THE INSTITUTE OF ACTUARIES OF AUSTRALIA
A.C.N. 000 423 656

# GUIDANCE NOTE 351
# PREMIUM RATE CERTIFICATION FOR THE NSW MOTOR ACCIDENTS SCHEME

## APPLICATION

This Guidance Note applies to actuaries who are asked to provide advice in relation to premium rate filings under the NSW Motor Accidents Scheme.

## LEGISLATION

The relevant legislation is the New South Wales Motor Accidents Act 1988 (as amended), in particular Section 15B.

## REVISED

November 1995

## CLASSIFICATION

Compliance with this Guidance Note is mandatory.

## DEFINITIONS

"CTP": Compulsory Third Party insurance - compulsory insurance with statutory coverage for bodily injury claims arising from motor accidents.

"Nominal Defendant": claims against unidentified or uninsured vehicles are made against the Nominal Defendant and the cost is shared by all insurers in proportion to market share.

"RTA": Roads and Traffic Authority - the government body responsible for registration of motor vehicles and licensing of drivers.

"Sharing": under a sharing agreement signed by all insurers, the cost of certain claims in multiple vehicle accidents is shared among the insurers of the vehicles involved.

"Best Estimate of Claims Cost": the expected claims cost, calculated according to realistic assumptions which the actuary considers have no bias towards optimism or pessimism.

"Base Rate": The Metropolitan Class 1 premium rate which, combined with the effect of the industry-wide relativities and insurer-specific premium loadings and discounts and mix of business, produces an average premium consistent with the requirements of the fully funded test. The base rate is likely to be different from the average premium for the whole portfolio.

"Risk Free Rate of Return": the rate of return on a matched portfolio of investments with minimal risk.

## 1. INTRODUCTION

1.1 In accordance with Section 15B of the Motor Accidents Act 1988, insurers are required to submit their rates to the regulatory body, the Motor Accidents Authority (MAA). These submissions are to be accompanied by a report from an actuary, wherein the actuary is required to given an opinion as to whether the insurer's proposed premiums will fully fund the prospective liability, in aggregate, over the period to which the premium rates will apply. A fully funded premium is defined in Section 15B(8) as one which is sufficient:

(a) to pay all acquisition and policy administration expenses of the licensed insurer concerned;

(b) to provide a sum of money that together with anticipated investment income is equal to the best estimate of the cost of claims plus claim settlement expenses (in inflated dollars) at the assumed date of settlement;

(c) to provide a profit margin in excess of all claims, costs and expenses that represents an adequate return on capital invested and compensation for the risk taken; and

(d) to provide for such other matters as a prudent insurer should, in all the circumstances, make provision for.

1.2 The MAA issues Premium Filing Guidelines each year, which (among other requirements) outline the issues expected to be covered in the actuarial report. From time to time the MAA also issues Circulars to insurers clarifying its rate approval procedures. The actuary is expected to be conversant with and to comply with all such rulings by the MAA, and to the extent that any of these rulings have an effect on the actuary's opinion of the rate, the issues involved should be detailed in the actuary's report. If the actuary is of the opinion that any such ruling by the MAA is significantly in conflict with professional requirements or compromises the actuary's opinion on the rates, then the actuary should qualify the report and certificate appropriately and bring this issue to the attention of the client, the Institute and the MAA. Section 5 deals with some specific matters arising from the MAA's Premium Filing Guidelines.

1.3 The MAA's Premium Filing Guidelines which took effect from 1 August 1994 raise the possibility of an insurer wishing to calculate premium rates using one or more assumptions which differ from those recommended by the actuary. In these circumstances, if use of the assumption(s) chosen by the insurer results in premiums which differ from those calculated by the actuary as being required to satisfy the fully funded test, the actuary's report should give an opinion on both:

(a) the premiums required to fund fully the prospective liability, and

(b) the extent to which the insurer's proposed premiums will fund the prospective liability.

## 2. DATA

2.1 The actuary should be satisfied as far as possible that the data available are reliable and not inconsistent. Historical experience of the insurer and the industry may be supplemented by other internal and external data, which may indicate the general direction of trends in insurance claim costs, claim frequencies, expenses and other relevant matters.

## 3. PREMIUM RATE COMPONENTS

3.1 Claims

3.1.1 The actuary should come to a view as to the likely claims experience of the insurer's own portfolio. The Act requires a "best estimate" to be made of the present value of the cost of claims and associated expenses.

3.1.2 Consideration should be given to making allowance for any apparent trends in experience and for the implications of any legislative amendments which have not yet been fully reflected in the claims data.

3.1.3 The actuary should analyse the insurer's own claims experience and, where possible, compare it with industry experience. The analysis should consider both claim frequency and claim size. The actuary should consider, as far as is practical, the extent to which the insurer's and the industry's claims experience is influenced by:

- data quality;
- claims management practices;
- portfolio mix;
- marketing strategies;
- sharing and Nominal Defendant claims;
- case reserving;
- infrequent large losses; and
- random variation.

3.1.4 The actuary should assess the extent to which differences, whether adverse or favourable, between past claims experience for the insurer and for the industry can be expected to persist in future.

Factors to be considered include:

- any changes in the insurer's marketing strategies, distribution intermediaries, use of premium discounts and loadings and claims management practices;
- corresponding changes made by other insurers; and
- how the insurer's premium rates compare with those of other insurers.

It is recognised that it may not be practical for the actuary to take into account all of these factors. For example, the actuary is unlikely to be fully aware of changes to marketing strategies and premium rates being made by other insurers.

3.1.5 If the actuary's assessment is that the extent of past differences between the insurer's claims experience and industry experience is expected to change materially in future, the actuary should both:

(a) estimate the premium rates required on the assumption that past differences between the insurer's and industry's experience will change as assessed by the actuary, and

(b) quantify the financial implications if the past differences were to remain unchanged in future.

3.2 Expenses

3.2.1 Expenses to be included in the premium rate calculation include expenses directly incurred in the sale, underwriting, assessment and administration of policies and claims together with an appropriate allocation for overhead expenses. Expense components to be considered include:

- acquisition costs
- policy administration costs
- policy alteration costs
- commissions and expense allowances
- MAA and other statutory levies
- add-on benefits
- claims administration costs.

3.2.2 It is recognised that there are limitations on what the actuary can do to assess the appropriateness of the loadings implied by the insurer's expense projections. In testing the reasonableness of the insurer's expense projections, including expense allocations, and business volume forecasts, the actuary should consider:

- how past actual experience compares with past forecasts and with the current forecast for the insurer, and

- whether such forecasts and allocations are consistent with the actuary's understanding of the insurer's operations and industry experience.

The following specific factors should be taken into account:

(i) non-recurring costs which may be expected to provide benefits over a number of years can be spread over more than one year where they can be reliably measured and where they will probably give rise to premium revenue in subsequent financial years.

(ii) the impact of the insurer's claims administration practices upon expense rates should be considered.

(iii) the insurer's CTP commission structure (including expense allowances and other incentives) together with forecast business written from each source, should be taken into account by the actuary in assessing the allowance for commission in the premium rate.

(iv) the expected cost of any add-on benefits or incentives which will be provided out of the pool of funds generated by this premium without specific additional charge to CTP policyholders must be taken into account.

3.2.3 This list of special issues which must be considered by the actuary is not exhaustive. The actuary must make his or her own decisions as to items that require special attention.

## 3.3 Economic Assumptions

### 3.3.1 Future Claims Inflation

The future cost of claims and expenses is affected by both normal economic inflation and superimposed inflation. Superimposed inflation refers to the extent to which the cost of claims escalates at a rate different from normal economic inflation. Considerations include the judicial environment and regulatory and legislative changes. The expected change in claims cost arising from both normal economic and superimposed inflation should be considered.

3.3.2 Investment Return

In arriving at an appropriate assumption as to the rate of investment return, the actuary should consider matters including prospective market rates and the risk-free rate, the assets likely to be held by the insurer and the insurer's investment policy.

The risk free rate of return will normally be the appropriate starting point in determining the investment return assumption.

3.4 Reinsurance

The effect of reinsurance on the insurer's expected claims experience and costs should be allowed for. The potential impact of infrequent large losses, which may or may not be in the reported experience, should be considered.

3.5 Profit Margin

3.5.1 The actuary must consider the appropriateness of the level of capital deemed to be supporting this class of business and how the profit margin included in the premium rate translates into an expected return on that capital. The expected rate of return on capital should be consistent with the rate of return required by investors undertaking the risk of this class of business.

3.5.2 To the extent that an insurer's investment policy introduces asset risks, and is reflected in the selected investment return assumption, this should be taken into account in selecting the expected rate of return on capital for the insurer and hence in the derivation of an appropriate profit margin.

3.6 Derivation of Base Rate

3.6.1 The period over which the rates are to apply must be clearly identified, and taken into account in the determination of the base rate.

3.6.2 The rates for individual risks vary on two accounts - industry-wide premium relativities, and the insurer's own use of discounts and loadings.

3.6.3 Insurers must specify the criteria they intend to use for varying the base rate, and the loading or discount to be applied in each case. In arriving at a Base Rate which is consistent with the requirements of the fully funded test, the actuary should consider the effect of the loading and discount criteria and the mix of business expected to be written using these criteria. This consideration should take into account the relationship between average premiums actually received by the insurer in the past and average premiums projected in previous rate filings.

3.6.4 Limitations on the ability to load or discount rates to reflect fully the risk undertaken must also be considered.

3.6.5 Where a margin above the "best estimate" of the present value of the cost of claims and associated expenses is included in the premium rate, it must be separately identified.

3.6.6 If the insurer wishes to charge premiums calculated using an assumption(s) which results in premiums which differ from those recommended by the actuary, the actuary should determine and state in his or her report both:

(a) the Base Rate required to fund fully the prospective liability, and

(b) the Base Rate proposed by the insurer.

## 4. CONTENTS OF REPORTS

4.1 The reasoning behind the assumptions contained in the premium rate calculation should be documented sufficiently clearly in the actuarial report that the process can be readily understood by an informed reader.

## 5. MAA REQUIREMENTS

5.1 The MAA's Premium Filing Guidelines for Insurers describe what the MAA expects from insurers, and from the associated actuarial report. The report should include certification, in a format compatible with that required by the MAA, either:

(a) that the proposed premiums satisfy the fully funded test, or

(b) if the insurer wishes to charge premiums calculated using an assumption(s) which results in premiums which differ from those recommended by the actuary, of the extent to which the premiums proposed by the insurer will fund the prospective liability.

The actuary has a clear obligation to ensure that he or she is satisfied with the statement made and that any other matter considered to be crucial to the opinion is included in the wording of the certificate. The certificate must include any material qualification. Because of the uncertainties which are inevitably involved in estimating premiums required for CTP, a qualification which relates to these uncertainties is to be expected. Attachment A contains an example of wording for the actuarial certificate where the only qualification relates to the inevitable uncertainties involved. Attachment B contains an example of wording if the insurer wishes to charge premiums calculated using an assumption(s) which results in premiums lower than those recommended by the actuary.

5.2 The report must also include a summary page in a standard format, as specified by the MAA (as shown in Attachment C), showing the assumptions underlying the premium rate. If applicable, the summary page should show the assumptions recommended by the actuary, the different assumption(s) which the insurer considers appropriate and the different premiums calculated using the different assumptions.

5.3 The MAA guidelines may impose constraints upon the choice of assumptions. If the "best estimate" subject to such constraints differs materially from an unconstrained best estimate, then both figures should be reported and the premium rates must satisfy the fully funded test on the basis of the higher figure.

5.4 In the event that the MAA Guidelines require the actuary to adopt a higher "best estimate" than would otherwse be the case, it is not acceptable for the actuary to adjust the profit margin on this account.

5.5 The MAA requires that, where the actuarial report for an insurer is prepared by an actuary employed by that insurer, the premium filing be supported by an actuarial certificate from an actuary external to the insurer. In these circumstances, it is still the responsibility of the external actuary to form his or her own opinion as to whether the rates proposed by the insurer satisfy the fully-funded requirement, not simply to certify the internal actuary's report.

## 6. OTHER MATTERS

6.1 Circumstances may change following the introduction of new premium rates, which may render the assumptions used in the rate calculation inappropriate. It is the insurer's responsibility to determine whether such a change in circumstances should warrant a refiling of its rates prior to the expiry date of the current filing.

ATTACHMENT A

# ACTUARIAL CERTIFICATE

I have examined the scale of the premium rates which XYZ Insurance Company proposes to charge for policies underwritten under the New South Wales Motor Accidents Act 1988 (as amended) ("the Act") from [date]. The results of my investigation are explained in my report dated .........

In my opinion, the premium rates proposed, when considered in aggregate, satisfy the fully funded test in Section 15B(8) of the Act.

This certificate is subject to the qualification that the level of premiums required to satisfy the fully funded test is inevitably uncertain because it depends on the outcome of future events which cannot be predicted accurately. The degree of uncertainty is commented on in Section ..... of my report referred to above. This certificate must be considered together with that report.

ATTACHMENT B

# ACTUARIAL CERTIFICATE

I have examined the scale of premium rates which XYZ Insurance Company proposes to charge for policies underwritten under the NSW Motor Accidents Act 1988 (as amended) ("the Act") from [date]. The results of my investigation are explained in my report dated ........

My report explains that alternative estimates of the premium rates required have been calculated using both:

(a) assumptions which XYZ Insurance Company considers appropriate, and

(b) assumptions which I consider appropriate.

In my opinion, the premium rates proposed, when considered in aggregate:

(a) satisfy the fully funded test in Section 15B(8) of the Act if the assessment of the premiums required is based on the assumptions which XYZ Company considers appropriate, but

(b) are about .....% of the premium rates which would satisfy the fully funded test if the assessment of the premiums required is based on the assumptions which I consider appropriate.

This certificate is subject to the qualification that the level of premiums required to satisfy the fully funded test is inevitably uncertain because it depends on the outcome of future events which cannot be predicted accurately. The degree of uncertainty is commented on in Section ...... of my report referred to above. This certificate must be considered together with that report.

ATTACHMENT C

# PREMIUM FILING SUMMARY SHEET

1. Claim frequency
2. Average claim size
3. Claims cost per vehicle in current values
4. Claims cost per vehicle (inflated and discounted)
5. MAA levy estimate
6. RTA commission per policy
7. Commission
8. Acquisition and policy handling (% gross premiums)
9. Claims handling expenses (% claim cost)
10. Reinsurance cost
11. Profit margin
12. Investment return, AWE and superimposed inflation and payment assumptions over ten years:

| Year Ending | Investment Return % | AWE % | Superimposed Inflation % | Payment Pattern % |
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13. Average premium after discounts and loadings
14. Loading factor to allow for proposed discounts
15. Ratio of Metro Class 1 to average
16. Class 1 Motor Vehicle Sydney Metropolitan base premium
17. Class 1 Motor Vehicle Sydney Metropolitan lowest premium
18. Period over which premiums are to apply

# END OF GUIDANCE NOTE 351