OFFICE OF THE SUPERINTENDENT OF FINANCIAL INSTITUTIONS

PROPERTY AND CASUALTY MEMORANDUM TO THE APPOINTED ACTUARY

2017





Table of Contents

1.	OVER	VIEW.		5
2.	REGU	LATOF	RY REQUIREMENTS	5
	2.1	Applic	eation of Professional Standards to the Appointed Actuary's Valuation	5
	2.2	Filing	Directions for the AAR, DCAT Report and Peer Review Report	6
	2.3		ences (if any) Between the Appointed Actuary's Valuations and Corresponding 1 Return Liabilities	7
	2.4	Person	s Signing the Appointed Actuary's Report	7
3.	OSFI'S	S REVI	EW PROCESS	7
4.	SPECI	AL LIN	E OF BUSINESS CONSIDERATIONS	8
	4.1	Marin	e Insurance	8
	4.2	Title I	nsurance	8
	4.3	Accide	ent and Sickness Insurance	8
5.	FORM	IAT OF	THE APPOINTED ACTUARY'S REPORT	8
	5.1	Repor	Outline	8
	5.2	Table	of Contents	9
6.	CONT	ENTS (OF THE APPOINTED ACTUARY'S REPORT	9
	6.1	Introd	uction	9
	6.2	Expres	ssion of Opinion	9
	6.3	Supple	ementary Information Supporting the Opinion	10
	6.4	Execu	tive Summary	11
	6.5	Descri	ption of Company	11
		6.5.1	Ownership and Management	11
		6.5.2	Business	11
		6.5.3	Reinsurance	11
		6.5.4	Materiality Standards	12
	6.6	Data		12
	6.7	Claim	Liabilities	13
		6.7.1	Undiscounted Claim Liabilities	13
		6.7.2	Claims Expenses	14
		6.7.3	Comparison of Actual Experience with Expected Experience in Prior Year- End Valuations	14
		6.7.4	Discounted Claim Liabilities	15
	6.8	Premi	ım Liabilities	16
	6.9	Other	Liabilities/Other Assets	16

7. OTHE	R DISC	LOSURE REQUIREMENTS	17
7.1	Dynam	nic Capital Adequacy Testing (DCAT)	17
7.2	New A	ppointment	17
7.3	Annua	Required Reporting to the Board or Audit Committee	17
7.4	Contin	uing Professional Development Requirements	17
7.5	Disclos	sure of Compensation	18
7.6	Report	ing Relationships of the Appointed Actuary	19
7.7	Peer Re	eview of the Work of the Appointed Actuary	19
7.8	Re-sub	mitting the report	20
8. UNPA	ID CLA	IMS AND LOSS RATIO ANALYSIS EXHIBIT	20
8.1	Introdu	oction	20
8.2	Data		20
9. Appen	dix I - E	xpression of Opinion	22
10.Appen	dix II - U	Jnpaid Claims and Loss Ratio Analysis Exhibit	23
11.Appen	dix III –	Annual Return Lines of Business	25
12.Appen	dix IV -	Unpaid Claims and Loss Ratio Analysis Exhibit	26
12.1		ation Contained in the Unpaid Claims and Loss Ratio Analysis Exhibits (by	
		n)	
		Column 01 – Accident Year	
		Column 02 – Paid Losses: Current Year	
		Column 03 – Paid Losses: Cumulative	26
	12.1.4	Column 04 – Undiscounted Unpaid Claims and Adjustment Expenses: Case Reserves	26
	12.1.5	Column 05 – Undiscounted Unpaid Claims and Adjustment Expenses: IBNR	26
	12.1.6	Column 06 – Undiscounted Unpaid Claims and Adjustment Expenses: Total	27
	12.1.7	Column 07 – Present Value of Unpaid Claims and Adjustment Expenses: Total	27
	12.1.8	Column 08 – Provision for Adverse Deviation (PfAD): Claims	27
	12.1.9	Column 09 – MfAD: Claims (%)	27
	12.1.10	Column 10 – PfAD: Reinsurance	27
	12.1.11	Column 11 – PfAD: Interest Rate	27
	12.1.12	2 Column 12 – Discounted Reserves Including PfAD	27
	12.1.13	3 Column 13 – Earned Premiums	27
	12.1.14	Column 14 – Investment Income from UPR	28
	12.1.15	5 Column 15 – Cumulative Investment Income from Unpaid Claim Reserves	28
	12.1.16	6 Column 16 – Loss Ratio (%): Undiscounted	28

	12.1.17	Column 17 – Loss Ratio (%): Discounted	28
12.2		ation Contained in the Unpaid Claims and Loss Ratio Analysis Exhibit (by	28
	12.2.1	Line 13 – ULAE - Total	28
	12.2.2	Line 14 – "Facility Association" and "Plan"	28
	12.2.3	Line 15 – Other Provisions	29
	12.2.4	Line 16 – Grand Total	29
	12.2.5	Line 17 – MfAD: Reinsurance (%)	29
	12.2.6	Line 18 – MfAD: Interest Rate (%)	29
	12.2.7	Line 19 – Interest Rate to Discount Unpaid Claims & Adjustment Expenses (%)	29
12.3	Claims	Reported on Other than an Accident Year Basis	29

1. OVERVIEW

This Memorandum describes the requirements of the Office of the Superintendent of Financial Institutions (OSFI or Superintendent) with respect to the Appointed Actuary's Report (AAR) specified in subsection 667(2) of the *Insurance Companies Act (ICA)*, sets out the minimum standards used in determining the acceptability of the AAR and provides guidance for the Appointed Actuary preparing reports in matters relating to presentation, level of detail and nature of the discussions to be included.

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 Appointed Actuary concerning the fairness and adequacy of the policy liabilities included in the insurer's financial statements, a detailed commentary, data exhibits and calculations supporting that opinion.

The purpose of the AAR is to give OSFI 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 OSFI's actuaries. It is also intended for company management and is read by regulators who may not be actuaries but who are knowledgeable about insurance. It should be a generally understandable presentation that can be used as a key component in OSFI's monitoring of the company's financial results.

2. REGULATORY REQUIREMENTS

2.1 Application of Professional Standards to the Appointed Actuary's Valuation

Subsections 365(2) and 629(2) of the ICA require that: "The actuary's valuation shall be in accordance with generally accepted actuarial practice with such changes as may be determined by the Superintendent and any additional directions that may be made by the Superintendent."

OSFI's Guideline E-15 describes all of the duties of the Appointed Actuary and the qualifications that OSFI expects the Appointed Actuary to have.

The Canadian Institute of Actuaries (CIA) annually issues a letter (the Fall Letter) from the Committee on Property and Casualty Insurance Financial Reporting (PCFRC), and from time to time may issue other educational notes. While both the Fall Letter and educational notes are not standards, the Appointed Actuary should disclose when either the educational notes and/or the PCFRC Fall Letter are/is not followed as well as the supporting justification.

For purposes of the Appointed Actuary's valuation of policy liabilities (and the associated opinion), OSFI currently accepts that work performed in accordance with "accepted actuarial practice" in Canada (as defined by CIA) is sufficient to satisfy the 'generally accepted actuarial practice' requirement referred to in the ICA sections identified above. "Accepted actuarial practice" is defined by the professional actuarial standards of practice promulgated by the Actuarial Standards Board (ASB), together with the additional requirements and directions of this Memorandum. Any deviations from CIA Standards of Practice or from the additional requirements of this Memorandum must be reported in the AAR and justified.

This Memorandum for 2017 year-end financial reporting does not contain any requirements that override or limit accepted actuarial practice.

In complying with accepted actuarial practice, the Appointed Actuary must meet a standard of care with respect to the data used in valuations. This standard of care, implicitly stated in the CIA Standards of Practice, requires the Appointed Actuary to establish suitable check procedures for the verification of data. While the CIA Standards of Practice (SOP Subsection 1630) offer the Appointed Actuary the option to consider the Auditor's work, the existence of the Joint Policy Statement does not override the ICA's requirement for filing reports with the Annual Return that meet the implicitly stated standard of care in the CIA Standards of Practice. The extent to which the Appointed Actuary considers the work of the Auditor must be discussed in the AAR. Where the Appointed Actuary uses the work of the Auditor, the details of the Auditor's work should not be addressed in the AAR. If there are instances where the Appointed Actuary does not use the work of the Auditor because of any special circumstances, this must be disclosed in the product sections of the AAR. In such cases, the Appointed Actuary should describe the data verification that was performed.

The CIA Standards of Practice (SOP Subsection 1610) describe the Appointed Actuary's use of another person's work. Such use of the work of others should be disclosed in the section of the AAR where it most logically applies (e.g., at the company level, a specific product level, etc.).

2.2 Filing Directions for the AAR, DCAT Report and Peer Review Report

The deadline for filing the AAR is 60 days after the end of the fiscal year. The requirement for filing the DCAT Report is the earlier of 30 days after the presentation to the Board of Directors, Audit Committee or Chief Agent and one year after the fiscal year end. The requirement for filing the Peer Review Report (full 3-year review or the limited annual review) is 30 days after its transmission to the Board of Directors, Audit Committee or Chief Agent. With respect to deadlines, refer to OSFI Guideline E-15 Appointed Actuary: Legal Requirements, Qualifications and Peer Review.

For the AAR, the DCAT Report and the Peer Review Report, the company is required to submit one electronic copy uploaded to via the Regulatory Reporting System (RRS). A scanned copy of the signed opinion must be included in the electronic submission. Failure to meet the deadlines of the filings will result in a penalty fee under OSFI's Late and Erroneous Filing Penalty Framework.

For security reasons, e-mail should not be used. The file should be in PDF format and preferably created with a PDF software rather than through scanning as the former is searchable while the latter is not. It is preferable if information can be easily copied by

OSFI staff from the AAR and thus, the report should not be security protected and exhibits should be in a format that can easily be transferred to a spreadsheet. Alternatively, the company should be prepared to promptly provide searchable data in an alternative media upon request.

Hard copies are not required, with the exception of some institutions for the AAR. Companies required to provide hard copies will be contacted individually.

For the file naming conventions follow the instructions for Unstructured Financial Returns. Both the full 3-year review and the limited annual review share the same naming conventions.

The <u>filing</u> instructions may be obtained on the OSFI Website at <u>www.osfi-bsif.gc.ca</u> under <u>Regulatory Data and Returns / Filing Financial Returns / Canadian & Foreign Property and Casualty Insurance Companies.</u>

In order to file a Peer Review Report within RRS, insurers are reminded that these filings must first be requested by contacting ReturnsAdmin@osfi-bsif.gc.ca or by calling 613-991-0609.

Insurers are reminded that the filing of AARs and opinions with the P&C Return requires that each copy of the P&C Return filed with OSFI should contain a properly signed copy of the AAR.

An insurance company that files its Annual Return without including the AAR will not have satisfied the requirements of the ICA with respect to the filing of its Annual Return. A certificate containing only the opinion of the Appointed Actuary will not be accepted in lieu of a full AAR.

2.3 Differences (if any) Between the Appointed Actuary's Valuations and Corresponding Annual Return Liabilities

Companies are expected to book the Appointed Actuary's estimated policy liabilities in the Annual Return. In the circumstances where the booked gross, ceded or net policy liabilities differ from the estimated policy liabilities by more than the Appointed Actuary's selected standard of materiality, 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 Appointed Actuary.

2.4 Persons Signing the Appointed Actuary's Report

The AAR must be signed by the Appointed Actuary, who must be a Fellow of the CIA.

3. OSFI'S REVIEW PROCESS

OSFI recognizes the confidential nature of the contents of the AAR. Reviews of the filed Annual Returns may disclose that an Appointed 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, OSFI may notify the Appointed Actuary that supplemental detail is required to sufficiently assess the assumptions and methods. The Appointed Actuary is expected to respond promptly to all supplemental requests. Working papers required to support the computation of the policy liabilities reported in the Annual Return and the AAR should be available at all times and should be made available to OSFI upon request.

If the appropriateness of particular assumptions or methods is not sufficiently demonstrated, the Superintendent will require the Appointed Actuary to choose other acceptable assumptions or methods, and to re-compute the policy liabilities. In such a situation, the Appointed Actuary will have to re-file 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.

4. SPECIAL LINE OF BUSINESS CONSIDERATIONS

4.1 Marine Insurance

Marine insurance business, if transacted, must be included within the scope of the AAR. The Appointed Actuary's provisions for marine insurance should be clearly identified in the AAR.

4.2 Title Insurance

Premiums for title insurance are earned at issue and therefore, unearned premium reserves are not usually required. The accident date for all claims is the issue date of the policy as most problems with the title that could cause a claim would be in existence at the issue date of the policy.

4.3 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 the *Memorandum to the Appointed Actuary on the Report on the Valuation of Life Insurance Policy Liabilities* issued by OSFI. The opinion described later in this document, included in the AAR, should cover these related provisions.

5. FORMAT OF THE APPOINTED ACTUARY'S REPORT

5.1 Report Outline

While the format of the AAR differs from Appointed Actuary to Appointed Actuary, most AARs include sections similar to the following:

Introduction

- Expression of Opinion
- Supplementary Information Supporting the Opinion
- Executive Summary
- Description of Company
- Data
- Claim Liabilities
- Premium Liabilities
- Other Liabilities
- Other Disclosure Requirements
- Unpaid Claims and Loss Ratio Analysis Exhibit
- Exhibits and Appendices

In Section 6 "Contents of the Appointed Actuary's Report", the above outline is used to discuss the required contents.

Although the exact content of the AAR is left to the professional judgement of the author, the Appointed Actuary is encouraged to use the above outline.

5.2 Table of Contents

A table of contents showing where the above information is located must be included at the beginning of the AAR. A table of contents for the Exhibits and Appendices is also required.

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

6. CONTENTS OF THE APPOINTED ACTUARY'S REPORT

6.1 Introduction

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 AAR. This section should indicate clearly that the AAR is an actuarial valuation report or supports an actuarial opinion. The scope of the AAR should be clearly identified.

6.2 Expression of Opinion

The Appointed Actuary must use the prescribed opinion format (see Appendix I). The opinion wording is as recommended in the CIA Standards of Practice – Practice-Specific Standards for Insurers. Any different wording will be considered as a qualified opinion.

Note that:

• The liability figures carried by the company in the Annual Return must be stated in the opinion.

• The liability figures derived by the Appointed Actuary must be stated in the opinion.

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

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

Any qualification or limitation concerning any aspect of the valuation should be noted in this section of the AAR. 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 but could be included in Section 6.3 "Supplementary Information Supporting the Opinion".

For branches where the External Auditor Report is not available at the time the Appointed Actuary has to render his/her opinion, a qualified opinion, conditional upon receiving an unqualified opinion from the External Auditor (Auditor), must be issued. The expected completion date of the external auditor's work should be stated. When the auditor's work is completed, the Appointed Actuary must either:

- a. file an unqualified opinion with OSFI, or
- b. file a revised opinion with a supporting AAR issued if the Auditor is unable to give an unqualified opinion or modifies the financial statements .

6.3 Supplementary Information Supporting the Opinion

It is important that any reader of the AAR be able to understand how the Appointed Actuary's figures, as shown in the opinion, are derived. This section should contain references to the report sections, exhibits and/or appendices where these results are derived or summarized. Where results from several places must be added together a table should be included.

Any conditions or limitations pertaining to the policy liabilities should also be included in this section.

Consolidated reporting will be required within the P&C Returns. For capital purposes, the consolidated entity includes the parent company and all subsidiaries that carry on business that the parent could carry on directly pursuant to the *Insurance Companies Act*.

The above rule does not apply to life company subsidiaries, which are to be reported using the equity method. OSFI anticipates that most Actuaries will continue to prepare non-consolidated AARs; however, an additional exhibit and commentary must be provided that reconciles the information within the AAR to the consolidated opinion. Actuaries will be expected to value non-federally regulated subsidiaries under Canadian generally accepted actuarial practices and include these AARs as appendices or as a separate part of the AAR.

6.4 Executive Summary

This section should contain a summary of the key results and findings and any other information the Appointed Actuary wishes to bring to the attention of the reader. In particular, it should comment on the comparison of the actual experience with the expected experience in the prior year end valuation for all lines combined.

It should also reference any significant changes in methods or assumptions from the prior AAR, significant issues and how they were resolved, data or other concerns identified by the Appointed Actuary and any other unusual circumstances identified as part of the valuation. Any deviation from CIA Standards of Practice or from the requirements of this memorandum must also be included in this section.

6.5 Description of Company

6.5.1 Ownership and Management

The Appointed Actuary should provide a brief history of the Company covering ownership and senior management. Changes over the past several years should be identified and potential impacts on the valuation as a result of these changes should be discussed.

6.5.2 Business

This section should contain a brief description of the lines/classes of business written, distribution channels and geographic distribution. Recent changes in business written, underwriting policies and claims policies and procedures should be noted and the impact of these changes should be described.

6.5.3 Reinsurance

6.5.3.a Reinsurance Arrangement

The Appointed Actuary should describe the company's reinsurance arrangements (type of arrangements, significant terms and conditions, order of application of treaties, and whether the arrangements are specific to the Canadian operations only) and any changes in the arrangements (including changes in retention or limits) during the experience period used in the AAR. This description should be included for all years where the ceded unpaid claims could be material. In many cases it is useful to include the rationale for the changes (if any). In particular, the Appointed Actuary should identify whether the terms and conditions of the reinsurance/retrocession arrangements require payments to be made from the reinsurer/retrocessionaire directly to the ceding company in Canada, including in the event of the cedant's insolvency.

6.5.3.b Reinsurance Ceded

The provision for reinsurance ceded must be reduced for expected reinsurer defaults, disputes, the time value of money due to delays in payment or other reasons that could reduce the amount recoverable. This reduction is in addition to the unexpected defaults within the reinsurance margin. The AAR should clearly indicate where none of the above reductions are made to the provision for reinsurance ceded.

When making this estimate it is not expected that the Appointed Actuary will necessarily assess the financial condition of each reinsurer. However, the existence of any of the following situations and the actions taken should be described:

- a dispute has arisen with a reinsurer;
- a reinsurance collectible is significantly overdue;
- the reinsurer has a history of not settling accounts promptly;
- the reinsurer is known to have been the subject of regulatory restrictions in its home jurisdiction; or
- the reinsurer has a poor credit rating.

It is expected that the Appointed Actuary will discuss reinsurance matters with management and the Auditor of the company to determine whether there are unusual problems and/or delays expected to be encountered in collecting the relevant amounts from the reinsurers.

Where reinsurance agreements were commuted or changed, the Appointed Actuary should clearly indicate how any changed arrangements were taken into account.

6.5.3.c Financial Reinsurance Agreements

The Appointed Actuary must disclose information of any material financial reinsurance agreements ceded where there is not significant insurance risk transfer between the ceding company and the reinsurer, or where there are other reinsurance agreements or side letters that could offset the financial effect of the first reinsurance agreement. If no such agreements exist, the Appointed Actuary must state that there are no material financial reinsurance agreements. The Appointed Actuary should also describe the process used to reach the above conclusion.

The Appointed Actuary should disclose any related party reinsurance that has or could have a material impact on the policy liabilities. The disclosure should include the parties involved, a description of the reinsurance and the impact on policy liabilities.

6.5.4 Materiality Standards

In preparing the company's Annual Return, the company management and the Auditor routinely agree on a level of materiality. The standard of materiality applied for accounting purposes and for valuation of an insurer's policy liabilities must be reported in the AAR. In addition, the Appointed Actuary must report how the materiality standard is selected for the valuation of policy liabilities.

6.6 Data

The extent of the Appointed Actuary's review and verification of the data and the extent of the Appointed Actuary'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 AAR should describe the type of data provided and the review and verification procedures applied thereto and the procedures and steps undertaken to ensure that the valuation data is sufficient, reliable and accurate.

The statutory requirement that the Appointed Actuary file an AAR with the Annual Return assumes that the Appointed Actuary has met the standard of care, as implicitly stated by the CIA. In particular this requires that the Appointed Actuary establish suitable check procedures to verify that the data utilized is reliable and sufficient for the valuation of policy liabilities.

In the event that the External Auditor's work is not complete when the Appointed Actuary provides his/her opinion, please refer to Section 6.2 Expression of Opinion.

With respect to any line of business (including more specifically accident & sickness business, pools and facility associations), the Appointed Actuary should also indicate any reliance on or use of the work of another actuary; the scope of such reliance must be disclosed and a justification for such reliance must be presented. The extent of the review of the other actuary's work should also be described.

6.7 Claim Liabilities

6.7.1 Undiscounted Claim Liabilities

The commentary on the claim liabilities must contain details of the derivation of the gross, ceded and net provisions. Normally the Appointed Actuary will calculate two of these provisions directly and derive the third by addition or subtraction. The provisions calculated directly will depend on the circumstances of the company and the preference of the Appointed Actuary, however, the individual provisions should each be reasonable.

The data, analysis and commentary will normally be provided by actuarial lines of business. These lines will be selected by the Appointed Actuary based on the credibility and homogeneity of the resulting data. Where the actuarial lines of business have changed from the prior AAR, the reasons for the changes should be clearly stated. In some cases it may be appropriate to use different lines of business for the ceded and gross/net provisions.

The commentary should disclose whether or not the company has exposure to mass tort and latent claims, and if the company has had a subsequent event. If it does, the Appointed Actuary should discuss the nature and treatment of those claims in the calculation of the provisions for unpaid liabilities.

Where the actuarial lines of business do not include all the business written by the company (e.g. pools and associations) the additional amounts should be clearly indicated and included in a reconciliation exhibit.

In determining the provision for each actuarial line of business, the Appointed Actuary should take into account, among other factors, at least the following:

- 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,
- any changes in the lags in the reporting of claims and in the payment of claims,
- changes to the loss reserving practices and
- the effects of regulatory changes.

The commentary should discuss the existence of any significant development (adverse or favourable) in the run-off of the reserves that had been set up in prior years, reasons for the development and changes to methods and assumptions that would eliminate the recurrence of any consistent development.

6.7.2 Claims Expenses

Claims expenses are normally split between internal (unallocated) and external (allocated).

Some actuaries combine external expenses with incurred losses and base their analysis on the total of losses and expenses. Other actuaries calculate separate provisions for indemnity and external expenses. Both approaches are acceptable, however the Appointed Actuary should clearly indicate the approach followed.

A variety of methods are used for internal loss expense provisions. Any method in accordance with accepted actuarial practice is acceptable; however, the method(s) should be described and changes in methods from prior AARs and their impact should be clearly indicated and, if material, included in the Executive Summary.

6.7.3 Comparison of Actual Experience with Expected Experience in Prior Year-End Valuations

In order to assess the effect of changes in the estimated claim liabilities, OSFI requires that a comparison of Actual Experience with Expected Experience on an undiscounted basis be provided for each actuarial line of business and for all lines combined for 10 years. However, if data for 10 years is not currently available, the Appointed Actuary should comment on this fact but also move toward the 10 year standard. These comparisons must be provided gross and net of reinsurance. Normally these comparisons will include external adjustment expenses, exclude internal adjustment expenses and exclude classes of business not reviewed by the Appointed Actuary (e.g. pools).

Actual Experience refers to the ultimate gross and net undiscounted estimates selected for each accident year for each actuarial line of business valued as of the current year-end (December 31 or October 31). Expected Experience in Previous Year End Valuations refers to the ultimate undiscounted estimates selected by the Appointed Actuary at each of the prior year-ends. 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. The total for all lines combined must be included and the Appointed Actuary will normally include useful subtotals.

Where there are changes in the actuarial lines of business the Appointed Actuary must allocate the actual total claim liabilities from prior AARs to the current

actuarial lines of business using a reasonable approximation. For the first year following the change it would be useful to show the development using the old actuarial lines of business as well.

Where the Appointed Actuary uses underwriting/policy year rather than accident year the Appointed Actuary may show the comparison of actual to expected experience using projected loss ratios based on underwriting/policy year data. In this case the Appointed Actuary should estimate the dollar impact of the development. This would normally be calculated by multiplying the change in loss ratio by the underwriting/policy year earned premium at the prior year-end.

Whenever significant differences in ultimate estimates occur for any accident year, the Appointed Actuary should provide commentary explaining such changes in ultimate estimates for each accident year. In addition, the Appointed Actuary should discuss any actions taken to reduce the likelihood of similar differences in the future. Commentary from prior AARs should be updated based on the most recent experience. For this section the Appointed Actuary may use a standard greater than the selected materiality standard to eliminate comments on normal fluctuations in data. A lower standard should be used for individual lines and a moderately higher standard may be used for older accident years to avoid repeating some of the less important comments from prior AARs.

Significant differences may exist between the loss development on page 60.40 of the Annual Report and that shown in the Comparison of Actual Experience. OSFI acknowledges that the company is not required to use the AAR as a basis for filling out page 60.40 and that the differences can arise from such items as the allocation of internal loss adjustment expenses, Facility Association and Other Reserves. The Appointed Actuary should inform the Company of any significant differences and also include a discussion of the differences in the AAR or indicate that there are no differences.

6.7.4 Discounted Claim Liabilities

The claim liabilities must be discounted and include appropriate margins as required by CIA Standards of Practice.

The discount rate(s) used for the valuation should be indicated and the method used to select the discount rate(s) should be described in detail. In particular, the selected discount rate(s) should be reduced by an explicit margin for expected credit-related events, including expected asset default. This deduction is in addition to the unexpected credit risks within the investment return rate margin. The Appointed Actuary should clearly document the rationale for the selections including where the explicit margin is zero. All supporting exhibits should be included in the AAR.

The impact of changes in selected margins should be quantified and the changes should be justified. Where material the impact of the changes in selected margins should be disclosed in the Executive Summary.

6.8 Premium Liabilities

The premium liabilities are normally calculated by line of business, however, the lines need not be identical to the actuarial lines of business used to estimate the claim liabilities.

The Appointed Actuary is expected to comment on all aspects of components of premium liability, and particularly on the following (Please indicate if not applicable):

- expected losses, loss expenses and servicing costs on the policies in force,
- anticipated broker/agent commission,
- expected adjustments (plus or minus) to swing rated policies,
- expected changes to premiums as a result of audits, late reporting or endorsements
- expected commission adjustments on policies with variable commissions.

The commentary should disclose whether or not the company has had a subsequent event. If there was a subsequent event, the Appointed Actuary should discuss the nature and treatment of the event in the calculation of the provisions for premium liabilities.

The premium liabilities should be discounted with appropriate margins as required by CIA Standards of Practice. Where the selected interest rate or margins differ from those used in the Claim Liabilities Section the reasons for the selections should be described.

The treatment of the above items may differ by company. The Appointed Actuary must demonstrate that the total of the carried premium liabilities is at least as large as his/her provision.

6.9 Other Liabilities/Other Assets

The Appointed Actuary must also comment on the adequacy of reserves, including IBNR, maintained for Self-Insurance Retention (SIR) plans. SIRs represent the portion of a loss that is payable by 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". The AAR should describe these provisions and provide details of their calculation.

Whenever amounts for salvage and subrogation are material, and therefore presented separately in the Annual Return, they must be included in the opinion as "other amounts to recover". The AAR should describe the method used to calculate these amounts.

Any other amounts reported by the Company as Other Liabilities or Other Assets should be included in the opinion with suitable commentary.

7. OTHER DISCLOSURE REQUIREMENTS

7.1 Dynamic Capital Adequacy Testing (DCAT)

The AAR must disclose the following information with respect to the DCAT reporting in the last three years:

- date on which the DCAT reports were signed by the Appointed Actuary,
- date on which the DCAT reports were presented,
- to whom the DCAT reports were presented (e.g. full board, audit committee, chief agent),
- whether the reports were presented in person or only in written form and
- date used as the start of the projection period in the DCAT reports.

7.2 New Appointment

OSFI expects Appointed Actuaries to comply with the qualification requirements contained in OSFI Guideline E-15. Any deviations from these qualifications must be explicitly disclosed in the AAR, including future steps to be taken to meet the qualification requirements.

If the Appointed Actuary was appointed to the role during the last year, the following disclosures must be made in the AAR:

- date of appointment,
- date of resignation of the previous Appointed Actuary,
- date on which OSFI was notified of the appointment,
- confirmation of communication with the previous Appointed Actuary, as required by the ICA section 364(1), and
- list of the Appointed Actuary's qualifications, keeping in mind, but not limited to, the CIA's Rules of Professional Conduct.

7.3 Annual Required Reporting to the Board or Audit Committee

For a Canadian company, the AAR must disclose the date on which the Appointed Actuary met with the board or the audit committee of the board as required by paragraph 203(3)(f) of the ICA.

For a foreign company, the AAR must disclose the date on which the Appointed Actuary met with the chief agent, as required by section 630 of the ICA.

7.4 Continuing Professional Development Requirements

The Appointed Actuary must disclose in the AAR that he/she is in compliance with the Continuing Professional Development requirements of the CIA.

7.5 Disclosure of Compensation

The Appointed Actuary should make a disclosure of their compensation. This is consistent with the Financial Stability Board's Principles for Sound Compensation Practices, which have been adopted by OSFI. The form of the disclosure statement should be as follows:

Disclosure of Compensation
I attest that all of my direct and indirect compensation is derived using the following methodology:

I confirm that I have performed my duties as Appointed Actuary 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 confirm that my ability to act fairly is unimpaired and that there has been full disclosure of the methodology used to derive my compensation (and/or my firm's compensation, if applicable) to all known direct users of my services as Appointed Actuary.

If the Appointed Actuary is an employee of the insurance company, the methodology should include a list of the major components of the Appointed Actuary's compensation. This could include: base salary, cash and/or stock-based bonuses, retirement and other significant benefits, other compensation (e.g. signing bonuses, severance packages), and perquisites (e.g. car allowances).

For each component of the Appointed Actuary's compensation listed above that varies with the performance of the company, the value of that component as a percentage of the base salary, must be disclosed. This might include, but is not limited to, participation in a bonus plan and/or a stock option plan that is based on company performance. The basis used to determine the amounts of these variable compensation components must be disclosed.

If the Appointed Actuary serves as an external consultant to the company, then the information provided to OSFI must include the following information:

- The consulting fees payable for the preparation of the AAR, DCAT, and any other work performed as the Appointed Actuary in respect of the company's current fiscal year;
- The basis used to determine the consulting fees payable for the Appointed Actuary's
 work (for example, fixed fee basis, time and expense basis, as well as any caps etc.),
 and whether the fees include any element of incentive or results-based compensation;
- The proportion that the consulting fees payable for the Appointed Actuary's work for the company represents, as a percentage of the total revenue billed by the consulting firm's Canadian legal entity to the company in the consulting firm's prior fiscal year (<10%, 10-25%, 25-50%, 50-75%, 75%+); and

• The proportion that the consulting fees payable for the Appointed Actuary's work for the company represents, as a percentage of the total revenue billed by the consulting firm's Canadian legal entity to all clients in the consulting firm's prior fiscal year (<10%, 10-25%, 25-50%, 50-75%, 75%+)

Due to its sensitive nature, **the "Disclosure of compensation" must be included in a separate cover letter** to Richard Xu, Actuarial Division at OSFI and, on request, to other Canadian regulators with reference to the cover letter made in the relevant section of the AAR.

7.6 Reporting Relationships of the Appointed Actuary

The Appointed Actuary Report is expected to disclose the reporting relationships and dependencies of the Appointed Actuary.

For Appointed Actuaries who are employees of the company, the AAR should disclose the name and position of the person (or persons) to whom the Appointed Actuary reports as well as any changes in this regard over the past year. Both solid line and dotted line reporting relationships should be disclosed. Any anticipated change should also be disclosed.

When the Appointed Actuary is not an employee of the company, the AAR should disclose the names and positions of the main contacts within the company with respect to the different functions of the Appointed Actuary, such as the valuation, DCAT, and MCT support (if any).

For example, disclosure should include the name and position of:

- The person who has hired the Appointed Actuary; and
- The company employees with whom the Appointed Actuary discusses findings and reports.

7.7 Peer Review of the Work of the Appointed Actuary

OSFI requires the work of the Appointed Actuary to be externally peer reviewed. The criteria and requirements are set out in OSFI's Guideline E-15, <u>Appointed Actuary: Legal Requirements</u>, <u>Qualifications and Peer Review</u>.

For each Peer Review Report filed in the last three years, the Appointed Actuary must complete the following table:

		AAR		DCAT			
(a). Accounting period for work reviewed	2017	2016	2015	Y*	Y-1	Y-2	
(b). Peer reviewer name							
(c). Work reviewed and nature of the peer review (e.g. full 3-year or limited annual)							
(d). Peer reviewer date signed							
(e). Date submitted to OSFI							
(f). Date submitted to Audit Committee or Chief Agent							
(g). Whether the Peer Review Report was issued pre-release or post-release							
(h). Year of next full 3-year review		•			•		

(i). Next peer reviewer (if known)	
including the plan and the name of the next reviewer	

^{*}Y =the most recent year.

In addition, the AAR should indicate when the peer reviewer last reviewed the information, if any, prepared by the Appointed Actuary to assist the insurer in the completion of the MCT (BAAT) schedules in the P&C returns.

For each peer review report, the Appointed Actuary should summarize the key findings or recommendations, and the status of each finding / recommendation by year.

The Appointed Actuary should disclose if no peer reviews were completed in the last three years and the reasons why. Note that such circumstances would be rare and require OSFI pre-approval.

7.8 Re-submitting the report

The AAR must disclose the reason for resubmission.

8. UNPAID CLAIMS AND LOSS RATIO ANALYSIS EXHIBIT

8.1 Introduction

The Unpaid Claims and Loss Ratio Analysis Exhibit (UCLR Analysis Exhibit), as shown in Appendix II, is constructed to allow the presentation and collection of industry loss information in a standard format. The compiled information allows for 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.

8.2 Data

A page must be completed for each actuarial line of business. Each actuarial line of business must be uniquely linked to one and only one Annual Return line of business as listed in Appendix III. For reinsurers, proportional and non-proportional business should be reported separately.

The basis, on which the Exhibit is completed, either "accident year" or "underwriting year", must be specified on each page. The selected basis should be the same for all pages. Insurers completing the exhibits on a "report year" basis should select "accident year".

If an actuarial line of business is a combination of two or more Annual Return lines, it is up to the Appointed Actuary to determine in which Annual Return line to place it to best represent the operations of the company. For actuarial lines of business where the earned premium is not available in the same detail as the claims (e.g. automobile-liability bodily injury and property damage), the Appointed Actuary should either estimate a split of the earned premium or combine the data showing it in the Annual Return line which best represents the line of business underwritten by the company.

A "Total" page must also be completed; this exhibit should balance to the AAR. An individual page does not have to be completed for a category that is not reviewed by the Appointed Actuary but the total discounted reserves including PfAD for the category must be included in Line 15 ("Other Provisions") of the "Total" page.

In the UCLR Analysis Exhibit, the present value of unpaid claims and adjustment expenses (excluding PfADs) (Column [7]) is expected to be less than the total undiscounted unpaid claims and adjustment expenses (Column [6]). If amount in the column [7] is greater than the amount in column [6], the AAR must comment on the reason for such exception.

The UCLR Analysis Exhibit is expected to be completed on a net basis with net being defined by the Appointed Actuary in the AAR. For instance, if the Appointed Actuary has completed his or her net analysis gross of intra-group reinsurance, the UCLR Analysis Exhibit should also be completed on this basis. Any adjustments to the net basis as reported in the AAR (e.g. industry pools or inter-company reinsurance) should be made in Lines 14 and 15 of the "Total" page.

It is the Appointed Actuary's responsibility to ensure the accuracy of the UCLR Analysis Exhibit and accompanying electronic filing.

Note that figures must be expressed in thousands of Canadian dollars.

The detailed instruction for the completion of the UCLR Analysis Exhibit is contained in Appendix IV.

The detailed instruction for the completion of the electronic filing can be found on OSFI's website: *Instructions for Electronic Filing - Data from the Unpaid Claims and Loss Ratio Exhibits*.

9. Appendix I - Expression of Opinion

I have valued the policy liabilities [and reinsurance recoverables] of [the Company] for its [consolidated] [statement of financial position] at [31 December XXXX] and their changes in the [consolidated statement of income] for the year then ended in accordance with accepted actuarial practice in Canada including selection of appropriate assumptions and methods.

(Qualifications should be included here)

In my opinion, the amount of policy liabilities [net of reinsurance recoverables] makes appropriate provision for all policy obligations and the [consolidated] financial statements fairly present the results of the valuation.

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

Claim Liabilities	Carried in Annual Return(\$'000)	Appointed Actuary's Estimate(\$'000)
(1) Direct unpaid claims and adjustment expenses		
(2) Assumed unpaid claims and adjustment expenses		
(3) Gross unpaid claims and adjustment expenses		
(4) Ceded unpaid claims and adjustment expenses		
(5) Other amounts to recover		
(6) Other net liabilities		
(7) Net unpaid claims and adjustment expenses (3)-(4)-(5)+(6)		

Premium Liabilities	Carried in Annual Return (\$'000) (Col. 1)	Appointed Actuary's Estimate (\$'000) (Col. 2)
(1) Gross policy liabilities in connection with unearned premiums		
(2) Net policy liabilities in connection with unearned premiums		
(3) Gross unearned premiums		
(4) Net unearned premiums		
(5) Premium deficiency		
(6) Other net liabilities		
(7) Deferred policy acquisition expenses		
(8) Maximum policy acquisition expenses deferrable		
$[(4)+(5)+(9)]_{\text{Col. }1}-(2)_{\text{Col. }2}$		
(9) Unearned Commissions + Ceded Deferred Premium Taxes +		
Ceded Deferred Insurance Operations Expenses		

	(9) Unearned Commissions + Ceded Deferred Premium Taxes +		
	Ceded Deferred Insurance Operations Expenses		
FCIA Signature of Appointed Actuary		Date opinion	was rendered
~	Simula of the bound of the bound	2 ww opinion	was removed
_	<u>FCIA</u>		

Printed name of Appointed Actuary

The language in square brackets is variable and other language may be adjusted to conform to interim financial statements and to the terminology and presentation in the financial statements.

10. Appendix II - Unpaid Claims and Loss Ratio Analysis Exhibit

Unp	aid Clai	ms and	Loss Ra	tio Analy	sis Exhib	oit											
		a Net basis a															
	Actuary's	S Category	:														
	Exhibit C	ategory:															
	Accident	Year or U/	W Year:														
		Paid L	ossesª				Unpaid (Claim An	alysis ^a					Loss	Ratio Ana	alysis ^a	
			Cumulative	Undiscounted	Unpaid Claims Expenses	and Adjustment	Present Value of	Provis		in for Adverse De and MfAD)	eviation	Discounted	Inc	ome	Cumulative Investment	Loss Ra	atio (%)
Line	Accident Year	Current Year (XXXX)	(XXXX and Prior)	Case Reserves	IBNR	Total	Unpaid Claims and Adjustment Expenses - Total	PfAD: Claims (\$'000)	MfAD: Claims (%)	PfAD: Reinsurance (\$'000)	PfAD: Interest Rate (\$'000)	Reserves Including PfAD	Earned Premiums	Invest. Income from UPR	Income from	Undiscounted	Discounted
	(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(09)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1	XXXX-10 & Prior					-			-			-					
2	XXXX-9			***************************************		-			-		***************************************	-					
3	XXXX-8					-			-			-					
4	XXXX-7					-			-	***************************************		-					b. 6000000000000000000000000000000000000
5	XXXX-6					-			-			-					
6	XXXX-5					-			-			-					
7	XXXX-4					-			-			-					
8	XXXX-3					-			-			-					
9	XXXX-2					-			-			-					
10	XXXX-1					-			-			-					
11	XXXX					-			-			-					
12	Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
13	ULAE - T	otal															
14	"Facility A	Association"	and "Plan"														
15	Other Pro	ovisions															
16	Grand To						stment expenses (U					-					

		a Net basis a		tio Alialy	sis Exhib	<u></u>											
All CITI																	
		Category	:														
	Exhibit C		M W														
	Accident	Year or U/\	w year:														
		Paid L	osses ^a				Unpaid C	laim An	alvsis ^a					Loss	Ratio Ana	lvsis ^a	
				Undiscounted	Unpaid Claims a	and Adjustment	Present Value of		ion and Margi	n for Adverse De and MfAD)	eviation	Discounted	Inc	ome	Cumulative Investment	Loss Ra	atio (%)
Line	Accident Year	Current Year (XXXX)	(XXXX and Prior)	Case Reserves	IBNR	Total	Unpaid Claims and Adjustment Expenses - Total	PfAD: Claims (\$'000)	MfAD: Claims (%)	PfAD: Reinsurance (\$'000)	PfAD: Interest Rate (\$'000)	Reserves Including PfAD	Earned Premiums	Invest. Income from UPR	Income from Unpaid Claim Reserves	Undiscounted	Discounted
	(01)	(02)	(03)	(04)	(05)	(06)	(07)	(08)	(09)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1	XXXX-10 & Prior					-			-			-					
2	XXXX-9					-			-			-					
3	XXXX-8					-			-			-					
4	XXXX-7					-			-			-					
5	XXXX-6					-			-			-					
6	XXXX-5					-	•		-			-					
7	XXXX-4					-	•		-			-					
8	XXXX-3					-	•		-			-					
9	XXXX-2					-	•		-			-					
10	XXXX-1					-			-			-					
11	xxxx					-			-			-					
12	Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
17	MfAD: Re	einsurance (%)														
18	MfAD: Int	erest Rate (%)														
19	Interest F	Rate to Disco	ount Unpaid C	Claims and Ad	justment Expe	enses (%)											

11. Appendix III - Annual Return Lines of Business

- Property-Personal
- Property-Commercial
- Aircraft
- Automobile-Liability Private Passenger
- Automobile-Personal Accident Private Passenger
- Automobile-Other Private Passenger
- Automobile-Liability Other than Private Passenger
- Automobile-Personal Accident Other than Private Passenger
- Automobile-Other Other than Private Passenger
- Boiler and Machinery
- Credit
- Credit Protection
- Fidelity
- Hail
- Legal Expense
- Liability
- Mortgage
- Other Approved Products
- Surety
- Title
- Marine
- Accident and Sickness

12. Appendix IV - Unpaid Claims and Loss Ratio Analysis Exhibit

12.1 Information Contained in the Unpaid Claims and Loss Ratio Analysis Exhibits (by Column)

The UCLR Analysis Exhibit contains amounts segregated by accident years (refer to Section 12.5 for instructions on other basis). All amounts entered on the UCLR Analysis Exhibit are to be expressed in Canadian dollars and rounded to the nearest thousand dollars.

Columns 03 and 13 through 17 must be completed for the past 10 accident years while columns 02 and 04 through 12 must be completed for all accident years.

12.1.1 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.

12.1.2 Column 02 - Paid Losses: Current Year

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

Paid losses for Accident year XXXX-10 & Prior should be reported in Line 1.

12.1.3 Column 03 – Paid Losses: Cumulative

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

12.1.4 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 claim liabilities are case reserved on a discounted basis (e.g. tabular reserves), the discounted case reserves are to be entered.

12.1.5 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 undiscounted claim liabilities for a line are not available, (e.g. tabular reserves), then the discounted IBNR should be entered.

12.1.6 Column 06 – Undiscounted Unpaid Claims and Adjustment Expenses: Total

This is the total of columns 04 and 05.

12.1.7 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 discount rate used in the present value calculations must be stated as a footnote in the exhibit or clearly identified in the AAR. The underlying rule to be respected with the completion of the UCLR Analysis Exhibit is that the amounts shown should correspond to those calculated by the Appointed Actuary in the AAR. Do not add any PfAD to this column.

12.1.8 Column 08 - Provision for Adverse Deviation (PfAD): Claims

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

12.1.9 Column 09 – MfAD: Claims (%)

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

12.1.10 Column 10 - PfAD: Reinsurance

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

12.1.11 Column 11 - PfAD: Interest Rate

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

12.1.12 Column 12 – Discounted Reserves Including PfAD

Column 12 is the result of the following formula:

$$Column(07) + Column(08) + Column(10) + Column(11)$$

Note: 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.

12.1.13 Column 13 - Earned Premiums

Earned premiums are shown separately by accident year. Net earned premiums are reported and developed at ultimate where development is possible, for example, where experience rating is used.

12.1.14 Column 14 - Investment Income from UPR

Investment income from unearned premium for each accident year is presented in this column. The use of the methodology must be consistent with the one used to calculate the discounted reserves presented in the Annual Return.

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

12.1.15 Column 15 – Cumulative Investment Income from Unpaid Claim Reserves

The cumulative investment income from the unpaid claim reserves is presented in column 15.

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

12.1.16 Column 16 - Loss Ratio (%): Undiscounted

The undiscounted loss ratio is calculated using the following formula:

$$100 \times [Column(03) + Column(06)] / Column(13)$$

12.1.17 Column 17 - Loss Ratio (%): Discounted

The discounted loss ratio is calculated using the following formula:

```
100 \times [Column(03) - Column(15) + Column(12)] / [Column(13) + Column(14)]
```

12.2 Information Contained in the Unpaid Claims and Loss Ratio Analysis Exhibit (by Line)

The amounts contained in lines 1 to 12 of UCLR Analysis Exhibit exclude all paid and unpaid ULAE.

12.2.1 Line 13 – ULAE - Total

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.

12.2.2 Line 14 – "Facility Association" and "Plan"

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.

12.2.3 Line 15 - Other Provisions

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.

12.2.4 Line 16 - Grand Total

This is the total of lines 12 through 15 of column 12 of the "Total" exhibit.

12.2.5 Line 17 – MfAD: Reinsurance (%)

The margin for adverse deviation on reinsurance is presented in line 17. If the margins vary by year, a weighted average of margins that produces the same total PfAD should be entered.

12.2.6 Line 18 - MfAD: Interest Rate (%)

The margin for adverse deviation on interest rate is presented in line 18. If the margins vary by year, a weighted average of margins that produces the same total PfAD should be entered.

12.2.7 Line 19 – Interest Rate to Discount Unpaid Claims & Adjustment Expenses (%)

The interest rate entered on this line should include an explicit provision for asset default – cross reference with Section 6.7.4. Do not subtract interest rate MfAD from this line. If the interest rates vary by year, a weighted average of interest rate that produces the same total present value of unpaid claims and adjustment expenses should be entered.

12.3 Claims Reported on Other than an Accident Year Basis

Normally, the UCLR Analysis Exhibit 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 AAR. This includes reinsurers reporting on an underwriting year basis (year when the policy is written) as well as insurers writing policies on a claim-made basis who declare on report year (year when the claim is reported). These insurers may encounter difficulties in completing the UCLR Analysis Exhibit on an accident year basis.

It is recommended that the basis that is most suited to the company's operation be used to complete the exhibits. Insurers completing the exhibits on an underwriting year basis are subject to the condition that OSFI is advised. In such case, line 15 (Other Provisions) of the "Total" exhibit must be adjusted so that line 16 (Grand Total) equals to the net unpaid claims and adjustment expenses reported in the opinion page of the AAR.