24th March, 2017

(Legislative Supplement No. 16)

LEGAL NOTICE NO. 37

THE INSURANCE ACT

(Cap. 487)

IN EXERCISE of the powers conferred by section 3A (1) (a), (b) and (g) of the Insurance Act, the Insurance Regulatory Authority issues the following guidelines—

THE INSURANCE (VALUATION OF TECHNICAL PROVISIONS FOR GENERAL INSURANCE BUSINESS) GUIDELINES, 2017

- 1. These guidelines may be cited as the Insurance (Valuation of Technical Provisions for General Insurance Business) Guidelines, 2017.
 - 2. In these guidelines, unless the context otherwise requires—

Interpretation.

"appointed actuary" means an actuary who is independent of the insurer or the related parties of the insurer and is approved by the Authority with the qualifications of an actuary as set out in section 2(1) of the Act;

"best estimate" means a value that reflects anticipated experience with no provision for risk of adverse deviation; and

"risk margin" means an amount included in a prudent estimate assumption that is intended to provide for estimation error and adverse deviation related to a corresponding anticipated experience assumption.

- 3. (1) An appointed actuary shall prepare a statement on the valuation of the insurer's insurance liabilities.
- Key requirements
- (2) For the purposes of these guidelines, an insurer's insurance liabilities shall include—
 - (a) the insurer's outstanding claims liabilities; and
 - (b) the insurer's premium liabilities.
- (3) An insurer shall determine the appropriate valuation of insurance liabilities.
- (4) Where an insurer rejects the appointed actuary's statement or adopts a valuation of insurance liabilities that is not in accordance with these guidelines, the insurer shall disclose in writing the following to the Authority prior to the finalisation of the insurer's financial statements—
 - (a) the reasons for not accepting the appointed actuary's statements or for not determining the insurance liabilities in a manner that is consistent with these guidelines; and
 - (b) the details of the alternative assumptions and methodologies used in determining the value of the insurance liabilities.

- (5) For the purposes of this paragraph—
- (a) "outstanding claims liabilities" means claims incurred prior to the calculation date which have been reported but have not yet been settled or which have been incurred but have not yet been reported; and
- (b) "premium liabilities" means the cost of running off the unexpired portion of an insurer's policies composed of unearned premium reserve and unexpired risk reserve.
- 4. (1) An insurer shall determine and disclose the value of its unearned premiums reserves for each class of business.

Valuation of premium reserves.

- (2) An insurer shall, in determining the value of unearned premium reserves, apply the following methods—
 - (a) "24ths" method (reserving on a monthly basis);
 - (b) "365ths" method (reserving on a daily basis); and
 - (c) any other method as may be approved by the Authority.
- (3) When determining unearned premium reserves, an insurer shall conduct a test of the adequacy of the reserves.
- (4) Where the unearned premium reserves are inadequate, the insurer shall determine the premium deficiency reserves.
- (5) The reserving method used by the insurer to determine the unearned premium reserves shall not be changed arbitrarily by the insurer.
- (6) A reinsurer may apply the "8ths" method when reserving on a quarterly basis.
- (7) The insurer shall calculate the reserve for the insurer's unexpired risks by estimating the claims expected to be incurred by the insurer after the valuation date on policies with unexpired exposure periods as at the valuation date, including the part of claims management expenses that relates to those claims in such an amount that the estimated value of those future claims exceeds the unearned premiums reserve.
- (8) The reserve for unexpired risks shall be calculated and maintained separately for each class of insurance.
- 5. (1) The reserves in respect of outstanding claims incurred and reported by the insurer shall be determined prudently by using case estimate method, average cost per claim method or any other methods recognised by the Authority.

Valuation of claim reserves.

- (2) The insurer's reserves in respect of incurred but not reported claims shall be valued and determined prudently by using at least two of the following methods in accordance with the risk nature, risk distribution and experiential data of the insurance lines—
 - (a) the chain-ladder method;
 - (b) the average cost per claim method;

- (c) the Bornhuetter-Ferguson method;
- (d) Cape Cod method;
- (e) Stochastic Reserving methods;
- (f) the standard development method; or
- (g) any other method that may be approved by the Authority.
- (3) An insurer that has been in existence for not more than three years may use the standard development method.
- (4) The percentage of the insurer's net premiums during the year shall be applied when using the standard development method as provided in the appendix to these guidelines.
- (5) The methods to be adopted by the insurer for the valuation of the claim reserves shall depend on $\,$
 - (a) the particular characteristics of the class of business;
 - (b) the reliability of the available data;
 - (c) the past experience of the insurer and the industry;
 - (d) the robustness of the valuation models; and
 - (e) consideration of materiality.
- (6) The value of the insurer's claim reserves shall include an amount in respect of the anticipated claim adjustment expenses.
- (7) When determining claim reserves, the insurer shall conduct a test on the adequacy of the reserves.
- (8) Where the insurer's claims reserves are determined to be inadequate after conducting a test of adequacy of the reserves, the insurer shall determine the claims deficiency reserves margin and load the margin to the reserve.
- (9) An insurer shall determine and disclose the value of its claims reserves for each class of business.
- 6. (1) The appointed actuary shall be in charge of determination of the insurer's reserves.

Reporting on reserves.

- (2) An insurer shall annually submit to the Authority reserves valuation report signed by the appointed actuary of the insurer.
- (3) The annual reserves valuation report shall contain the following -
 - (a) a statement that the applied method complies with these guidelines;
 - (b) an actuarial opinion on the reserving;
 - (c) a detailed description of the reserves valuation; and
 - (d) an explanation of special terms and concepts used in the report.

- (3) The description of the annual reserves valuation shall contain the following—
 - (a) the criteria used by the appointed actuary for division of insurance lines or categories and names of the insurance lines or categories;
 - (b) the completeness and accuracy of the data of different insurance lines or categories and a description of the problems these data may have;
 - (c) the actuarial method and model of valuation; if the actuarial method and model differ from those previously adopted, the reasons for making the change and the effects of the change on the reserves;
 - (d) any major assumptions of the actuarial method and model of valuation and the reasons for adopting such assumptions;
 - (e) any discrepancy between the actuarial result and the previous reserving and actuarial experience;
 - (f) the adequacy of reserving;
 - (g) in the case of the insurer's unearned premium reserves, a description of any changes concerning periodicity, basic premium rate, risk adjustment coefficient, loss ratio, expense ratio, surrender ratio and other factors of insurance lines; and
 - (h) in the case of the insurer's outstanding claims reserves, a description of any changes concerning the occurring rules of compensation cases, case closing rules, changing rules of average cost per claim, underwriting practices, claim settlement practices, ceding arrangements, additional cost increment and other factors.
- (4) The insurer shall submit to the Authority the insurer's quarterly reserve valuation reports signed by the head of the actuarial function and the principal officer of the insurer.
- (5) The insurer's quarterly reserve valuation report shall contain the following -
 - (a) a statement that the applied method complies with these guidelines;
 - (b) the reserve value per line of business; and
 - (c) any other information that may influence the value of the reserves.
- 7. (1) Where the Authority determines that an insurer has not met the requirements of these guidelines, the Authority may impose any or all the remedial measures to correct the situation in accordance with the provisions of the Act.
- (2) An insurer shall, within thirty days, inform the Authority if the insurer has breached or is likely to breach the prescribed capital requirements.

Remedial measures.

- (3) A notice by an insurer of the breach or potential breach of these guidelines shall state the remedial action taken or planned to be taken and the period when action shall be taken.
- (4) The level of supervisory intervention by the Authority to address a breach or potential breach of these guidelines shall be determined by the extent of the breach or potential breach.
- 8. Where the Authority determines that an insurer has not met the requirements of its directive, the Authority may impose any or all of the administrative sanctions under the Act to correct the situation, including—

Administrative sanctions.

- (a) prohibiting the insurer from declaring or paying dividends;
- (b) suspending, dismissing, disqualifying or revoking the appointment by the insurer of an individual in a position as a board member, member of the senior management or a key person in a control function;
- (c) imposing additional reporting requirements on the insurer;
- (d) declaring that a person may not take the office of appointed actuary or the head of the actuarial function of the insurer;
- (e) withdrawing or imposing conditions on the insurer's business license; and
- (f) taking any other action as may be necessary.

APPENDIX

Standard development method factors

No.	Class of insurance business	Percentage of net premium written
1.	Aviation	2%
2.	Engineering	5%
3.	Fire domestic	1%
4.	Fire industrial	1%
5.	Liability	5% - current year
		3% - one year preceding the current year
		1% - two years preceding the current year
6.	Marine	21/2%
7.	Motor private	5%
8.	Motor commercial	5% - current year
		3% one year preceding the current year
		1% - two years preceding the current year
9.	Motor commercial (PSV)	20% - current year
		12 ½% - one year preceding the current year
		5% two years preceding the current year
10.	Personal accident insurance	5%
11.	Theft	5%

12.	Workmen's compensation	5% - current year	
		3% - one year preceding the current year	
		1% - two years preceding the current year	
13.	Medical	3%	
14.	Micro insurance	4%	
15.	Miscellaneous	5%	

Dated the 9th February, 2017.

GODFREY K. KIPTUM,

Acting Commissioner of Insurance and Chief Executive Officer. Insurance Regulatory Authority.

ABDIRAHIN H. ABDI,

Chairman, Insurance Regulatory Authority.

LEGAL NOTICE NO. 38

THE INSURANCE ACT

(Cap. 487)

IN EXERCISE of the powers conferred by section 3A (1) (a), (b) and (g) of the Insurance Act, the Insurance Regulatory Authority issues the following guidelines—

THE INSURANCE (VALUATION OF TECHNICAL PROVISIONS FOR LIFE INSURANCE BUSINESS) GUIDELINES, 2017

1. These guidelines may be cited as the Insurance (Valuation of Technical Provisions for Life Insurance Business) Guidelines, 2017.

Citation.

2. In these guidelines, unless the context otherwise requires—

Interpretation.

"appointed actuary" means an actuary who is independent to insurer or the related parties of the insurer and approved by the Authority with the qualifications of an actuary as set out in section 2(1) of the Act;

"best estimate" means a value that reflects anticipated experience with no provision for risk of adverse deviation;

"hedge" means actions taken to offset the impact of risks materialising;

"risk margin" means an amount included in a prudent estimate assumption that is intended to provide for estimation error and adverse deviation related to a corresponding anticipated experience assumption.

- 3. (1) An insurer shall submit an actuarial valuation report of its life insurance business at least once in every three months and at the end of the financial year.
- (2) An appointed actuary shall be responsible for preparing the annual valuation of technical provisions.

Key requirements.

- (3) The head of actuarial function shall be responsible for preparing the valuation of technical provisions once in every three months.
- (4) The insurer's technical provisions for life insurance business shall be composed of—
 - (a) best estimate liability; and
 - (b) the risk margin.
- (5) The risk margins shall be prescribed by the Authority and the insurer shall modify the best estimate assumptions by the prescribed margins:

Provided that an assumption shall be increased or decreased, respectively, if such increase or decrease results to an increase in the liability of the class of policies concerned.

(6) Where the insurer's technical provisions are hedged or replicated by a financial instrument, the technical provisions shall be hedged or replicated by a financial instrument with a reliable market value where the value of the technical provisions shall be equal to the market value of the hedging or financial instrument:

Provided that a separate computation of the best estimate and risk margin on the value of the hedging or financial instrument shall not be required in determining the technical provisions.

(7) The actuary may adopt any other valuation method for the valuation of technical provisions:

Provided it shall not result in a value lower than the value obtained using the best estimate assumptions and prescribed risk margin.

- (8) The method used by the actuary in calculating technical provisions and the assumptions of the valuation shall not vary from one year to the next without the prior approval of the Authority.
- (9) Where an insurer intends to adopt another valuation method other than the best estimate method for the valuation of technical provisions, the insurer shall seek the prior approval of the Authority and give—
 - (a) the reasons for adopting the different valuation method; and
 - (b) the details of the alternative assumptions and methodologies that the insurer shall rely on in determining the value of the technical provisions, including comparative results.
- 4. (1) Where an insurer is determining the value of the insurer's technical provisions, the insurer shall use a market consistent approach to the valuation which shall require that—

Valuation methodology.

(a) all assets shall be valued at the amount for which they could be exchanged between knowledgeable and willing parties in an arms' length transaction; and

- (b) all liabilities shall be valued at the amount for which they could be transferred or settled between knowledgeable and willing parties in an arms' length transaction.
- (2) When an insurer values the insurer's technical provisions, no subsequent adjustment shall take account of the insurer's credit standing.
- (3) An insurer shall use a mark-to-market approach in order to measure the economic value of assets and liabilities based on readily available prices in orderly transactions that are sourced independently.
- (4) Where marking to market is not possible, mark-to-model techniques shall be used.
 - (5) In this paragraph—
 - (a) "mark to market" means the practice of revaluing an instrument to reflect the current value of the relevant market variables; and
 - (b) "mark-to-model" means any valuation technique which has to be benchmarked, extrapolated or otherwise calculated as far as possible from market input and where the insurer shall maximise the use of relevant observable inputs and minimise the use of unobservable inputs.
- 5. (1) The technical provisions shall correspond to the current amount an insurer may pay if the insurer was to transfer the insurer's insurance obligations immediately to another insurer.

Technical provisions.

- (2) The technical provisions shall be the sum of the Best Estimate Liability and the Risk Margin.
- (3)The insurer shall segment the insurance obligations into homogenous risk groups and at least by the line of business when calculating technical provisions.
- (4) An insurer shall use actuarial and statistical methods in calculating the technical provisions that shall be proportionate to the nature, scale and complexity of the risk supported by the insurer.
- 6. (1) An insurer shall ensure that the best estimate liability corresponds to the probability weighted average of future cash flows taking account the time value of money.

Best estimate liability.

- (2) An insurer shall calculate best estimate liability using a prospective cash-flow gross premium valuation method.
- (3) For the purpose of this paragraph "gross premium valuation method" means the method for placing a value on a life insurance company's liabilities that explicitly values the future office premiums payable, future expenses and also future discretionary benefits.
- (4) An insurer shall calculate best estimate liability gross without deduction of the amounts recoverable from reinsurance contracts or other special purpose vehicles.
- (5) The amounts recoverable from reinsurance contracts or other special purpose vehicles shall be calculated separately and disclosed as

- (6) An insurer shall use non-economic assumptions to compute the best estimate liability with no prudential margins and shall allow for all expected decrements and policyholder actions including lapses.
- (7) An insurer shall take into account all relevant available internal and external data when arriving at the assumptions referred to in subparagraph (5).
- (8) An insurer shall take into account future premiums up to the contract boundary which shall be the point at which an insurer can unilaterally terminate an insurance contract, refuse to accept a premium, vary the premium or the benefits in such a way that the premium fully reflect the risks insured.
- (9) An insurer shall allow for future expenses needs to take account for overheads, directly attributable expenses and future expense inflation.
- (10) The projection time horizon used in the calculation of the best estimate liability by an insurer shall cover the full time of all the cash inflows and cash outflows required to settle the obligations related to existing insurance and reinsurance contracts on the date of the valuation.
- (11) In determining the best estimate liability the insurer shall consider the following cash inflows—
 - (a) future premiums; and
 - (b) future fund management charges or fees income.
- (12) The cash inflows referred to in subparagraph (10) shall not take into account investment returns including interest and dividends.
- (13) The cash outflows referred to in subparagraph (10) shall be divided between benefits to the policyholders or beneficiaries, expenses that will be incurred in servicing insurance obligations and other cash-flow items including taxation payments which are charged to policyholders.
- (14) In determining the best estimate liability an insurer shall consider the following policyholder benefit cash outflows—
 - (a) death benefits;
 - (b) critical illness and disability benefits;
 - (c) surrender benefits;
 - (d) partial and full maturity benefits;
 - (e) annuity payments; and
 - (f) profit share commission payments.
- (15) In determining the best estimate liability the insurer shall consider the following expense cash outflows—
 - (a) administrative expenses;
 - (b) investment management expenses;

- (c) claims management or handling expenses;
- (d) direct and override commissions which are expected to be incurred in the future;
- (e) overheads expenses;
- (f) premium levy and policyholder compensation levy; and
- (g) overhead expenses which shall include those related to general management and service functions which are not directly involved in new business or policy maintenance.
- (16) In circumstances where the best estimate liability of technical provisions is negative for some individual contracts the insurer shall set to zero the value of the best estimate with respect to those individual contracts.
- (17) The cash-flow projection by an insurer shall be based on a policy-by-policy approach but reasonable actuarial methods and approximations may be used.
- 7. An insurer shall value the insurer's group life business using methods prescribed for the valuation of technical liabilities for general business.

Group life

8. (1) The unit-linked liability shall be denominated partly in units and non-unit terms.

Unit-linked contracts.

- (2) The liability relating to the unit shall be the number of units allocated to the policy multiplied by the prevailing unit price as at the valuation date
- (3) The liability relating to the non-unit shall be the amount required to ensure that the insurer is able to purchase units in accordance with its contractual obligations, pay claims in excess of the unit liability and meet the insurer's continuing expenses without recourse to further finance.
- (4) For the purpose of these guidelines, an insurance contract shall be deemed to be unit-linked if the value of the policy is linked directly to the market value of the underlying assets in a ring-fenced unit fund and policyholder pay-outs are not at the discretion of the insurer.
- 9. (1) The guaranteed funds in life insurance companies established to manage retirement savings or investment business shall be classified as discretionary participation business but index-linked or unit-linked business shall not be classified as discretionary participation business.

Discretionary participation or with-profit contracts.

- (2) An insurer shall take into account future discretionary benefits which are expected to be made, whether or not the payments are contractually guaranteed in calculating the best estimate of the discretionary participation business.
 - (3) Discretionary benefits shall include—
 - (a) historic non-vesting claims bonuses as at the valuation date;

- (b) other non-vesting bonuses; and
- (c) future vesting and non-vesting bonuses assumed to be declared in the calculation of the technical provisions including—
 - (i) future benefits assumed to be payable in terms of policyholder reasonable benefit expectations; or
 - (ii) considerations relating to the fair treatment of policyholders.
- (4) The distribution of future discretionary benefits shall be a management action and assumptions about the distribution shall be objective, realistic and verifiable, and shall, in particular, take the relevant and material characteristics of the mechanism for their distribution into account
- (5) The insurer shall value the distribution of future discretionary benefits using—
 - (a) a retrospective or asset share type valuation method; and
 - (b) the valuation of future policy related liabilities including—
 - (i) the cost of financial options and guarantees;
 - (ii) the cost of smoothing;
 - (iii) planned future benefit enhancements; and
 - (iv) non-contractual commitments arising out of treating customer fairly obligations;
 - (c) for the purpose of this paragraph "asset share valuation method" means the accumulation of past premiums, less expenses and the cost of cover at the actual rate of return on the assets.
- (6) The assumptions on the future returns of discretionary participation business should be consistent with the relevant risk-free interest term structure including where a risk-neutral approach for the valuation is used.
- (7) For the purpose of this paragraph "risk-neural valuation approach" means the valuation method where the current value of financial assets is equal to their expected payoffs in the future discounted at the risk-free rate.
- 10. (1) An insurer shall be required to identify all contractual options and financial guarantees embedded in the insurer's contracts.
- (2) An insurer shall be required to take account of the value of financial guarantees and any contractual options included in the insurer's contracts when the insurer calculates the insurer's best estimate liability.
- (3) The best estimate of contractual options and financial guarantees shall— $\,$

Options and guarantees embedded in contracts.

- (a) capture the uncertainty of cash-flows; and
- (b) take into account the likelihood and severity of outcomes from multiple scenarios combining the relevant risk drivers.
- (4) An insurer shall value the best estimate of contractual options and financial guarantees by using one or more of the following methods—
 - (a) a stochastic approach using a market-consistent asset model including both closed form and stochastic simulation approaches;
 - (b) deterministic projections with attributed probabilities; or
 - (c) a deterministic valuation based on expected cash-flows in cases where the valuation method delivers a market-consistent valuation of the best estimate liability.
- 11. (1) An insurer shall apply the Government bond yield curve as the default for the risk-free term structure of interest rates.

Economic assumptions.

- (2) The risk-free term structure shall be used to discount the insurer's technical provisions.
- (3) The insurer shall base the valuation discount rate term structure on the unadjusted term-dependent gross redemption yields published by the Nairobi Securities Exchange.
- (4) In cases where the liability duration is longer than the term structure provided by the Nairobi Securities Exchange yield curve, the insurer shall assume that the yield curve shall remain flat from the latest term in the yield curve up to the point all liabilities expire.
- (5) The insurer's investment expenses shall be allowed in the cash flows underlying the calculations of the insurer's technical provisions and not in the risk-free term structure of interest rates used to discount the technical provisions.
- 12. (1) The insurer's technical provisions shall consist of the best estimate liability and the risk margin.

Risk margin.

- (2) The purpose of the risk margin shall be to increase the insurer's technical provisions to the amount that would be paid by another insurer in order for that other insurer to take on the best estimate liability.
- (3) The risk margin shall be used to increase the insurer's technical provisions to the amount that reflects the risk that the actual experience deviates from the best estimate assumptions.
- (4) The Authority shall determine what risk margins shall be loaded onto the insurer's best estimate assumptions.
 - (5) The risk margins shall be as outlined in Appendix 2.
- 13. (1) Once in each year, an insurer shall submit to the Authority an actuarial valuation report signed by the appointed actuary of the company.

Reporting on technical provisions.

(2) The insurer's actuarial valuation report shall be prepared in accordance with the provisions of the Act.

- (3) The actuarial valuation report shall contain—
- (a) a statement that the valuation method is in compliance with these guidelines;
- (b) an actuarial opinion on the valuation;
- (c) a detailed description of the actuarial valuation; and
- (d) an explanation of special terms and concepts in the report.
- (4) The description of the annual actuarial valuation shall contain the following—
 - (a) completeness and accuracy of the data of different insurance lines or categories and a description of the problems these data may have had;
 - (b) major assumptions of the actuarial valuation and reasons for adopting those assumptions;
 - (c) the variation between the actual result of the previous valuation and the actual experience;
 - (d) adequacy of reserving; and
 - (e) provision for expected allocations of profit to shareholders and the bonus rates declared for policyholders under section 46 of the Act.
- (5) The insurer's quarterly valuation report shall contain the following
 - (a) a statement that the applied method complies with these guidelines;
 - (b) the reserve value per line of business; and
 - (c) any other information that may influence the value of the reserves.
- 14. (1) Where the Authority determines that an insurer has not met the requirements of these guidelines, the Authority may impose any or all the remedial measures to correct the situation in accordance with the provisions of the Act.

Remedial measures.

- (2) An insurer shall, within thirty days, inform the Authority if the insurer has breached or is likely to breach the prescribed capital requirements.
- (3) A notice by an insurer of the breach or potential breach of these guidelines shall state the remedial action taken or planned to be taken and the period when action shall be taken.
- (4) The level of supervisory intervention by the Authority to address a breach or potential breach of these guidelines shall be determined by the extent of the breach or potential breach.
- 15. Where the Authority determines that an insurer has not met the requirements of a directive, the Authority may impose any or all of its administrative sanctions to correct the situation in accordance with the provisions of the Act including—

Administrative sanctions

- (a) prohibit the insurer from declaring or paying dividends;
- (b) suspend, dismiss, disqualify or revoke the appointment of an individual in a position as a board member, member of the senior management or key person in a control function;
- (c) impose additional reporting requirements on the insurer;
- (d) declare that a person may not take the office of appointed actuary or the head of the actuarial function;
- (e) withdraw or impose conditions on the business license of the insurer; and
- (f) take any other action as may be necessary.

APPENDIX 1

Guidance note on best estimate assumptions

This guidance note provides an outline on how the best estimate assumptions can be determined for the purpose of computing the best estimate liability.

- A. Mortality, longevity and morbidity/disability rates
 - (1) The KE 07/10 base mortality rates will be used, with an appropriate adjustment, to reflect the company's own experience.
 - (2) Where no reliable assumptions are available, the assumptions used can be based on the insurer's own experience, industry study or other relevant studies.

B. Withdrawals

- (1) The lapse rate should reflect the expected experience of both existing and potential policyholders and the actuary should perform a lapse investigation using the insurer's past data.
- (2) If a sufficient volume of relevant experience is not available, then experience from similar contracts or industry wide data may be used.

C. Expenses and commissions

 The actuary should make an allowance for expenses to include acquisition costs, underwriting and administration costs, investment costs, claim settlement costs and any future expenses.

D. Investment return

- (1) The actuary should take into account the following regarding the future investment return assumption—
- (2) the extent of any investment guarantees included—
 - (a) nature of contract, e.g. non-profit, with-profit; and
 - (b) level of investment guarantee.
- (3) the size of the reserve built up under the contract—

- (a) type of contract, e.g. term assurance, endowment assurance; and
- (b) frequency of premium payment, e.g. single premium, regular premium.
- (4) The assumed rate of future investment return will depend on the mix of the assets held to match the liabilities.
- (5) Allowance should be made for any changes in the future economic environment.

E. Other assumptions

(1) If a sufficient volume of relevant experience is not available, then experience from similar contracts or industry wide data may be used.

APPENDIX 2

Risk margins schedule

Assumption	Prescribed margin as a percentage of the base assumption			
Mortality	10% increase in mortality for death assurances			
Longevity	10% decrease in mortality for life assurances and annuities			
Morbidity/disability	10% increase in inception rates			
	5% decrease in recovery rates			
Lapses	25% increase or decrease in lapse rate depending on which alternative gives rise to an increase in the liability of the policy concerned			
Interest rates 20% decrease				
Surrenders	10% increase or decrease in surrender rates depending on which alternative gives rise to an increase in the liability of the policy concerned			
Expenses	10% increase			
Expense inflation	10% increase of the estimated escalation rate			

Dated the 9th February, 2017.

GODFREY K. KIPTUM,

Acting Commissioner of Insurance and Chief Executive Officer. Insurance Regulatory Authority.

ABDIRAHIN H. ABDI, Chairman, Insurance Regulatory Authority. and

LEGAL NOTICE No. 39

THE INSURANCE ACT

(Cap. 487)

IN EXERCISE of the powers conferred by section 3A (1) (a), (b) and (g) of the Insurance Act, the Insurance Regulatory Authority issues the following guidelines—

THE INSURANCE (CAPITAL ADEQUACY) GUIDELINES, 2017

- 1. These guidelines may be cited as the Insurance (Capital Adequacy) Guidelines, 2017.
 - 2. In these guidelines unless the context otherwise requires—

"minimum capital requirements" means the level of capital below

"prescribed capital requirement" means the level of capital above which the Authority shall not intervene on capital adequacy grounds;

which an insurer is regarded not viable to operate effectively;

"stress factors" means the assumptions that shall be applied by an insurer for the determination of capital that shall take into consideration the current and prospective impacts of an adverse outcome.

3. (1) The objective of these guidelines is to ensure that insurers maintain a capital adequacy level that is commensurate to their risk profile.

Objective and principles of the guidelines.

Citation.

Interpretation.

- (2) The principles of these guidelines are the—
- (a) allowance of greater flexibility for an insurer to operate at different risk levels in line with the insurer's business strategies;
- (b) explicit quantification of the prudential buffer level with the aim of improving transparency;
- (c) provision of incentives for insurers to put in place appropriate risk management infrastructure and adopt prudent practices;
- (d) promotion of convergence of international practices so as to enhance comparability across jurisdictions and reduce opportunities for regulatory arbitrage within the financial sector; and
- (e) provision of an early warning signal on the deterioration in capital adequacy level, hence allowing prompt and preemptive supervisory actions.
- 4. (1) An insurer shall maintain adequate capital at all times.

Responsibility.

- (2) An insurer shall develop and implement an internal capital management policy.
- 5. (1) An insurer shall assess capital adequacy level using the capital required and the capital available.
- (2) An insurer shall meet the capital adequacy ratio at all times as required under the Act.

Capital adequacy.

- (3) An insurer shall promptly notify the Authority if the insurer falls below the required capital adequacy level.
- (4) An insurer shall maintain a capital adequacy ratio of at least one hundred percent of the minimum capital prescribed under the Act.
- (5) The prescribed capital for an insurer shall be two hundred percent of the minimum capital as required under the Act.
- 6. (1) The capital required for an insurer shall be equivalent to the minimum capital required under the Act.

Capital required.

- (2) For the purpose of determining the minimum capital requirement, the risk-based capital shall be determined in accordance with paragraph 12 of these guidelines.
- 7. The capital available to an insurer shall be divided into two tiers based on the following criteria—

Capital available.

- (a) whether it is paid up or not;
- (b) whether it is available immediately to absorb losses or not;
- (c) its ranking in liquidation of the insurer;
- (d) the extent of any obligation by the insurer to pay dividend or interest;
- (e) the period to the maturity or redemption of the capital of the insurer; and
- (f) the existence of any incentives for the insurer to redeem capital.
- 8. (1) The tier 1 capital of an insurer shall be the highest quality, most loss absorbent and permanent form of capital.

Tiers of capital.

- (2) The minimum capital required of an insurer shall be tier 1 capital.
 - (3) The tier 1 capital of an insurer is the aggregate of—
 - (a) the issued and fully paid up ordinary shares of the insurer;
 - (b) share premium;
 - (c) statutory reserves maintained by the insurer; and
 - (d) profits retained by the insurer.
- (4) The tier 1 capital of an insurer shall be in the form of government bonds, treasury bills, deposits, cash and cash equivalents.
 - (5) The tier 2 capital shall consist of—
 - (a) irredeemable preference shares issued by the insurer;
 - (b) capital loan stocks and other similar capital instruments held by the insurer;
 - (c) subordinated loans subject to approval by the Authority;

- (d) convertible preference shares issued by the insurer;
- (e) revaluation reserves for self-occupied properties and other assets owned by the insurer; and
- (f) general reserves held by the insurer.
- 9. The capital available to an insurer that is not admissible for the determination of the insurer's capital adequacy shall be—

Inadmissible assets.

- (a) goodwill and other intangible assets in the name of or held by the insurer;
- (b) deferred tax assets of the insurer;
- (c) assets pledged to support the credit activities obtained by an insurer or for other purposes;
- (d) assets over their concentration limits;
- (e) all credit facilities granted by an insurer and secured by the insurer's own shares;
- (f) prepayments made by the insurer;
- (g) the fixed assets of the insurer;
- (h) the unsecured loans advanced by the insurer;
- (i) receivables from other insurers;
- (j) inventory; and
- (k) other assets held or owned by the insurer as may be determined by the Authority.
- 10. (1) For the purpose of calculating a general insurer's capital adequacy, the general insurer shall apply the following concentration limit factors—

Investment concentration limits.

- (a) for deposits in any one financial institution or group of related companies, ten percent of total assets;
- (b) for shares of any one institution or group of related companies, ten percent of total assets;
- (c) for property, thirty percent of the total assets; and
- (d) for investment in related parties, ten percent of total assets.
- (2) For the purpose of calculating a life insurer's capital adequacy, the life insurer shall apply the following concentration limit factors—
 - (a) for deposits in any one financial institution or group of related companies, ten percent of total assets;
 - (b) for shares of any one institution or group of related companies, ten percent of total assets;
 - (c) for property, fifty percent of total assets; and
 - (d) for investment in related parties, ten percent of total assets.

11. (1) An insurer shall value assets using a market-consistent basis.

Valuation.

- (2) For the purpose of determining the capital adequacy of an insurer, the market value of assets shall be—
 - (a) in the case of an asset which is listed on a licensed securities exchange and for which a price was quoted on that securities exchange on the date as at which the value is calculated, the price last quoted for the asset; and
 - (b) in any other case, the price which could have been obtained by the insurer upon a sale of the asset between a willing buyer and a willing seller dealing in an arms-length transaction, as estimated by the insurer.
- (3) Where the Authority determines that there is over-estimation or under-estimation in the valuation of assets held by an insurer, the Authority may require an independent revaluation of the asset and the expense of the revaluation shall be met by the insurer.
- (4) The Authority shall prescribe a valuation basis that an insurer shall apply when determining the liabilities of the insurer.
- 12. The risk-based capital of an insurer shall be the square root of the sum of the squares of capital required for—

Determination of risk-based capital.

- (a) insurance risk;
- (b) market risk;
- (c) credit risk; and
- (d) capital required for operational risk,

as provided in the following formula-

 $\sqrt{insurance \, risk^2 + market \, risk^2 + credit \, risk^2}$

- + Capital required for operational risk
- 13. (1) The capital required by an insurer to provide for insurance risk shall be for the purpose of cushioning the insurer against adverse experiences relative to the amount of technical provisions.

Capital required for insurance risk.

- (2) An insurer writing general insurance business shall hold capital against fluctuations in the insurer's premium reserves and claim reserves.
- (3) An insurer shall, for the purpose of calculating the capital required for insurance risk, use the risk factors set out in Appendix 2.
- (4) The capital required by an insurer for insurance risk shall be computed as the value of the insurer's claim reserves multiplied by the risk factor plus the value of the insurer's premium reserves multiplied by the risk factors for each class of business.
- (5) An insurer shall compute the claims reserves as a sum of the best estimate liability and the risk margin.
- (6) An insurer shall compute the premium reserves as a sum of the best estimate liability and the risk margin.

- (7) A general insurer shall, for the purpose of calculating the capital required for catastrophes, apply a charge of two percent of the previous year's net earned premiums.
- (8) An insurer writing life business shall, where applicable, hold capital against adverse experiences resulting from the following risks—
 - (a) mortality;
 - (b) longevity;
 - (c) morbidity;
 - (d) disability;
 - (e) expenses;
 - (f) lapses; and
 - (g) catastrophes.
- (9) The life insurance liabilities risk factors shall be for the purpose of addressing the risk of under-estimation of the insurer's liabilities and adverse claims experience.
- (10) The life insurance capital charge shall be equal to the adjusted value of life insurance liabilities computed using the parameters stipulated in Appendix 1 less the sum of the best estimate value of the life insurance liabilities and provision of risk margin for adverse deviation as shall be prescribed by the Authority. Capital required for insurance risk for life insurer shall be the square root of the sum of the squares of capital required for parameters stipulated in appendix 1 as provided in the following formula —

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\int Mortality<sup>2</sup> + Longevity<sup>2</sup> + Morbidity and Disability<sup>2</sup> + Expenses<sup>2</sup> + Lapses<sup>2</sup> + Catastrophe<sup>2</sup>
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- (11) When an insurer computes its life insurance risk capital charges, the appointed actuary shall be required to determine and declare for each insurance product separately and to decrease or increase life stress factors according to the nature of the insurance product.
- (12) The stress factors for major risks inherent in life insurance liabilities are set out in Appendix 1.
- (13) For group life and group credit policies for which premium and claims liabilities have been reserved by an insurer, the applicable risk charges shall correspond to that as required for general insurance liabilities.
- (14) For deposit administration and group pension savings plan offered by the insurer, a one percent risk charge shall be applicable to the fund amount.
- 14. (1) The capital required by an insurer for market risk shall be for the purpose of cushioning against volatility in the market prices of assets held by the insurer used to back policyholder liabilities.

Capital required for market risk.

- (2) The market risk capital charges shall be for the mitigation of the risk of financial losses arising from—
 - (a) the reduction in the market value of assets held by an insurer due to exposures to equity, interest rate, property, currency risks:
 - (b) non-parallel movements between the value of liabilities faced by the insurer and the value of assets held by the insurer backing the liabilities due to the fluctuation in interest rates in the market; and
 - (c) concentration of exposures to particular counterparties or asset classes.
- (3) An insurer shall, for the purposes of calculating the capital required for market risk, apply a capital charge to the balance sheet asset value.
- (4) The capital required for market risk shall be square root of the sum of the squares of capital required for equity, property, interest rate and currency risks as provided in the following formula—.

$$\sqrt{\text{equity risk}^2 + \text{property risk}^2 + \text{interest rate risk}^2 + \text{currency risk}^2}$$

- (5) An insurer shall apply the factors set out in Appendix 4 for the purpose of calculating the capital required for market risk.
- (6) Equity risks are exposures to equity instruments including ordinary shares or similar instruments that exhibit market behaviour similar to equities.
- (7) Property risks are exposures to immovable properties both for investment and for self-occupied purposes.
- (8) Interest rate risks are exposures to interest rate related assets and liabilities including debt securities, commercial papers and debentures.
- (9) The interest rate risk shall be computed for life insurance funds and general insurance funds with discounting factors.
- (10) An insurer shall reduce the capital charge to address interest rate risks to the extent that the weighted average duration of the exposures in interest rate related assets match the weighted average duration of the insurance liabilities.
- (11) The amount of capital charges required by an insurer shall be the higher of the reduction in surplus under the increasing and decreasing rate scenario:

Provided that if the reduction in surplus is higher under the increasing scenario in one fund but higher under the decreasing scenario in another fund, then the dominant scenario at the company level should be selected and applied consistently to all funds:

Provided further that any resulting negative capital charges for each individual fund should be taken as zero.

- (12) The yield to value of the securities under the base scenario should be the risk-free yield in the case of Government securities or the implied market yield for quoted securities or securities with similar characteristics.
- (13) For the purposes of determining the interest rate risk charge, the base yield curve should be multiplied by (1 + stress-up), and (1 stress-down) for the increasing and decreasing scenarios respectively.
- (14) The stress up and stress down to be applied in determining the interest rate risk charge shall be twenty five percent.
- (15) An insurance fund which has exposures in currencies which are different from that of the liabilities will be subjected to a currency risk charge of eight percent on the net open position.
- (16) For the purposes of calculating the capital charge for currency risks, the net balance sheet positions for exposures to each of the different currencies are converted into Kenya shillings at the spot exchange rates at the valuation date.
- (17) The sum of the net short positions or the sum of the net long positions, whichever is higher, is then multiplied by the eight percent risk charge to arrive at the currency capital charge.
- (18) The insurer's net position in each currency should be calculated by aggregating the following positions—
 - (a) all asset items less liabilities; and
 - (b) the value of all amounts to be received less the value of all amounts to be paid under unsettled spot transactions and forward foreign exchange transactions.
 - (19) For the purposes of these guidelines—
 - (a) "increasing or decreasing rate scenario" means the increasing interest or decreasing interest rate on both the assets and liabilities to test the effect of surplus;
 - (b) "yield to value" means the determination of the value of securities using the yield curve;
 - (c) "base scenario" means the set of assumptions used to calculate the best estimates;
 - (d) "base yield curve" means the yield curve for the Government bonds and treasury bills; and
 - (e) "spot exchange rate" means the prevailing exchange rate at a particular time.
- 15. (1) The credit risk capital charge shall be for the purpose of cushioning an insurer against risk of losses resulting from counterparty default.

Capital required for credit risk.

- (2) An insurer shall, for the purpose of calculating the capital required for credit risk, apply the factors provided in Appendix 3.
- 16. (1) The operational risk capital shall be used by an insurer as the cushion against losses that may arise from failed processes, systems and people.

Capital required for operational risk.

- (2) The operational risk capital shall be computed as the higher of—
 - (a) thirty percent of the square root of the sum of the squares of the capital required for insurance risk, market risk and credit risk; and
 - (b) three percent of the previous year's gross earned premium.
- 17. (1) Where the Authority determines that an insurer has not met the requirements of these guidelines, the Authority may impose any or all the remedial measures to correct the situation in accordance with the provisions of the Act.

Remedial measures.

- (2) An insurer shall, within thirty days, inform the Authority if the insurer has breached or is likely to breach the prescribed capital requirements.
- (3) A notice by an insurer of the breach or potential breach of these guidelines shall state the remedial action taken or planned to be taken and the period when action shall be taken.
- (4) The Authority may enter into an agreement with the board of directors of an insurer requiring the insurer to rectify its deficiencies within a period directed by the Authority.
- (5) The level of supervisory intervention by the Authority to address a breach or potential breach of these guidelines shall be determined by the extent of the breach or potential breach as indicated by the capital adequacy ratio.
- 18. (1) Where the Authority determines that an insurer has not met the provisions of these guidelines, the Authority may impose any or all of the following administrative sanctions to correct the situation in accordance with the Act, including—

Sanctions.

- (a) require the insurer to invest in a specified manner;
- (b) restrict or prohibit the insurer from investing in certain asset classes or individual assets to safeguard insurance funds;
- (c) suspend, dismiss, disqualify or revoke the appointment of an officer of the insurer in a position as a board member, member of the senior management or key person in control function;
- (d) impose additional reporting requirements on the insurer;
- (e) restrict declaration and payment of dividends by the insurer;
- (f) withdraw or impose conditions on the business license of the insurer; and
- (g) take any other action as may be deemed necessary.

APPENDICES

APPENDIX 1

(a) Insurance Risk Factor—Life insurance companies

Parameter	Stress risk factor		
Mortality	6% increase of base mortality rates		
Longevity	7% decrease of base mortality rates		
Morbidity/disability	40% increase in morbidity/disability inception rates in the first year followed by 15% increase in morbidity/disability rates in subsequent years		
	10% decrease in morbidity/disability recovery rates		
Expenses	5% increase in best estimate assumption for expenses.		
	1% increase in best estimate assumption for inflation.		
Lapses	15% increase in lapse rates for new business		
	5% increase in lapse rates for in force business		
Interest rate 10% decrease			
Catastrophe	An absolute increase in the rate of policyholders dying over the following year of 1.5 per mille.		
Retirement savings business			
Parameter	Risk factor		
Pension plans	1.0%		
Deposit Administration	1.0%		

(b) Insurance risk factors—Life Reinsurance Companies

Class of business	Life reserve risk—risk charge
Ordinary life	3.5
Annuities	1.5%
Investment linked	1.5%

APPENDIX 2

(a) Insurance risk factors—General Insurance Companies and Life Insurance Companies transacting group life and group credit business

Class of Business	Premium Reserve— Risk Charge	Claims Reserve— Risk Charge
Aviation	39%	29%
Engineering	8%	4%
Fire domestic	3%	2%
Liability	9%	9%
Marine	7%	8%
Motor vehicle private—Property damage	5%	5%
Motor vehicle private—Liability	12%	12%

Class of Business	Premium Reserve— Risk Charge	Claims Reserve— Risk Charge
Motor vehicle commercial		
Motor vehicle commercial—Property damage	3%	3%
Motor vehicle commercial—Liability	13%	13%
Motor vehicle commercial PSV-Property damage	3%	3%
Motor vehicle commercial PSV—Liability	14%	14%
Personal accident	6%	9%
Theft	4%	4%
Workmen's compensation	18%	19%
Miscellaneous	8%	6%
Medical	15%	13%
Group life	10%	8%
Group credit	12%	10%

(b) Insurance risk factors—Reinsurance Companies

Class of Business	Premium Reserve—	Claims Reserve—
	Risk Charge	Risk Charge
Aviation	42%	26%
Engineering	9%	6%
Fire domestic	5%	3%
Liability	13%	12%
Marine	12%	10%
Motor vehicle private—Property damage	8%	7%
Motor vehicle private—Liability	16%	15%
Motor vehicle commercial—Property damage	6%	5%
Motor vehicle commercial-Liability	17%	16%
Motor vehicle commercial PSV—Property damage	5%	5%
Motor vehicle commercial PSV — Liability	17%	16%
Personal accident	10%	12%
Theft	7%	6%
Workmen's compensation	20%	22%
Miscellaneous	8%	8%
Medical	15%	13%
Group life	10%	8%
Group credit	12%	10%

APPENDIX 3

(a) Credit risk—Insurance and Reinsurance Companies capital charges

Asset	Risk charge
Government securities—National and County	0%
Foreign government bonds	5%
Corporations' and other organisations' bonds	12%
Term deposits	0%
Cash and cash balances	0%
Policy loans	0%
Secured loans—corporations and other organisations	10%
Secured loans—staff and individuals	30%
Investment in subsidiaries, associates and joint ventures	40%
Mortgages	30%
Secured loans to related parties	100%
Category 1—Reinsurers rated above A-	1.5%
Category 2— Reinsurers rated above BBB	10%
Category 3— Reinsurers rated below BBB	35%
Category 4— Reinsurers unrated	100%
Category 5 – Reinsurers licenced under the Insurance Act	2.5%
Insurance receivables—amount outstanding for less than 30 days	30%
Insurance receivables—amount outstanding for over 30 days	100%
Reinsurance receivables—amount outstanding for less than 60 days	20%
Reinsurance receivables—amount outstanding for over 60 days	100%
Assets under Deposit Administration and Pension Plans	1.5%
Assets under Unit Linked	2.0%

APPENDIX 4

Market Risk-Insurance and Reinsurance Companies capital charges

Equity risk	Risk charge
Listed ordinary shares on the Nairobi Securities Exchange	30%
Listed ordinary shares on other regional securities exchanges	30%
Listed preference shares on the Nairobi Securities Exchange	35%
Listed preference shares on other regional securities exchanges	40%
Unlisted shares or private equity	40%

Interest rate risk

Scenario	Asset value	Liability value	Surplus
Base interest rate			
Increasing interest rate			

Scenario	Asset value	Liability va	lue	Surplus
Decreasing interest rate				
Interest rate risk cap	ital	•		
Currency risk				•
Type of currency	Net on balance sheet position	Net forward position	Net long position	Net short position
Total position				
Exposure				
Currency risk charge				8%
Currency risk capital	l charge			

Dated the 9th February, 2017.

GODFREY K. KIPTUM,

Acting Commissioner of Insurance and Chief Executive Officer. Insurance Regulatory Authority.

ABDIRAHIN H. ABDI, Chairman, Insurance Regulatory Authority.