and the net policy liabilities in connection with unearned premiums, plus the unearned commissions;
- (e) the other net liabilities:
- an adjustment for excess of loss treaties where the premium rate varies with the claims experience;
  - an adjustment for proportional treaties where the ceding commission varies with the claims experience;
  - an adjustment relating to an inflation clause;
  - an adjustment relating to an automatic reinstatement premium; and
  - any expected increase in profit commissions to agents;
- (f) the derivation of the gross deferred policy acquisition expenses and the unearned commissions.

In determining these provisions, the Actuary should take into account, among other factors, at least the following:

- the ultimate loss ratio history of the company over the last few years;
- any changes in premium rates;
- any significant trends in the severity and frequency of claims;
- any significant trends in the servicing costs of policies;
- any important changes in the coverage under the policies;

- any changes in the cost of reinsurance and/or in reinsurance arrangements; and
- any significant lags in the collection of premiums.

#### **4.4 Reinsurance**

Each report must:

- indicate the amounts that were assumed to be recoverable from reinsurers in giving the opinion stated in the report; and
- specify any unusual problems or delays known by the person signing the report that are expected to be encountered in the collection of the relevant amounts from the reinsurers.

The author of the report should describe the company's reinsurance arrangements (type of arrangements, significant terms and conditions, and order of application of treaties) and any changes in the arrangements (including changes in retention or limits) during the experience period used in the report. The author should clearly indicate how any changed arrangements were taken into account.

It is not expected that the Actuary will necessarily assess the financial condition of each reinsurer. However, some of the problems or delays that should be specified, if relevant, would include situations in which:

- a reinsurance contract or cover note is not signed;
- a dispute has arisen with a reinsurer;
- the reinsurer has a history of not settling accounts promptly;
- the reinsurer's experience under the treaty is so minimal or other circumstances exist that cause there to be a high probability that the reinsurer will deny liability; or
- the reinsurer is known to have been the subject of regulatory restrictions in its home jurisdiction.

In this regard, it is expected that the Actuary will discuss reinsurance matters with the management and the External Auditors of the company regarding whether there are unusual problems and/or delays expected to be encountered in collecting the relevant amounts from the reinsurers.

The Actuary should disclose material amounts by type of reinsurance, i.e. affiliated, unaffiliated, registered, and unregistered reinsurers (as in P&C-1) judged to have an impact on the insurer's operations.

If the Actuary believes that unusual problems or delays in the collection of the relevant amounts from reinsurers are not known to exist, that belief should be clearly expressed.

## **5.0 REVIEW PROCEDURES**

### **5.1 OSFI's Review Procedures**

The Superintendent recognizes the confidential nature of the contents of the AAR.

Reviews of the filed Annual Returns may disclose that an Actuary's valuation warrants further assessment and questioning. The Superintendent may reject assumptions and methods where it appears that the policy liabilities produced are inappropriate.

Since the review of an AAR may take place over an extended period after filing, the regulator may notify the Actuary that supplemental detail is required to sufficiently assess the assumptions and methods. The Actuary is expected to respond promptly to all supplemental requests. Working papers required to support the computation of the actuarial and other policy liability figures reported in the Annual Return and the AAR should be available at all times at the company's head office in Canada, and should be made available to the regulator upon request.

Should the questioning of particular assumptions or methods not sufficiently demonstrate the appropriateness of the policy liabilities produced, the Superintendent will require the Actuary to choose other acceptable assumptions or methods, and to re-compute the policy liabilities. In such a situation, the actuary will have to refile the AAR. The Superintendent may require the company to amend the Annual Return. Alternatively, the Superintendent may ask the company to reflect the changes in the Annual Return for the following year. The Superintendent may request an Independent Actuary's report, if deemed necessary.

### **5.2 External Review Program**

An external review program ~~is being~~ has been introduced. This is described in OSFI's Guideline E-15, [\*Appointed Actuary: Legal Requirements, Qualifications and External Review\*](#). The AAR must disclose all recommendations for material changes and improvements that were made in external review reports received since completion of the previous AAR.

## Appendix I Expression of Opinion

“I have valued the policy liabilities of (XYZ Company) for its balance sheet at December 31, 2003<sup>4</sup> 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”.

“I am satisfied that the data utilized for the valuation of these liabilities are reliable and sufficient. I verified the consistency of the valuation data with the company financial records”.

**(Qualifications should be included here)**

The results of my valuation together with amounts carried in the Annual Return are the following:

Claims Liabilities	Carried in Annual Return	Actuary's Estimate
Direct unpaid claims and adjustment expenses:		
Assumed unpaid claims and adjustment expenses:		
Gross unpaid claims and adjustment expenses:		
Ceded unpaid claims and adjustment expenses:		
Other amounts to recover:		
Other net liabilities:		
Net unpaid claims and adjustment expenses:		

Premium Liabilities	Carried in Annual Return	Actuary's Estimate
Gross policy liabilities in connection with unearned premiums:		
Net policy liabilities in connection with unearned premiums:		
Gross unearned premiums:		
Net unearned premiums:		
Premium deficiency:		
Other net liabilities:		
Deferred policy acquisition expenses:		
Maximum policy acquisition expenses deferrable:		
Unearned Commissions:		

“In my opinion, the amount of policy liabilities makes appropriate provision for all policyholder obligations and the Annual Return fairly presents the results of the valuation.”

\_\_\_\_\_  
FCIA  
Signature of Actuary

\_\_\_\_\_  
Date opinion was rendered

\_\_\_\_\_  
FCIA  
Printed name of Actuary

## Appendix II

**Unpaid Claims and Loss Ratio Analysis Exhibit**

(All amounts are on a Net basis and in 000\$)

Actuary's Category : \_\_\_\_\_

Exhibit Category : \_\_\_\_\_

Line	Accident Year	Paid Losses <sup>a</sup>		Unpaid Claim Analysis <sup>a</sup>								Loss Ratio Analysis <sup>a</sup>					
		Current Year (2004)	Cumulative (2004 and prior)	Undiscounted Unpaid Claims and Adjustment Expenses			Present Value of Unpaid Claims and Adjustment Expenses - Total	Provision and Margin for Adverse Deviation (PfAD and MfAD)				Discounted Reserves including PfAD	Income		Cumulative Investment Income from Unpaid Claim Reserves	Loss Ratio (%)	
				Case Reserves	IBNR	Total		PfAD: Claims (000\$)	MfAD: Claims (%)	PfAD: Reinsurance (000\$)	PfAD: Interest Rate (000\$)		Earned Premiums	Invest. Income from UPR		Undiscounted	Discounted
(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(09)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	
1	1994 and Prior					-						-					
2	1995					-						-					
3	1996					-						-					
4	1997					-						-					
5	1998					-						-					
6	1999					-						-					
7	2000					-						-					
8	2001					-						-					
9	2002					-						-					
10	2003					-						-					
11	2004					-						-					
12	Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**Unpaid Claims and Loss Ratio Analysis Exhibit**

(All amounts are on a Net basis and in 000\$)

Actuary's Category : \_\_\_\_\_

Exhibit Category : \_\_\_\_\_

Line	Accident Year	Paid Losses <sup>a</sup>		Unpaid Claim Analysis <sup>a</sup>								Loss Ratio Analysis <sup>a</sup>					
		Current Year (2004)	Cumulative (2004 and prior)	Undiscounted Unpaid Claims and Adjustment Expenses			Present Value of Unpaid Claims and Adjustment Expenses - Total	Provision and Margin for Adverse Deviation (PfAD and MfAD)				Discounted Reserves including PfAD	Income		Cumulative Investment Income from Unpaid Claim Reserves	Loss Ratio (%)	
				Case Reserves	IBNR	Total		PfAD: Claims (000\$)	MfAD: Claims (%)	PfAD: Reinsurance (000\$)	PfAD: Interest Rate (000\$)		Earned Premiums	Invest. Income from UPR		Undiscounted	Discounted
(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(09)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	
1	1994 and Prior					-						-					
2	1995					-						-					
3	1996					-						-					
4	1997					-						-					
5	1998					-						-					
6	1999					-						-					
7	2000					-						-					
8	2001					-						-					
9	2002					-						-					
10	2003					-						-					
11	2004					-						-					
12	Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	ULAE - Total																
14	"Facility Association" and "Plan"																
15	Other reserves																
16	Grand Total											-					

a) Including Allocated loss adjustment expenses (ALAE), but excluding Unallocated loss adjustment expenses (ULAE), except for lines 13 to 15.

**Appendix III**  
**Exhibit Categories**

Property-Personal  
Property-Commercial  
Aircraft  
Automobile-Liability - Bodily Injury  
Automobile-Liability - Property Damage  
Automobile-Personal Accident  
Automobile-Other  
Boiler and Machinery  
Credit  
[Credit Protection](#)  
Fidelity  
Hail  
Legal Expense  
Liability  
Mortgage  
[Other Approved Products](#)  
Surety  
Title  
Marine  
Accident and Sickness