

*Technical Notes  
for  
Automobile Insurance Rate  
and Risk Classification Filings*

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# Technical Notes for Automobile Insurance Rate and Risk Classification Filings

## A. Introduction

All insurers writing non-fleet automobile insurance on Ontario Automobile Policy (OAP) 1 or OAP 2 must have their rates and risk classification systems approved or authorized by the Financial Services Commission of Ontario (FSCO).

There are five different filing guidelines depending upon the types of changes proposed:

1. *Section 410 Filing Guidelines - Expedited*: to be used when the company is filing for changes to private passenger automobile insurance rates or risk classification systems and the changes proposed meet the criteria as set out in Regulation 664. Where rates for other categories of automobile insurance are dependent on the private passenger automobile rates (e.g. motorhome rates are dependent on private passenger rates) they should be included within the expedited filing.
2. *Section 410 Filing Guidelines - Respond To Market (R2M)*: to be used when the company is filing for changes to private passenger automobile insurance rates or risk classification systems and the changes proposed meet the criteria as set out in Exhibit 1 of the Technical Notes. Where rates for other categories of automobile insurance are dependent on the private passenger automobile rates (e.g. motorhome rates are dependent on private passenger rates) they should be included within the R2M filing.
3. *Section 410 Filing Guidelines - Major*: to be used when a company is initially entering the private passenger automobile insurance market, or is changing existing automobile insurance rates but the changes proposed do not meet the criteria for the R2M process. Where rates for other categories of automobile insurance are dependent on the private passenger automobile rates (e.g. motorhome rates are dependent on private passenger rates) they should be included within the filing.
4. *Section 413 Filing Guidelines - Major*: to be used when a company is initially entering the insurance market for a category other than private passenger automobile insurance or when changes proposed meet the criteria set out in Exhibit 4 of the Technical Notes or when requested by FSCO to use it. Where rates for other categories of automobile insurance are dependent on the rates of a Section 413 category (e.g. public vehicle rates are dependent on commercial vehicle rates) they should be included within the filing.
5. *Section 413 Filing Guidelines - Minor*: to be used when the company is filing for changes to automobile insurance rates or risk classification systems for other than the private passenger (e.g. company is filing for motorcycle rates). Where rates for other categories of automobile insurance are dependent on the rates of a Section 413 category (e.g. public vehicle rates are dependent on commercial vehicles rates) they should be included within the filing.

When proposing rate or risk classification changes, insurers should also have regard to Superintendent's bulletins that may be issued from time to time. For example, Bulletin A-4/00, Automobile Insurance Territorial Rating, established criteria for filing changes to territories. Bulletins are listed on FSCO's website at [www.fSCO.gov.on.ca](http://www.fSCO.gov.on.ca).

## B. Requirement to File

The requirement to file rate and risk classifications changes includes the following:

1. where an insurer is proposing to use Insurers' Advisory Organization (IAO) advisory rates;

2. where an insurer is updating vehicle rate groups and off-balancing the changes. If changes are not off-balanced, updated vehicle rate group tables and updated risk profiles still need to be filed with FSCO;
3. where an insurer is updating vehicle rate groups and using other than standard Vehicle Information Centre of Canada (VICC) differentials; or
4. where an insurer is changing rates for categories of automobile insurance that are dependent on another category of automobile insurance (e.g. public vehicle rates that are dependent on commercial vehicle rates).

If an insurer uses rates or risk classification systems that are not approved or authorized by the Superintendent, it may be prosecuted under the *Insurance Act* (the *Act*).

### C. Filing Documentation

In general, documentation should be in sufficient detail to enable the reviewer to trace the resulting rates from the raw data experience and other supporting data. If market analysis information is used by the company in developing the proposed changes this information must be provided within the filing. For more specific details please refer to the appropriate filing guidelines. **Failure to provide documentation, as outlined in the filing guidelines, will result in the filing being deemed incomplete.**

### D. Reviewing Rate Adequacy

Insurers should regularly review the adequacy of rates for **all** categories of automobile insurance so that consumers are less likely to experience large rate changes.

The *Act* requires that all risk classification systems be just and reasonable, reasonably predictive of risk, and distinguish fairly between risks. Also, under the *Act*, rates must be just and reasonable, not impair the solvency of the insurer, and not be excessive in relation to the financial circumstances of the insurer.

### E. Major Filings

Outlined below are specific components to take into consideration when preparing your rate filing where full rate level indications are required.

#### 1. Loss Data

- a. The insurer's own current direct (i.e., prior to reinsurance transactions) loss data should be provided otherwise the filing will be deemed incomplete.
- b. The insurer's own loss data should be used to the extent that it is credible.
- c. Loss data must be Ontario specific for the filed category of insurance at the coverage level. Valuation data for loss reserving purposes may not satisfy this requirement.
- d. Data at the major sub-coverage level is generally required for estimating ultimate costs. Aggregation will be required to estimate the required change in premiums.

Loss experience should be subdivided into homogenous groups at the major sub-coverage level as follows:

TPL - bodily injury  
TPL - property damage  
TPL - Direct compensation - property damage

AB - medical  
AB - rehabilitation - renovation  
AB - rehabilitation - other  
AB - caregiver  
AB - income replacement  
AB - attendant care  
AB - funeral and death  
AB - other

Uninsured automobile

Collision

Comprehensive

All perils

Specified perils

Underinsured motorist (OPCF 44R)

- e. For each coverage and major sub-coverage listed above, payment patterns should be developed for discounting purposes.
- f. The filing should use the most recent ratemaking data that is available. Should the filing rely on industry experience, we would expect any filing received after industry data is released to include the most recent industry data (i.e. assuming that industry data for the 2001 accident year is released on May 1, 2002, any filing received by FSCO after that date should include 2001 accident year data). Accident half-year loss development data on an industry-wide basis is generally available in early November.
- g. Company automobile experience under the Superintendent's Automobile Statistical Plan (ASP) is generally considered to be appropriate for ratemaking purposes. Companies that rely on alternative data sources should be able to reconcile closely with the AIX loss ratio and loss development company data reported under the ASP. Such companies, are required to provide a copy of the AIX data to demonstrate that the ratemaking data is reasonably accurate to support rate changes. If the data does not reconcile closely to the AIX, explanations should be provided to FSCO with the rate filing.

## **2. Indicated Rate Changes and Proposed Rate Changes**

- a. The indicated rate change should be based on at least three consecutive years of actual experience.
- b. Proposed rate changes should be in the same direction as the indicated rate change direction at the coverage level. For example, if the indicated rate change for TPL-BI is positive and the indicated rate change for AB is negative, we expect that the proposed rates for TPL-BI should increase and the proposed rates for AB should decrease, even though both TPL and AB are compulsory coverages.
- c. Significant differences at the coverage level between the indicated and proposed rate

changes should be explained.

- d. The data included in the experience period should be readily reconcilable with information provided in Appendix A of the Filing Guidelines.
- e. It should be readily apparent how the investment income assumptions have been reflected in the calculation of the indicated rate change.
- f. Both indicated and proposed rate changes should take into consideration the changes to coverages resulting from the Bill 59 product.
- g. Rationale and other considerations in support of the proposed rate changes should be provided.
- h. Insurers should regularly review their indicated rate levels and current rate levels **for all categories of automobile insurance**.

### **3. Credibility**

- a. Credibility standards and the complement of credibility should be consistent from one filing to the next. Changes in either the standards or the complement of credibility must be outlined and justified.
- b. Credibility standards should also be reasonable in the circumstances. The purpose of credibility weighting is to provide a balance between stability and responsiveness of an estimate. Standards that are too low may cause significant instability in the indicated rates. Those that are too high may reduce responsiveness of a rate change.
- c. A commonly used standard of 1,082 claims for short tail, low severity coverages, such as property damage and physical damage, is considered reasonable. The use of a higher standard in long-tail, high severity coverages in the form of a multiplier of the base standard, is considered reasonable.

### **4. Loss Development**

- a. The insurer should provide its own company data and use it to the extent possible.
- b. The insurer should not solely use industry factors unless the insurer can support why those factors are more appropriate than basing loss development on its own data.
- c. If loss development for a partial accident year is used, then comparable experience at the same level of maturity should be provided to support the selected loss development factors.

### **5. Bill 59 Adjustments**

- a. The filing should clearly indicate how loss experience has been adjusted to reflect the Bill 59 product.

### **6. Loss Trend**

- a. Loss trends are usually based on industry-wide experience. Loss trends based on the company's own experience may also be useful in better understanding the dynamics of the company's business.
- b. Selected loss trend assumptions should be supported with an analysis of the indicated loss cost changes using an appropriate loss trend methodology. Loss trend assumptions

that do not follow the indicated loss trends should be rationalised and explained.

- c. Prospective loss trends should reflect the expected changes in loss costs in the future period. To assist insurers ranges of future loss trend factors are in Exhibit 3. These ranges of future loss trend factors are the result of FSCO's loss trend analysis based on the recent industry data as well as a review of assumptions used in recent rate filings and are provided for reference purposes only.
- d. Loss cost trends are generally sufficient. However, frequency and severity trends are often reviewed and analysed separately in the selection of trend factors.

#### **7. Treatment of Large Losses**

- a. The filing should clearly indicate how large losses in the experience period have been handled. If losses have been capped, a description of the large loss procedure and the effects of the caps must be demonstrated.
- b. A long period should be used in estimating the large loss provision to minimize statistical variations over years.
- c. Each company should ensure that large losses do not cause significant instability in the company's rates from one period to the next.

#### **8. Catastrophe Provision**

- a. A catastrophe procedure is used to remove aberrations in the underlying loss data caused by infrequently occurring, multi-claim, weather-related events.
- b. In the past we have considered a 2% loading on comprehensive coverage, the comprehensive portion of all perils coverage, and specified perils coverage, as a reasonable catastrophe provision.

#### **9. Rate Group Drift**

- a. The gradual shift in the distribution of business to newer and more expensive cars results in increases in physical damage premiums. This should be explicitly reflected in deriving rate level indications. Otherwise, rate indications for direct compensation - property damage and physical damage coverages will be overstated.
- b. We have accepted 2% as a reasonable premium trend factor in the past up to year 2000 under the Manufacturers Suggested Retail Price (MSRP) system and the Canadian Loss Experience Automobile Rating (CLEAR).
- c. From year 2000 and onwards, we anticipate that the rate group drift factors will increase substantially for the physical damage coverages due to the continued use of the CLEAR 2000 table. VICC can be contacted for the estimated average rate group differentials for 2002.

#### **10. On-Level Premium**

- a. All premiums by coverage and territory used in the filing should be adjusted for previous rate changes.
- b. If the extension of exposures method is used for determining the on-level premium, documentation must be provided to demonstrate how it compares to the parallelogram method based on past rate changes.

## 11. Investment Return, Premium to Equity Ratios and Return on Equity

- a. The rationale for assumptions should be made based on the current economic environment.
- b. While expected investment returns should reflect new money rates, we anticipate that the expected investment return will be close to the actual investment return the insurer earned within the recent past. Significant differences must be explained and justified.
- c. A premium to equity ratio of 2:1 is fairly standard on a combined coverage basis. Some insurers may decide to obtain leverage ratios at the coverage level. In our view, the premium-to-equity ratios that were established in 1988 at the time of the Ontario Automobile Insurance Board reflect industry-wide averages that existed at that time under a tort product and may not be appropriate under the current product or for individual companies.
- d. The return on equity underlying the indicated rate level should reflect the current economic environment as well as the company's leverage ratio. A consultant is being engaged to review a reasonable profit margin for the industry as whole, and how it should be applied in the rate filing review process.
- e. FSCO is unlikely to approve any filing that proposes a rate change that results in a negative return on equity.

## 12. Expenses

- a. Some general expenses may vary as a function of premiums or exposures, while others, such as salaries and rent, may follow inflation or other economic conditions.
- b. A reasonable approach is to treat commissions and premium taxes as premium variable expenses and treat all other expenses as fixed expenses. Some companies may, through additional analysis, use a three-way split, which we have also found to be reasonable. Fixed expenses should normally be allocated to compulsory coverages.
- c. FSCO is unlikely to approve any filing that will pass through to consumers an expense provision, excluding unallocated loss adjustment expenses (ULAE) and excluding allocated loss adjustment expenses (ALAE), that exceeds the expense provision set out in Exhibit 3.
- d. It is FSCO's stated position that any profit or loss effects from the residual market cannot be included as an element of general expenses. This is explained in the *Filing Guidelines*.
- e. There should be no expense provision established in respect of the Facility Association Residual Market, unless there is a known subsidy in its operation. Risk Sharing Pool should be treated as direct business and therefore should be reflected in the direct loss and premium data.

## 13. Territorial, Class, Driving Record and Other Differential Changes

- a. In order to ensure rate equity and minimize rate dislocation, insurers should cap differential changes at +/- 10% from the current differential in the direction of the coverage indication.
- b. Overall dislocation should be carefully reviewed by insurers and capping implemented as necessary.

#### 14. Introduction of New Discounts/Surcharges or Differentials

- a. Insurers may have innovations in pricing auto insurance through the introduction of new discounts/surcharges and differentials. Data should be provided in support of a new discount/surcharge or differential. FSCO will consider non Ontario data provided it is credible and relevant to the current Ontario product.
- b. If an insurer is proposing to adopt a discount/surcharge or differential that is in use by other auto insurers in Ontario, it must provide the supporting information, i.e. the names of the insurers and the level of the discount/surcharge or differential, within the filing.
- c. Insurers must collect data and, once sufficient data has been gathered, be prepared to amend the discount/surcharge or differentials accordingly.
- d.

#### 15. Vehicle Rate Group Changes

- a. A filing must be provided where an insurer is changing vehicle rate group differentials or where an insurer is updating vehicle rate groups and using other than standard VICC differentials.
- b. For most vehicles, companies may be able to adopt the CLEAR rate groups. However, as a result of CLEAR, some vehicles will face a significant increase in premium. We expect companies to manage the dislocation for these vehicles by applying capping procedures and to "phase-in" the rate groups over a period of time.

From previous filings, we have seen capping at the rate group level to be the most efficient procedure during the transition period. For example, capping at the rate group level takes the company's current differential for the vehicle, applies the cap and maps the capped differential to the CLEAR differential. The corresponding CLEAR rate group is then assigned based on the mapped CLEAR differential. FSCO has considered a 35% cap at the rate group level to be acceptable. It is up to each insurer to decide which capping procedure best suits the insurer's needs. Capping procedures must be described.

- c. Insurers must ensure that the most current vehicle rate group table for the company has been filed with FSCO and updated risk profiles provided where applicable.

#### 16. Tax Rates

Insurers should reflect the tax rates expected to be effective for the period of the proposed rates. Tax reform measures that result in reduced corporate tax rates should be explicitly reflected in the rate level calculations. The corporate tax rate in Ontario is slated to decline in each year up to and including 2005. Corporate tax rates for 2002 and 2003 are expected to be 38.6% and 35.1% respectively.

### F. Respond To Market (R2M) Filings

An insurer may submit a private passenger automobile insurance filing under the R2M process where the insurer meets the criteria set out in Exhibit 1 to the *Technical Notes*. It is expected that the values for the criteria will be updated annually. These criteria include:

1. the average cumulative rate change for all coverages fall within the established range;

2. individual risk rate level changes must be within the established range;
3. the return on equity underlying the proposed rates is within the established range.

Attached as Exhibit 2 is an example of how to determine the cumulative rate change for qualifying under the R2M filing process. The attached relevant pages (A1 - A5) are from Appendix A of the company's rate filing.

The insurer estimates a return on equity of 10% underlying its proposed rate level, based on the insurer's response to Question 6c of the Appendix A of the filing. This Return on Equity falls within the R2M criteria range.

All individual risk rate level changes are within the range of -20% to +20%, based on the insurer's response to Question 6d and 6e of the Appendix A of the filing. These rate changes fall within the R2M criteria range.

The proposed effective date for renewal policies of the rate change is September 1, 2002 as shown in the response to Question 2. The insurer is proposing to increase its rates by 2.6% (i.e. the *All Coverages Combined Proposed Rate Level Change*) as shown in the response to question 4.

The average cumulative rate change for all coverages is shown in 5b. It is calculated by:

1. taking the *All Coverages Combined Proposed Rate Level Change* from the response to question 4;
2. taking each *All Coverages Combined Rate Level Change* that occurred after January 1 of the year up to the proposed renewal effective date from the responses to question 5a;
3. and using the formula from the filing guidelines: 
$$\left[ \prod (1 + i) (1 - d) \right] - 1$$
 all i, d

where i = proposed rate level increase or approved rate level increase(s) that occurred after January 1 of the year in which the proposed rate change is expected to be effective for renewal business; and

d = the proposed rate level decrease or approved rate level decrease(s) that occurred after January 1 of the year in which the proposed rate change is expected to be effective for renewal business.

#### Require update

In this example :

1. the *All Coverages Combined Proposed Rate Level Change* from the response to question 4 is +2.6%;
2. the insurer is proposing the rates to be effective as of September 1, 2002 from the response to question 2. The rate change during the period January 1, 2002 to September 1, 2002 from the response to question 5a is 4.3%.
3. the *Average Cumulative Rate Change* for all coverages is 7.0% as shown in the response to question 5b. It is calculated as follows:

$$\text{average cumulative rate change} = [(1+.043)(1+.026)] - 1 = 0.07 = 7.0\%$$

In this example, the insurer has met all conditions for the R2M approval process. The average cumulative rate change for all coverages is 7.0% and the other changes proposed in the filing comply with the criteria for the R2M approval process.