Guidance Note on Actuarial Review of Insurance Liabilities in respect of Employees' Compensation and Motor Insurance Businesses

Introduction

Under the Insurance Companies Ordinance (Cap. 41) ("Ordinance"), the Insurance Authority ("IA") has the responsibility of ensuring that an insurer is able to meet its liabilities or fulfil the reasonable expectations of policy holders. Adequacy of the reserves set aside by an insurer for payment of future claims is an important factor affecting the insurer's ability to meet such obligations. The IA attaches great importance to the adequacy of such reserves of an insurer when examining its solvency position under the Ordinance.

2. An actuarial review of these reserves will enhance the adequacy and reliability of such reserves, reflect a more accurate picture of the financial position of insurers, and help to ensure sustainable market pricing over the longer term. The IA therefore considers it appropriate that insurers which carry on employees' compensation ("EC") and/or motor insurance business should be required to commission an actuarial review of these reserves in respect of such statutory lines of business. The review should be conducted according to the criteria as specified in this Guidance Note. An actuarial report should be prepared and certified by the actuary. It should be submitted to the IA for review. The IA may contact the actuary direct for further information or clarifications as considered appropriate. The actuarial report and certificate should also be submitted to the Board of Directors of the insurer, or the regional headquarters in the case of a non-Hong Kong incorporated insurer, for information.

Application of this Guidance Note

3. This Guidance Note applies to both direct insurers as well as professional reinsurers which are authorized to carry on EC and/or motor insurance business in or from Hong Kong.

4. The definitions of terms referred to in this Guidance Note shall have the meanings assigned to them under the Ordinance, except otherwise stated.

Parameters for the Actuarial Review

5. The reserves, which are set aside by an insurer for the purpose of meeting its insurance liabilities, in respect of EC and/or motor insurance business will be subject to actuarial review where such business written in the relevant financial year separately fall within any one of the following parameters:

(a) the gross premium income at or exceeding HK$20 million; or

(b) the gross reserves for claims outstanding at or exceeding HK$20 million; or

(c) the gross reserves for claims outstanding being below HK$20 million but exceeding the amount of solvency surplus as calculated under the Ordinance (subject to a minimum of gross reserves for claims outstanding of HK$5 million).

6. Gross premium income and gross reserves for claims outstanding in this context refer to, in respect of an insurer incorporated in Hong Kong, that of its overall EC or motor insurance business written in or from Hong Kong, and in respect of an insurer incorporated overseas, to that of its Hong Kong EC or motor insurance business.

7. The solvency surplus is the amount by which the value of the net assets of the insurer as determined at the end of the relevant financial year in accordance with the Insurance Companies (General Business) (Valuation) Regulation ("Regulation") or so relaxed by the IA under section 60(1) of the Ordinance exceeded the relevant amount (solvency margin) as determined at the end of the relevant financial year in accordance with section 10 of the Ordinance.

Actuarial Review Report

8. The actuarial review refers in this Guidance Note is for EC and/or motor insurance business. The actuary who conducts the actuarial review of reserves for such business as at the end of each financial year shall prepare a formal report on the review.

9. For Hong Kong incorporated insurers, the actuarial review shall be conducted in respect of all EC and/or motor insurance business

written. For non-Hong Kong incorporated insurers, the actuarial review shall be conducted in respect of the Hong Kong EC and/or motor insurance business.

10. It is possible to have the valuation date of the actuarial review to be a date other than the financial year end date, provided that prior notification with reasons is given to the IA and the practice consistently applied.

11. The valuation of insurance liabilities of each class of business must comprise :

(a) a best estimate of the premiums liabilities;

(b) a best estimate of the outstanding claims liabilities; and

(c) where considered appropriate by the actuary, risk margins that relate to the inherent uncertainty in each of these best estimate values.

For the above purpose, the following terms are so defined :

"Premiums liabilities" refers to unearned premiums and additional amount for unexpired risks, and includes liabilities for all benefits, claims and expenses, acquisition costs, and maintenance costs to be incurred after the valuation date.

"Outstanding claims liabilities" refers to the obligation whether contractual or otherwise, to make future payments in relation to all claims that have been incurred as at the valuation date, and includes reserves for claims reported, incurred but not reported (IBNR) and incurred but not enough reported (IBNER), as well as direct and indirect[(1)] claims expenses.

"Best estimate" refers to the mean value in the range of possible values for the future outcome. It is made with assumptions regarding the future experience, and are made using judgement and experience, and are neither deliberately overstated or understated.

Note

(1) Indirect claims expenses shall be included where (i) such indirect costs can be reasonably estimated; (ii) an appropriate allocation of these indirect cost estimates to the future settlement of claims can be made; and (iii) the resultant effect of such an allocation has a significant effect on the underwriting results from one accounting period to the next.

12. The premiums liabilities shall be valued on a net of reinsurance basis whilst outstanding claims liabilities shall be valued on both gross basis and net of reinsurance. The actuary shall comment where there is a known material risk that one or more reinsurers will fail to meet their obligations, and the presence of non-reinsurance recoveries such as salvage and subrogation.

13. It shall be stated in the report the general principles, details of the methods adopted, and analysis in the valuation of premiums liabilities and outstanding claims liabilities of each class of business, including the following matters:

(a) assumptions used in the valuation process and the justifications therefor;

(b) definition of terms and expressions used in the report that may be ambiguous or subject to wide interpretation;

(c) data available, a view as to its appropriateness, steps taken by the actuary to validate the data and material adjustment to the data;

(d) grouping of risks;

(e) methods used (if these are different from the preceding report, to justify the change and to quantify the financial implication arising from the change in methods); and

(f) analysis.

14. The report shall also address the issues covered in paragraphs 15 to 25 below.

15. The actuary shall ensure that the data used gives an appropriate basis for estimating the insurance liabilities. Reasonable steps shall be taken to verify the consistency, completeness and accuracy of the data collated, with reliances and limitations clearly explained in the report.

16. The valuation of the insurance liabilities of the insurer is likely to require sub-division of risks into sub-classes of business with similar characteristics. The actuary shall consider and determine the most appropriate sub-division of risks for the purpose of the valuation, and discuss the credibility and homogeneity of the sub-division of risks so

selected. However, the value of insurance liabilities must be reported for each class of business.

17. The actuary may make adjustments to the data collated to account for abnormal items, such as large losses. Where such adjustments are made, the nature, amount and rationale for the adjustments shall be disclosed.

18. The actuary shall describe any changes in the nature of coverage the insurer provides and the mix of risks underwritten. He or she shall also address the impact of any changes in the business strategy, underwriting policy, and claims policy that may have on the valuation of the insurance liabilities.

19. The actuary shall take into consideration economic, technological, medical, legal, judicial and social trends within the broader community that may impact upon the value of insurance liabilities.

20. Insurance liabilities must not be discounted in valuation except with the prior approval of the IA as stipulated under section 11 of the Regulation.

21. It is not the purpose of this Guidance Note to be prescriptive in terms of the methods to be adopted for the valuation of insurance liabilities. The actuary is responsible for the selection of an appropriate valuation method, having regard to the availability and reliability of the data and the key drivers of claim cost as revealed by the data analysis or consistent with the nature of the class of business.

22. Where the actuary has used a method that is standard and well understood by the general insurance community, a brief reference to the method and an explanation of the elements of the data to which the method has been applied would suffice. Where an unusual or non-standard method has been used, a more detailed description of the method shall be given.

23. In view of the inherent uncertainty in insurance business, it may be often appropriate for the actuary to use more than one method in the estimation of insurance liabilities, then select one or blend the results from more than one as considered most appropriate. The key assumptions of each such method shall be clearly stated in the report. Where results of different methods differ significantly, the actuary shall comment on the likely reasons for the differences and explain the basis for the choice of results.

24. The actuary shall compare the actual experience of the insurer, for both premiums liabilities and outstanding claims liabilities, with the results of the previous valuation in the report, and highlight and clearly explain where any significant differences between the actual experience and the previous valuation have been observed.

25. The actuary shall also compare the results of the current valuation with those of the previous valuation of the insurer in the report, and justify any material changes in the assumptions made, methods used, or conclusions between the current valuation and the previous valuation as well as quantify the financial implication arising from such changes in assumptions, methods or conclusions.

Certification of the Actuarial Opinion

26. The report prepared shall be certified and signed by the actuary by way of a certificate as prescribed.

27. The certificate shall consist of the following:

(a) identifying the qualification and work experience of the actuary;

(b) stating the subjects on which actuarial opinion is to be expressed and describing the scope of the actuary's work;

(c) certifying that the data, assumptions and methodology used are appropriate;

(d) expressing the actuary's opinion with respect to such subjects, including that of the adequacy of the reserves of the insurer and the need for additional risk margins that relate to the inherent uncertainty in each of the best estimate values of the premium liabilities and outstanding claims liabilities as per paragraphs 11 and 12 above; and

(e) relevant comments if the actuary considers it necessary to state a qualification of his or her opinion, or to explain any aspect which is not already sufficiently explained in the actuarial report.

28. A pro-forma actuarial certificate prescribed for the purpose of this Guidance Note is at Annex.

The Actuary

29. The actuary, either in-house or consulting, shall possess either of the following qualifications or a qualification that is accepted by the IA as being comparable to the following qualifications:

(a) Fellow of the Institute of Actuaries of England;

(b) Fellow of the Faculty of Actuaries of Scotland;

(c) Fellow of the Institute of Actuaries of Australia; or

(d) Fellow of the Casualty Actuarial Society of the United States of America;

as well as appropriate work experience in general business obtained in the last 3 years. The actuary should also be familiar, e.g. by having a physical presence in Hong Kong, with the situation in Hong Kong, particularly the legal, judicial and social trends in Hong Kong that may impact upon the value of insurance liabilities.

30. Any insurer wishing to appoint an actuary possessing qualification and work experience other than those listed in paragraph 29 above shall seek approval from the IA before making the appointment.

Commencement of the actuarial review requirement

31. The requirement for actuarial review shall commence to take effect in respect of the financial year ending on or after 31 December 2001.

32. For insurers with gross premium income or gross reserves for claims outstanding falling outside the parameters as mentioned in paragraph 5 above, they will continue to be subject to the IA's normal monitoring. An actuarial review may nevertheless be required if it is considered appropriate based on the circumstances of individual cases.

Submission of the Actuarial Review Report and Certificate

33. The actuarial review pursuant to this Guidance Note is to be conducted on an annual basis.

34. The chief executive of the insurer, or the local chief executive in the case of a non-Hong Kong incorporated insurer, shall ensure that the actuarial review report and certificate is submitted to the Board of Directors, or the regional headquarters in the case of a non-Hong Kong incorporated insurer, for information. The actuary shall be given the opportunity to raise matters arising out of the preparation of the report directly with the Board or regional headquarters. This includes matters that have already been raised with the management of the insurer, but have not been dealt with to the satisfaction of the actuary.

35. The actuarial review report and certificate prepared are to be submitted to the IA within 4 months after the close of the financial year, together with the annual submission of the audited Hong Kong General Business Returns. An insurer should take into account the valuation result of the actuarial review report in the preparation of the statutory Returns as well as in the annual audited accounts as required under the Ordinance. Where an insurer incorporates a value for such insurance liabilities which is below the valuation result as determined by the actuary, the insurer shall notify the IA in writing with justifications for so doing at the same time when the relevant Returns or accounts are submitted to the IA.

September 2005 (Revised edition)
Office of the Commissioner of Insurance

[SIO(G)A(26).note/GN9-sept2005-e/al]

Annex

CERTIFICATE OF ACTUARIAL OPINION ON INSURANCE LIABILITIES OF EMPLOYEES' COMPENSATION AND MOTOR INSURANCE BUSINESSES OF

[THE COMPANY]

AS AT

[31 DECEMBER 2005]

Identification and qualification of the signing actuary

[I, John Citizen, am an actuary employed by XYZ ("the Company") / I, John Citizen, am associated with the Firm of ABC Consulting Actuaries.] I am a Fellow of the [Institute of Actuaries of Australia] with [x] years of experience of insurance liabilities reserving in general insurance business and am familiar with the situation in Hong Kong as it affects the value of insurance liabilities.

Scope

[I have been retained by XYZ to conduct an actuarial review of the reserve / I have reviewed the data, actuarial assumptions and methods used in determining the reserves] in respect of the insurance liabilities of XYZ in accordance to the requirement of 'Guidance Note on Actuarial Review of Insurance Liabilities in respect of Employees' Compensation and Motor Insurance businesses' ("GN9") issued by the Insurance Authority of Hong Kong and last revised in September 2005.

In forming my opinion on the adequacy of the reserves, I have relied upon the data prepared by the Company. Reasonable steps have been taken to check the reasonableness, completeness and internal consistencies of the data, but otherwise the data has not been independently verified.

The reserves are the responsibility of the Company. My responsibility is to express an opinion on those reserves based on my review.

The reserves being reviewed are compared with my estimate of the liabilities in the table below. The details of the review are set out in my report "Actuarial review of employees' compensation and motor insurance liabilities as at 31 December 2005" and dated XX April 2006 (the "Actuarial Report").

	Company's reserve	Estimated liability
Gross outstanding claims liabilities		
Motor		XX
Employees' compensation		XX
TOTAL GROSS OUTSTANDING CLAIMS		XX
Net outstanding claims liabilities		
Motor	XX	XX
Employees' compensation	XX	XX
TOTAL NET OUTSTANDING CLAIMS	XX	XX
Net premiums liabilities		
Motor	XX	XX
Employees' compensation	XX	XX
TOTAL NET PREMIUMS LIABILITIES	XX	XX

Company's reserves are taken from [Form 1 and 2 of the General Business Return for year 2005 submitted / to be submitted to the Insurance Authority / Company's management accounts as at 31 December 2005]. My estimates of the insurance liabilities are:

- Valued on both gross and net of reinsurance recoveries outstanding basis
- Net of non-reinsurance recoveries outstanding
- Inclusive of indirect claim handling expenses where (i) such indirect costs can be reasonably estimated; (ii) an appropriate allocation of these indirect cost estimates to the future settlement of claims can be made; and (iii) the resultant effect of such an allocation has a significant effect on the underwriting result from one accounting period to the next.
- Not discounted for time value of money
- Inclusive of an additional risk margin relating to the inherent uncertainty of the best estimate of the insurance liabilities

Additional comments / variability *[Include if applicable, some examples are listed below]*

- [Special feature of the businesses / environment causing uncertainty beyond that the reader would reasonably / normally expect]
- [Uncertainties in projection for immature portfolios. Especially when it impacts on the choice of major benchmark / parameters of the model]

- [Other special risks that the actuary wants to mention – eg mass tort, asbestos or other environmental claims]
- [Data issues causing the estimates to be especially volatile]
- [Any known material risk on reinsurance recoveries and/or non-reinsurance recoveries such as salvage and subrogation]
- [Any deliberate non-compliance with the GN9 are listed explicitly]

Opinion

In my opinion, subject to the comments above and qualification below:

- [The data provided was appropriate for this review]
- [The assumptions used are appropriate for this review]
- [The methodologies used are appropriate for this review]
- [The actuarial review and report complies / is intended to comply with the requirement as set out in GN9]
- [Company's net reserves in respect of unearned exposures are greater/less than the best estimate of net premiums liabilities plus risk margins as at 31 December 2005]
- [Company's net reserves in respect of outstanding claims liabilities are greater/less than the best estimate of net outstanding claims liabilities plus risk margins as at 31 December 2005]

Qualification *[reasons for qualifying the opinion or if unable to form an opinion]*

- [For example, The data is corrupt that bias estimates were produced and no suitable adjustment was made, or that not all of the businesses required by GN9 were reviewed]
- [Example on the qualification for reserve shortfall: Company's reserves in respect of premiums liabilities and net outstanding claims liabilities are less than the best estimated liabilities plus risk margins as at 31 December 2005]

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[John Citizen]
[Fellow of the Institute of Actuaries of Australia]

Date: ______________________________