

# Motor accident guidelines 2017

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## Determination of insurance premiums for third-party policies

For insurance premiums proposed by insurers for all third-party policies issued with a commencement date on or after 1 December 2017.

**August 2017**

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**State Insurance  
Regulatory Authority**

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# 1. Introduction

These guidelines provide mechanisms for the regulation of insurance premiums matters under Part 2, Division 2.3 and clause 2 of Schedule 4 *Motor Accident Injuries Act 2017* (the MAI Act) issued by the State Insurance Regulatory Authority (SIRA).

# 2. Commencement and revocation of previous guidelines

These guidelines are effective for premium rate filings submitted for all third-party policies that the filing insurer proposes to issue with a commencement date on or after 1 December 2017, replacing any prior guidelines, and will remain in force until amended or replaced.

# 3. Definitions

The definitions in the MAI Act apply to these guidelines.

# 4. Guiding principles

The primary objects of the MAI Act<sup>1</sup> relating to a premium framework are to:

- promote competition and innovation in the setting of premiums
- ensure the sustainability and affordability of the scheme and fair market practices
- keep premiums affordable by ensuring that the profits realised by insurers do not exceed the amount that is sufficient to underwrite the relevant risk

SIRA seeks to achieve these objects in managing third-party insurance premiums.

To promote competition and innovation by insurers, SIRA allows risk-based pricing, but this must be done within limits in order to keep premiums affordable. The premium framework recognises that this liability scheme, which is compulsory and privately underwritten, blends risk-based and community-rated approaches to assist with the object of affordability.

Filed premiums are required to be adequate and not excessive<sup>2</sup>. Filed premiums will be closely scrutinised by SIRA against the objects of the MAI Act and against any range of premiums for transitional policies determined by SIRA under clause 2 (3)(c) of Schedule 4 *Savings, transitional and other provisions*.

In aligning with the competition and innovation objects, SIRA recognises that insurers will pursue their own particular business objectives that will be reflected as an integral

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<sup>1</sup> Section 1.3 of the MAI Act.

<sup>2</sup> Section 2.22(1)(a) MAI Act

part of each insurer's pricing strategy. On this basis, technical (actuarial) pricing will not be considered in isolation and explanation by insurers is encouraged for non-technical pricing considerations including:

- business plans and short, medium and long term growth strategies
- response to pricing by competitors
- market segmentation and distribution strategies
- innovation and efficiencies in their business model

SIRA will take into account the objects of the MAI Act by considering in aggregate both qualitative and quantitative explanations when reviewing insurer filings. SIRA recognises that in the early stages of the MAI Act relevant data will be limited and more weight on qualitative considerations may be appropriate.

## 5. Filing under Division 2.3 of the MAI Act

In submitting a full or partial rate filing a licensed insurer must provide a soft copy of the filing including a covering letter, the filing report, appendices and any associated spreadsheets. The covering letter is to be signed by the NSW CTP Product Executive or equivalent office holder and must include:

- a description of the type of filing<sup>3</sup>, proposed effective date and, if applicable, any period nominated by the insurer for rejecting the filing exceeding 6 weeks
- an executive summary of the filing
- overall average premium
- any significant changes to the most recent business plan delivered to SIRA impacting competitive strategies or market positioning
- significant rating factor changes
- changes in bonus malus levels, and
- an outline of the policyholder impact analysis

## 6. Rejection of premiums by SIRA

SIRA may reject<sup>4</sup> a premium filed under Division 2.3 of the MAI Act if it is of the opinion that the premium:

- is excessive or inadequate in relation to actuarial advice and to other relevant financial information available to SIRA
- does not conform to the relevant provisions of these Guidelines, or
- will not fall within the range of premiums determined by SIRA under clause 2 (3)(c) of Schedule 4, *Savings, transitional and other provisions*.

SIRA will conduct a review of all filings lodged in accordance with Division 2.3 of the MAI Act and these Guidelines. SIRA may also obtain actuarial advice or other relevant financial advice.

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<sup>3</sup> Partial filing Section 2.20(2) MAI Act or full filing Section 2.21 MAI Act.

<sup>4</sup> Section 2.22 of the MAI Act.

SIRA's review will consider:

- whether a filing is considered incomplete. Completeness will be determined by SIRA reviewing the documentation and schedules required by these Guidelines, and being satisfied that there is materially sufficient explanation of the assumptions and filed premiums to enable a review of the quantitative and qualitative elements of the filing. If classified as incomplete, SIRA may request further information from the insurer in accordance with section 2.20(7) of the MAI Act which will mean that time does not run in relation to the period allowed for rejecting the premium until the insurer complies with the SIRA request. Alternatively SIRA may request its withdrawal and, if not withdrawn, will exercise its discretion to reject the filing.
- whether the premium has been determined in accordance with the process set out in these Guidelines. This will include the requirements for additional information provided with the premiums filed and to justify premiums that have been filed.

## 7. Special provisions for premiums during the transitional period

SIRA has determined the likely cost of claims for claims arising after the start of the transition period to be consistent with the initial costing by SIRA's independent actuary subject to any subsequent costing variations.

In determining SIRA's opinion on whether the premium is adequate and not excessive under section 2.22(1)(a) of the MAI Act SIRA will consider the comparison between the assumptions in the insurer's filing and those in the independent actuary's costing published by SIRA.

### 7.1 Comparison with industry

During the transition period<sup>5</sup>, insurers must provide a comparison of the assumptions made to allow for scheme benefit changes with SIRA's independent actuary's costing assumptions (**Schedule E**), taking into account insurers' business mix by class and region and other (claims experience related) factors, against those of the industry.

### 7.2 Taxi and motorcycle average premium changes

Insurers must provide a summary of changes in average premium for vehicle classes 7 and 10 for any filing for premiums to be charged on or after 1 December 2017.

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<sup>5</sup> As defined in clause 2(1), Schedule 4, MAI Act

<sup>6</sup> Determination of insurance premiums for third-party policies

## 8. Premium components and factors to be calculated

### 8.1 Motor Accident Schedule of Premium Relativities

Insurers must classify vehicles based on the Motor Accident Schedule of Premium Relativities. SIRA will publish two sets of Premium Relativities:

- (1) Customer Premium Relativities' which are to be used to calculate customer premiums
- (2) 'Insurer Premium Relativities' which are used in Appendix A - Schedule C to arrive at Insurers Base Premium

These schedules will be published to licensed insurers each year or other period as determined by SIRA. Insurers must apply the relevant premium relativities that are applicable to the vehicle class and region.

### 8.2 Base premium

The base premium for each vehicle classification and region must be calculated as:

- (1) the Class 1 Metro vehicle base premium for which the policyholder is not entitled to any Input Tax Credit (ITC)
- (2) multiplied by the relativity for the particular vehicle class and region published in the Motor Accident Schedule of Insurer Premium Relativities current at the date the third-party policy begins
- (3) divided by 100.

The nominated base premium is used to define the allowable range of premiums in terms of the limits for bonus malus, the relative premiums for vehicle classifications and regions, and the loading which allows for policyholder entitlement to an ITC. It is equal to:

$$IB_{\text{Class 1 Metro}} = \frac{AP \times n \times 100}{\sum_i \text{insurer premium relativity}_i \times (1 + bm_i)}$$

where

$IB_{\text{Class 1 Metro}}$  = the insurer's base premium for Class 1 Metro including GST but excluding the Fund levy, calculated as if no policyholders are entitled to any ITC. The Fund levy is the combined total of the SIRA Motor Accidents Operational Fund (MAF) levy, Lifetime Care and Support Authority Fund (LTCS) levy and Motor Accident Injuries Treatment and Care Benefits Fund (MAITC) levy.

$AP$  = the insurer's average premium including GST but excluding Fund levy, calculated as if no policyholders are entitled to any ITC, as shown in the Premium Filing Summary Sheet (Appendix A - Schedule C)

$\text{insurer premium relativity}_i$  = the premium relativity applicable to the i-th policy, as anticipated to be underwritten over the period of the premium filing based on the Motor Accident Schedule of Insurer Premium Relativities

$bm_i$  = bonus malus rate (%) applicable to the  $i$ -th policy, as anticipated to be underwritten over the period of the premium filing

$n$  = number of policies anticipated to be underwritten over the period of the premium filing.

Insurers must provide the filed base premium for each vehicle class and rating region in accordance with this clause in an electronic spreadsheet designated **Schedule A**.

### 8.3 Ratio of insurer's average premium to Class 1 Metro (Item 13 in Appendix A - Schedule C)

This factor expresses the ratio of the insurer's average premium based on the insurer's projected portfolio mix<sup>6</sup> (taking into account the insurer's vehicle class and region mix of business), relative to the base premium of a Class 1 Metro vehicle. This is calculated by:

- (1) determining the percentage of the insurer's projected portfolio (based on the number of vehicles) that will be written in each vehicle class and region
- (2) multiplying each of the above proportions by the Motor Accident Schedule of Premium Relativities premium relativities published by SIRA for the corresponding vehicle class and region
- (3) adding up all of the values calculated in (2) above
- (4) dividing (3) by 100

The formula for the calculation is:

$$\text{Ratio} = \frac{\sum_k \alpha_k \times \text{true premium relativity}_k}{100}$$

where

$\alpha_k$  = proportion (as a %) of the insurer's projected portfolio (based on vehicle count) for the  $k$ -th vehicle class and region

*true premium relativity<sub>k</sub>* = premium relativity for the  $k$ -th vehicle class and region in the Motor Accident Schedule of Insurer Premium Relativities published by SIRA.

### 8.4 Bonus malus factor (Item 14 in Appendix A - Schedule C)

This factor expresses the average bonus malus applied by an insurer to its projected annual policy equivalent portfolio (after taking into account the insurer's vehicle class and region mix of business). This is calculated by:

- (1) determining the total portfolio premium (before GST and levies) to be collected, inclusive of the bonus malus rates to be applied, for the portfolio of risks projected to be written by the insurer. The portfolio of risks projected to be written by the insurer should take into account the mix of business by vehicle class, region and insurer's rating factors
- (2) determining the total portfolio premium (before GST and levies) to be collected, before the application of any bonus malus rates, for the portfolio of risks projected to be written by the insurer

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<sup>6</sup> annual policy equivalent



(3) dividing (1) by (2)

The formula for the calculation is:

$$\text{bonus malus factor} = \frac{\sum_i \text{base premium}_i \times (1 + \text{bm}_i)}{\sum_i \text{base premium}_i}$$

where

$\text{base premium}_i$  = applicable base premium (\$) for the i-th policy based on its vehicle class and rating region

$\text{bm}_i$  = bonus malus rate (%) applicable to the i-th policy given the rating factors and bonus malus structure adopted by the insurer.

## 8.5 Bonus malus limits, rating structure and risk rating factors

Each risk rating factor proposed by an insurer must be objective and evidence based. A risk rating factor must not be used unless approved by SIRA. Insurers can apply to use objective risk rating factors except race, policy duration, input tax credit entitlement and postcode.

Applications by insurers to use innovative rating factors that differentiate risk with quantifiable data including telematics are encouraged by SIRA. Alternative pricing mechanisms including initial premium payments combined with premium refund or extra premium options are possible for all vehicle classes. Insurers may refund part of the premium paid for a third-party policy during or after the period for which the policy is issued by reference to digital information recorded about the safe driving of the insured vehicle during that period or other factors including the distance travelled. If insurers wish to apply these refund provisions to any vehicle class the basis and methodology must be approved by SIRA.

Except for the first MAI Act filing where there is a significant change to an insurer's bonus malus structure or change in the bonus malus applied to a group of policyholders (more than 10% change in the bonus malus percentage applied compared to the current rating structure in force, in absolute terms), an insurer must include in their filing:

- analysis showing the technical relativity (or cost) for each group of policyholders within the rating factor for which bonus malus changes are proposed
- comparison of the technical relativity (or cost) against the actual premium relativity or bonus malus percentage (or cost) proposed.

Except for the first MAI Act filing where an insurer proposes a rating structure that is significantly different from the technical basis, reasons for the difference must be discussed in the filing report.

The various levels of the bonus malus filed by a licensed insurer for each vehicle class and rating region must be supported by experience-based evidence or a reasoned assessment of risk and/or strategic commercial reasons except where an absolute bonus malus has been mandated by SIRA. An insurer must not charge the maximum

malus for all vehicles in a particular vehicle classification unless this is supported by such evidence or assessment.

## 8.6 Malus limits

The maximum malus percentage may be calculated exactly or may be rounded to the nearest one tenth of a per cent. For example, a multiple calculated as 51.2657 per cent may either be applied without rounding or may be rounded to 51.3 per cent.

Premiums charged by an insurer must be no greater than the following multiple of the insurer's base premium excluding GST for the vehicle classification and each region:

Vehicle Classes	Maximum Malus
1 (excluding new / non-fleet class 1 vehicles), 3c, 3d, 3e, 5, 6a, 6b, 6c, 8, 9a, 9d, 9e, 9f, 11, 12a, 13 and 18a	$(145\% \times RB + (IB - RB) \times 30\%) / IB$
7	Not more than 125 per cent of the insurer's base premium excluding GST
10d, 10e, 10f, 10g and 10h	$(130\% \times RB + (IB - RB) \times 30\%) / IB$
6d, 6e, 12b, 14, 15a, 15c, 17, 18b, 18c and 21	Not more than 110 per cent of the insurer's base premium excluding GST

where

IB = insurer's filed base premium for a Class 1 Metro vehicle for which the policyholder is not entitled to any ITC

RB = reference base rate at the time of filing.

## 8.7 Bonus limits

Premiums charged by an insurer for specific vehicle classifications by region must accord with the following if the:

- vehicle is a new <sup>8</sup>(non- fleet<sup>9</sup>) class 1 vehicle; premiums must be 80 per cent of the base premium excluding GST for each region. **No other bonus malus may be charged.**

Otherwise for non-new class 1 vehicles and any class 3c vehicles that are not part of a fleet if the:

<sup>7</sup> Original (establish) registration for current year and including plus or minus one year

<sup>8</sup> Original (establish) registration for current year and including plus or minus one year

<sup>9</sup> A fleet of less than 5,000 class 1 and/or class 3c vehicles

- vehicle is class 1 or 3c and youngest driver is aged under 55, the minimum premium is no less than 80 per cent of the insurer's base premium excluding GST for these vehicle classifications by region, or
- vehicle is class 1 or 3c and the youngest driver is aged 55 or over, the minimum premium is no less than 75 per cent of the insurer's base premium excluding GST for these vehicle classes by region.

Otherwise for fleet vehicles if the:

- fleet comprises 5,000 or more class 1 and/or class 3c vehicles owned by a single entity/operator, or a group of related entities/operators, that proposes to insure third-party policies with **one licensed insurer**, the minimum premium is no less than 60 per cent of the insurer's base premium excluding GST for these vehicle classes by region.

Premiums charged by an insurer for vehicle classes 10d, 10e, 10f, 10g and 10h must be no less than 80 per cent of the insurer's base premium excluding GST for these vehicle classifications by region.

Premiums charged by an insurer for vehicle classes 3d, 3e, 5, 6a, 6b, 6c, 8, 9a, 9d, 9e, 9f, 11, 12a, 13 and 18a for each region must be no less than 70 per cent of the insurer's base premium excluding GST for the vehicle classification by region:

Premiums charged by an insurer for vehicle classes 6d, 6e, 12b, 14, 15a, 15c, 17, 18b, 18c and 21 for each region must be:

- No less than 90 per cent of the insurer's base premium excluding GST for each of these vehicle classes by region

Premiums charged by an insurer for vehicle class 7 must be no less than 80 per cent of the insurer's base premium excluding GST

## 8.8 Premiums where entitlement to an Input Tax Credit (ITC) is applicable

Specific premiums apply when the vehicle owner is entitled to an ITC for GST purposes to allow for the tax treatment. The insurer will determine two sets of premium rates:

- (1) nil ITC premium rates applicable to policyholders with no entitlement to any ITC for GST included in the premium, and
- (2) some ITC premium rates, which apply to policyholders entitled to claim an ITC for at least some of the GST included in the premium. Some ITC premium rates will be the insurer's corresponding nil ITC premium rates increased by a loading.
  - each insurer will determine the percentage loading it considers appropriate. However, the loading, expressed as a percentage of the corresponding nil ITC premium rates, must be within the range from 6.5 per cent to 7.5 per cent.
  - the loading will be determined in relation to the effect of policyholders' entitlement to claim an ITC on the insurer's entitlement to claim decreasing adjustments for claims costs attributable to those policyholders.

- the ITC loading will be the same percentage for each vehicle classification and region and will not vary according to the bonus malus; that is, the risk rating factors used to determine the bonus malus must be the same for the insurer's nil ITC premium rates and its ITC premium rates. However, minor variations in the percentage loading attributable only to the calculation of premiums for non-annual policies, or to rounding, are acceptable.

## 8.9 Loading of premiums for short term policies

For quarterly or six-month policies, short term insurer premiums may include a surcharge (the short term policy surcharge) excluding GST, LTCS levy and MAF levy which is calculated as:

Quarterly premium = (Annual premium + X) x (100% + Y%) / 4

Half yearly premium = (Annual premium + A) x (100% + B%) / 2

Where:

- Annual premium excludes GST, LTCS levy and MAF levy
- X, Y, A and B are amounts that each insurer will determine subject to:
  - X (an administrative costs loading for quarterly policies) being no more than \$15
  - Y (a forgone investment income loading for quarterly policies) being no more than 2.2 per cent
  - A (administrative costs loading for half yearly policies) being no more than \$5
  - B (forgone investment income loading for half yearly policies) being no more than 1.5 per cent.

Each licensed insurer must set one proposed rate for each of the factors X, Y, A and B that will be applied consistently across all short term CTP policies offered by that insurer. The proposed loadings will be included in all filings and must be approved by SIRA. The surcharge does not apply to short term periods for common due date policies. GST and pro rata Fund levy for the relevant policy term are then added to calculate the total amount payable by the policyholder for a short term policy, initially to the nearest one cent.

## 8.10 Schedule B

A licensed insurer must provide its complete rating structure, risk rating factors and filed premium<sup>10</sup> at each bonus malus level for each vehicle class, rating region and input tax entitlement level, in an electronic spreadsheet designated **Schedule B**.

<sup>10</sup> Annual, half yearly and quarterly premiums split by insurance premium, Fund levy and GST.

## 9. Justifying third-party premium assumptions

Insurers must specify how they have determined proposed premiums and must explain the proposed premiums to the satisfaction of SIRA. Insurers are required to complete the published SIRA Motor Accident Filing Template and Appendices.

### 9.1 Basis of estimate

The total estimated claims cost (risk premium) adopted in the filing must

- reflect the expected outcomes of the MAI Act 2017
- be on a central estimate basis; that is, an estimate of the mean which must not be intentionally or knowingly conservative or optimistic.

Expense assumptions adopted in the filing must be set with reference to:

- maximum rates of expense assumptions specified by SIRA
- excluding expenses not directly relevant to the acquisition, policy administration or claims management of third-party insurance business of the insurer
- the suitability of expense type for inclusion in a compulsory insurance product and efficiency of insurer's own administration and claims processes
- insurer's best estimate of expenses taking into account current internal management budgets and internal strategies to control costs.

### 9.2 Level of explanation

Filed assumptions for full and partial filings must be explained with sufficient information that an analysis of the filing can lead to a conclusion that the results stated in the filing:

- have been determined on a central or best estimate basis where required
- meet the adequate test under section 2.22 (1) (a) of the MAI Act, and
- represent a genuine effort on the part of the insurer to offer competitive premiums and thereby allow SIRA to form an opinion under section 2.22 (1) (a) of the MAI Act that the filed premium is adequate and not excessive.

The level of detail to be provided will depend on the price impact of the assumptions, the extent of the uncertainty surrounding the assumptions, the nature of the analysis and considerations of materiality<sup>11</sup>.

### 9.3 Insurance liability valuation report

Each licensed insurer must provide SIRA with a copy of its latest<sup>12</sup> full valuation report (when it is completed, and including all appendices) relating to its NSW CTP business. Comparison and explanation of any differences between the filed assumptions and the

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<sup>11</sup> Materiality as viewed by SIRA.

<sup>12</sup> If a full valuation of the NSW CTP portfolio is conducted by an insurer more frequently than annually, an insurer must provide the most recent full valuation report available.

following assumptions from an insurer's NSW CTP portfolio Insurance Liability Valuation Report assumptions must be provided in filings:

- claim frequency assumed for premium liabilities<sup>13</sup>
- average claim size assumed for premium liabilities
- superimposed inflation
- economic assumptions
- claim handling expense assumed for premium liabilities<sup>13</sup>
- policy and administration expense assumed for premium liabilities<sup>13</sup>.

Insurers must explain any developments in experience since the most recent full valuation as part of this comparison.

## 9.4 CTP business plan and management accounts

Each licensed insurer must provide SIRA annually with a copy of its current NSW CTP business plan and disclose all relevant business and distribution strategies when significant changes are made. Each licensed insurer must provide SIRA with a copy of its NSW CTP management accounts. In addition the insurer must provide a:

- comparison of budgeted expenses and actual expenses for the previous filing period
- detailed budget of expenses covering the proposed filing period.

For the 1 December 2017 Rate Filing, insurers must provide a detailed expense budget for the policy year 1 December 2017 to 30 November 2018.

The above expense analysis should show the following expenses separately (to the extent they have been broken down as such in the management accounts):

- commission
- acquisition and policy administration expenses
- claims handling expenses
- any other expense components itemised in the insurer's own management accounts.

## 9.5 Discount rate assumptions

Insurers must use rates of discount that are no less than the risk-free rates based on the forward rates implied from market information available at the time of preparing the filing, being applied to the average underwriting date of the period filed.

Insurers must disclose the single weighted average discount rate calculated by applying the payment pattern or expected weighted mean term for the claim liabilities underlying the policies to be underwritten to the insurer's adopted rates of discount.

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<sup>13</sup> Or latest accident year/underwriting year if premium liabilities are not estimated at a given balance date. Claim frequency and average claim size may be considered in aggregate (e.g. as a risk premium) if an insurer's adopted methodology for the full valuation does not enable such breakdown.

## 9.6 Maximum rates of assumptions used in the determination of premiums

SIRA is not bound by any of the maximum rates of assumptions if it considers that it would be unreasonable to be applied in the particular circumstances of the case. SIRA's intention in setting maximum rates of assumptions is that they reflect current market conditions. Alignment to changing market conditions will be considered through periodical reviews. The following assumptions are subject to a maximum rate used in the determination of premiums:

- claims handling expense assumptions must not exceed a rate of 7.5 per cent of risk premium
- acquisition and policy handling expenses including commission and other remuneration are subject to a maximum rate of \$43.60 per policy (on average across the policies underwritten by an insurer), indexed with movement in CPI
- the superimposed inflation assumption must not exceed a rate of 2.5 per cent
- the maximum profit margin for determination of premiums is 8 per cent of the proposed average gross premium (excluding levies and GST)

These maximum rates will be reviewed periodically by SIRA.

Insurers may take into account allowances for innovation and efficiency that are forecast to improve scheme and policyholder outcomes to justify any assumption exceeding the maximum rates of assumptions currently prescribed by SIRA. For the avoidance of doubt SIRA may still reject the premium by an insurer notwithstanding compliance with this clause.

## 9.7 Risk equalisation mechanism (REM)

In determining proposed premiums the insurer must consider any risk equalisation arrangements that the regulations may impose under section 2.24 (2) of the MAI Act or in accordance with section 2.24 (7) of the MAI Act.

## 9.8 Calculating net REM amount

Insurers must calculate the net REM amount consistent with the SIRA Motor Accident Filing Template and Appendices (**Schedule D**) related to the filing period by:

1. Projecting the number of annualised policies to be issued for the filing period by each REM pool and for the total of other classes and regions which are not part of the REM pools.
2. Multiplying the projected number of annualised policies for the filing period in 1) above by the REM \$ amount for each REM pool prescribed by the Risk Equalisation Mechanism Deed.
3. The sum of all the REM amounts for all REM pools from 2) above divided by the projected number of annualised policies for all classes and regions (including those not in REM pool) for the filing period.
4. This result is the net REM amount per policy that is included in item 12 (a) of **Schedule C**.

## 9.9 Portfolio analysis

Insurers must provide a portfolio analysis consistent with the format detailed in the SIRA Motor Accident Filing Template and Appendices. The following information and analysis relating to portfolio mix must be provided:

- expected future number and mix of insured vehicles by vehicle class and rating region at each bonus malus level, including commentary on strategies that are expected to result in any changed mix of business
- actual past number and mix of insured vehicles for the previous 12 months (for a period ending no earlier than 2 months before the rate filing is submitted), by vehicle class and rating region at each bonus malus level that applied for each policy written within that 12 month period
- for each REM pool compare the projected mix of business from the last filing against actual mix including a detailed explanation of any variation of projected mix from recent experience
- the net impact of the REM based on the projected mix
- proposed use of bonus malus, the basis on which they will be offered to all vehicle owners including a complete description of the rating structure, each rating factor with relevant qualifying time periods, where applicable, definitions of generic terminology, a summary of the explicit changes in bonus malus since the previous filing and the impact on the insurer's required and expected average premium
- for all policyholders to be issued a renewal notice during the proposed filing period<sup>14</sup>, the distribution by numbers of policies experiencing a price increase/decrease (including Fund levy and GST) using incremental bands<sup>15</sup> compared to the actual premium paid for in force policies for each of the following vehicle classes (in Excel format):
  - Class 1 by rating region
  - Class 3c by rating region
  - Class 3d
  - Class 3e
  - Class 6a
  - Class 7 by plate type
  - Classes 10d, 10e, 10f, 10g and 10h combined
  - Classes 6d, 6e, 12b, 14, 15a, 15c, 17, 18b, 18c and 21 combined
  - All remaining classes combined
  - All classes combined in aggregate
- expected number of policies by underwriting quarter split by vehicle class, region, ITC entitlement, policy duration and at each bonus malus level with premium income split by insurer premium, MAF levy, LTCS levy, MAITC levy, GST and total payable (in Excel format), and
- the resulting average bonus malus factor for each vehicle class and rating region (in Excel format).

## 9.10 Sensitivity analysis

Except for the first MAI Act filing, insurers must undertake sensitivity analysis on key assumptions that are subject to significant uncertainty to quantitatively illustrate the impact of uncertainty on proposed premiums. Such sensitivity analysis includes the use of scenarios to test the impact of multiple assumptions simultaneously.

<sup>14</sup> Assuming 100 per cent retention.

<sup>15</sup> Designated in the SIRA Motor Accident Filing Template



The extent of the variation assumed on key assumptions for sensitivity testing should reflect an alternate reasonable and plausible situation. Insurers must document the results of the sensitivity analysis in the filing report.

SIRA may provide guidance on the specific assumptions or scenarios to be tested and included in a filing prior to its submission.

## 10. Full filing report

A full filing report must include the manner in which proposed insurance premiums<sup>16</sup> were determined by the insurer and the factors and assumptions taken into account in the determination of the premiums. This should include discussion and explanation of how the insurer's assumptions as set out in **Schedule E** of the SIRA Motor Accident Filing Template and Appendices were derived, and any variation relative to SIRA's independent actuary.

An explanation of the non-technical pricing factors must also be included where applicable.

The filing report must include the covering letter and commentary on the techniques used in assessing the following items:

### Claim frequency

- projected future frequency of
  - claims for the industry (inclusive of nominal defendant claims), and by subdivision as set out in **Schedule E**)
  - claims for the insurer (by subdivision as set out in **Schedule E** and disclosing the treatment of shared claims and Nominal Defendant claims)

### Average claim size

- projected future average claim size of
  - claims for the industry (inclusive of nominal defendant claims, and by subdivision as set out in **Schedule E**)
  - claims for the insurer (by subdivision as set out in **Schedule E** and including the estimated net effects of shared and Nominal Defendant claims)

A summary of claim frequency and average claim size (in current values), and resulting cost per policy, by claim component (including nominal defendant), allowing for sharing and net of ITCs, should be included in the full filing report. This should reconcile to item 1c in **Schedule C** for claim frequency, and indicate the adjustment to claim sizes required to reconcile to item 2b in **Schedule C**.

### Economic and investment assumptions

- assumed future rates of wage and price inflation
- full yield curve adopted and the single equivalent rate of discount

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<sup>16</sup> Excluding Fund levy and GST and assuming no policyholders are entitled to any input tax credit.

- assumed future claim payment pattern for the underwriting period covered by the filing specifying if the basis is current values, inflated or discounted

#### Superimposed inflation (SI) assumption

- assumed future rates of SI
- disclosure of the single equivalent rate of SI where different rates have been used for different claim segments and/or different rates of SI have been adopted in future years
- an explanation of the approach taken in setting the SI assumptions

#### Average risk premium

- estimated average risk premium

#### Insurer expenses

- average past actual and expected future rates and amounts of
  - acquisition and policy handling expenses (excluding commission or other remuneration) associated with third-party policies with appropriate explanation provided and a description of the methodology used to allocate overhead expenses
  - commission or other remuneration payments. The commission or other remuneration percentage paid per policy cannot exceed 5% of the insurance premium)
  - claims handling expenses, including an explanation of what is included in this item, and a description of the methodology used to allocate overhead expenses
  - net cost of reinsurance
- disclosure of the above past and expected future expenses on a total pool basis as well as on a cost per policy basis for acquisition and policy expenses, and on a per claim basis for claims handling expense<sup>17</sup>
- the expense assumptions used and an explanation of how they relate to the above information

#### Profit margin

- proposed profit margin – the percentage of gross insurance premiums intended to be retained as profit, before tax

Adjustments to insurer premium to obtain the Class 1 Metro base premium by disclosing a full explanation of the calculation of the:

- ratio of the Class 1 Metro premium to the average premium
- average bonus malus factor – commentary should be included where the filed average bonus malus factor varies from the average implied by the expected future number and mix of insured vehicles by vehicle class and rating region at each bonus malus level (as provided in the portfolio analysis)

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<sup>17</sup> For clarity, claims handling cost per claim expected to arise during the period covered by the filing

## Other

- any other matter the insurer should reasonably take into account in the determination of premiums
- details of how the percentage loading applied to the nil ITC premium rates to obtain the some ITC premium rates was determined, and
- details of how the short term loading parameters A, B, X and Y were determined.

A full filing report must include **Schedule A**, **Schedule B**, **Schedule C** (shown in Appendix A, spreadsheet provided), **Schedule D** and **Schedule E** (shown in Appendix B). **Schedules C and E** must reconcile with the equivalent assumptions adopted in the filing report.

## 10.1 Comparison with previous full filing

Except for the first MAI Act filing, insurers must provide a comparison with the previous full filing of the filed average premium and the actual average premium received by the insurer, together with an explanation of the allowance made for non-annual policies in calculating these average amounts, including:

- how the assumptions regarding future experience in the current premium filing differ from the corresponding assumptions in the previous full filing by the insurer, and
- the changes in assumptions and the effect of those changes on the proposed premiums, including reconciliation between the previous and proposed new base premium for a Sydney passenger vehicle for which the policyholder is not entitled to any ITC.

# 11. Schedules to the filing

The following documents and the SIRA Motor Accident Filing Template are to be attached to every filing report:

## 11.1 Schedule A

Insurers must provide the base premium including GST, but excluding Fund levy, for each vehicle classification and region for policyholders who are not entitled to any ITC (PDF version in filing report and Excel version using the SIRA Motor Accident Filing Template and Appendices).

## 11.2 Schedules B(i) and B(ii)

Insurers must provide a full description of proposed bonus and malus structure and the actual amounts (after application of any rounding) proposed to be charged for each vehicle classification, region and bonus malus rate, sub-divided into separate amounts of:

- insurance premium excluding GST
- GST
- Fund levy, and
- total payable by the policyholder.

Separate **Schedules B(i)** and **B(ii)** are required for nil ITC premium rates and some ITC premium rates respectively, for both annual and short term policies.

### 11.3 Schedule C (Appendix A)

Insurers must provide a summary of the assumptions adopted and base premium filed (PDF version in filing report in the form specified in Appendix A and an Excel version using the SIRA Motor Accident Filing Template and Appendices).

### 11.4 Schedule D

Insurers must provide details of the calculation of the net REM amounts in the form specified in the SIRA Motor Accident Filing Template and Appendices.

### 11.5 Schedule E (transition period only)

Insurers must provide a summary of assumptions as per **Schedule E**, in the form specified in Appendix B.

## 12. Partial filing report

Insurers can submit partial filings where **all** of the following conditions are met:

- the expiry date of the partial filing lodged is within 12 months from the commencement date of the most recent full filing approved by SIRA
- the change in average premium excluding GST and the Fund levy reported in **Schedule C** (Item 13) is **less than 4 per cent** when compared to the most recent full filing approved by SIRA, and
- the change in Base Premium Rate (Class 1 Metro) excluding GST, Fund levy reported in **Schedule C** (Item 16) is **less than 4 per cent** when compared to the most recent full filing approved by SIRA.

If any of the above conditions is not met, the insurer must submit a full rate filing. A partial filing must include:

- a summary of the changes proposed and any changes in business strategy
- explanation on each filing assumption change made since the previous full filing and if relevant, previous partial filing approved. The explanation for each individual assumption change is required to be at the same level of detail as that required in a full filing
- **Schedule A, Schedules B(i) and B(ii)** (for both annual and short term policies) **Schedule C**
- commentary and analysis of the estimated effects on the portfolio composition as described in
- an analysis of the change in average premium and base premium against the previous full filing and if relevant, against the previous partial filing approved, and
- signed endorsement of the partial filing from the NSW CTP Product Executive or equivalent office holder.

SIRA may also request additional explanation and documentation to clarify matters about the partial filing.

## 13. Penalties for non-compliance with these guidelines

It is a condition of a licence under section 10.7 of the MAI Act that the licensed insurer complies with the relevant provisions of these Guidelines. If a licensed insurer does not comply with these Guidelines under section 9.10 of the MAI Act SIRA may impose a penalty of up to \$110,000 per breach of this licence condition.

## Appendix A - Schedule C

### Premium filing summary sheet

1a. Assumed frequency	Claims for an industry mix of vehicles (net of sharing and Nominal Defendant)	0.****%
1b.	Relativity of the claims frequency for the insurer's mix of vehicles to the claims frequency for an industry mix of vehicles	
1c.	Claims for insurer (net of sharing and Nominal Defendant)	0.****%
2a. Average claims size, start of underwriting period	Claims in current dollar values for an industry mix of vehicles (gross of reinsurance, net of sharing and Nominal Defendant) (i)	\$**,***
2b. Average claims size, start of underwriting period	Claims in current dollar values for insurer (gross of reinsurance, net of sharing and Nominal Defendant) (i)	\$**,***
3a. Average claims size for filing period	Claims for an industry mix of vehicles for filing period (from item 2) fully inflated and discounted to the middle of the period filed (i)	\$**,***
3b.	Relativity of the claims average claim size in current dollar values for the insurer's mix of vehicles to the claims average claim size in current dollar values for an industry mix of vehicles	
3c. Average claims size for filing period	Claims for insurer for filing period (from item 2c) fully inflated and discounted to the middle of the period filed (i)	\$**,***
4.	Insurer average risk premium (formula used to combine above assumptions to arrive at average risk premium) (1c x 3c) (i) (ii)	
5. Average risk premium	Excluding GST calculation (substitute values in formula) (i)	\$***.**
6. Acquisition and policy handling expenses including commission	Per cent gross premium excluding GST and Fund levy	\$**.**
7. Claims handling expenses	Per cent gross premium excluding GST and Fund levy	*.**%
8. Net cost of	Per cent gross premium excluding GST, and Fund levy	*.**%

reinsurance loading		
9. Other assumptions	Specify nature and value of assumption	*.***%
10. Profit margin	Per cent gross premium excluding GST and Fund levy	*.***%
11. Average premium	Formula used to arrive at average premium excluding GST and Fund levy) $((5 + 9)/(1-(6+7+8+9+10))$ (ii)	
12.	Excluding GST and Fund levy (substitute values in formula) (i)	\$***.**
12a.	Net overall impact of the REM (net REM \$ per policy) (refer to SIRA Motor Accident Filing Template D (iv)	\$***.**
12b.	Required average premium (item 12 less item 12a)	\$***.**
13.	Ratio Class 1 Metro to average premium calculated in accordance with clause 8.3	*.***
14. Bonus malus	Bonus malus factor calculated in accordance with clause 8.4	*.***
15. Class 1 Metro premium	Nil ITC Class 1 Metro base premium excluding GST and Fund levy $(12b \div 13 \div 14)$	
16.	Nil ITC Class 1 Metro base premium including GST but excluding Fund levy	\$***.**
17.	Minimum nil ITC Class 1 Metro premium including GST but excluding Fund levy (ignoring premiums calculated using a bonus factor of less than 80 per cent)	\$***.**
18.	Minimum nil ITC Class 1 Metro amount payable by policyholder including GST and Fund levy (ignoring amounts calculated using a bonus factor of less than 80 per cent)	\$***.**
19.	Maximum nil ITC Class 1 Metro amount payable by policyholder including GST and Fund levy	\$***.**
20.	Loading applied to nil ITC premium rates to calculate some ITC premium rates (per cent nil ITC premium rates)	*.***%
21	MAF levy (Class 1 Metro)	\$***.**
22.	Administrative costs loading for quarterly policies ('X')	\$**.**
23.	Forgone investment income loading for quarterly policies ('Y')	*.***%
24.	Administrative costs loading for half yearly policies ('A')	\$**.**

25.	Forgone investment income loading for half yearly policies ('B')	***%
26.	Period premiums are proposed to apply	

## Notes:

(i) Estimates of average claim sizes and average premiums must be those applicable to the nil ITC premium rates, that is, calculated as if no policyholders have any entitlement to an ITC, and as if the insurer has an entitlement to decreasing adjustments or ITC for all claims costs directly attributable to specific policies. The loading applied to nil ITC premium rates to calculate the insurer's some ITC premium rates is then shown as item 20.

(ii) Use item number for formula description.

Supplementary Table 1 - Further assumptions used in calculating estimate of insurer average risk premium (item 5).

Year Ending	Investment Return (%)	Inflation (% p.a.)		Payment Pattern (iii)	
		AWE	Superimposed (in aggregate if set at an aggregate level or by segments as defined by the insurer if superimposed inflation assumption varies by segment)	Development Year	% Paid

(iii) The payment pattern shown must be that for the underwriting period covered by the proposed filing. If different payment patterns have been assumed for claims segments, Supplementary Table 1 must be modified to show the payment pattern assumed for each.



## Appendix B - Schedule E

### Summary of claim assumptions

Assumption description (column A)	Scheme actuary costing assumption (column B)	Insurer's adjusted assumption for the industry (column C)	Relativity of insurer assumption to industry assumption (column D)	Insurer assumption (column E)
Claims frequency - at-fault (AF) claims	0.063%			
Claims frequency - Not at-fault (NAF) minor injury claims	0.040%			
Claims frequency - NAF claims WPI >10%	0.027%			
Claims frequency - NAF claims WPI <=10%	0.108%			
<b>Total claims frequency</b>	<b>0.238%</b>			
Average claims size (ACS) - AF claims (1/12/17 dollars)	\$16,900			
ACS - NAF minor injury claims (1/12/17 dollars)	\$12,700			
ACS - NAF claims WPI >10%	494,000			
ACS - NAF claims WPI <=10%	80,000			
<b>Total ACS all claims (1/12/17 dollars)</b>	<b>99,000</b>			
<b>Total average claims size (inflated/discounted)<sup>18</sup></b>	<b>110,000</b>			
Weighted average duration of payments (1/12/17 dollars)	2.97			
Claims inflation - wage inflation (overall weighed average)	3.0%			

<sup>18</sup> Discounted to the middle of the underwriting year beginning 1 December 2017 (i.e. 1 June 2018)

Assumption description (column A)	Scheme actuary costing assumption (column B)	Insurer's adjusted assumption for the industry (column C)	Relativity of insurer assumption to industry assumption (column D)	Insurer assumption (column E)
Claims inflation – superimposed inflation (overall weighed average)	2.5%			
Discount rate (overall weighed average)	1.9%			
Risk premium - inflated and discounted risk premium for underwriting year beginning 1 December 2017 <sup>19</sup>	<b>\$262</b>			
Claims handling expense (% of risk premium)	7.5% (\$19.6)			
Net reinsurance expense	\$1.2			
Policy and acquisition expense	\$43.6			
Profit margin (% of premium excl GST and levies)	8% (\$28.4)			
GST (10%)	\$35.4			
<b>Insurer premium (incl GST)</b>	<b>\$390</b>			
MAF levy	\$46.5			
LTCS levy	\$80.6			
MAITC levy	\$10.5			
<b>Total premium payable (incl GST and levies)</b>	<b>\$528</b>			

## Description of each column

Column A – describes the type of assumption.

Column B – sets out SIRA's independent actuary's new Scheme wide assumptions for the industry to achieve the overall \$528 target average premium.

Column C – insurer industry assumption for an industry mix of business – allows comparison against SIRA's independent actuary assumptions in column B.

<sup>19</sup> Discounted to the middle of the underwriting year beginning 1 December 2017 (i.e. 1 June 2018)

Column D - relativity of insurer assumption to industry assumption to allow for differences in the insurer's portfolio of risks to be better or worse experience than the industry before business mix adjustment (which is based on the mix by class/region from relativities) and any other claims related differences.

## Column E – insurer assumption

### Other notes

Total claims frequency for column C should be the same figure as in item 1a in **Schedule C**.

Total claims frequency for column E times the relatively for the insurer's mix of vehicles should be the same figure as in item 1c in **Schedule C**.

Average claims size (1/12/17 dollars) for column C should be the same figure as in item 2a in **Schedule C**.

Average claims size (1/12/17 dollars) for column E times the relatively for the insurer's mix of vehicles should be the same figure as in item 2b in **Schedule C**.

Average claims size (inflated/discounted dollars) for column E times the relatively for the insurer's mix of vehicles should be the same figure as in item 3c in **Schedule C**.

Column E for risk premium (fully inflated and discounted to middle of period filed) should be the same figure as in item 5 in **Schedule C**.

#### Disclaimer

This publication may contain information that relates to the regulation of workers compensation insurance, motor accident third party (CTP) insurance and home building compensation in NSW. It may include details of some of your obligations under the various schemes that the State Insurance Regulatory Authority (SIRA) administers.

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Motor Accidents Insurance Regulation, Level 6, McKell Building, 2-24 Rawson Place, Sydney NSW 2000

General phone enquiries 1300 656 919

Website [www.sira.nsw.gov.au](http://www.sira.nsw.gov.au)

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