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NATIONAL BANK OF ETHIOPIA

LICENSING AND SUPERVISION OF INSURANCE BUSINESS

VALUATION OF INSURANCE LIABILITIES
DIRECTIVE NO.SIB//2025

Whereas it is essential for the National Bank to receive relevant, reliable and timely financial and non-financial information to assess the financial soundness, managerial effectiveness and stability of each insurer and the sector on an on-going basis;

Whereas the appropriate valuation of insurance liabilities is one of the most important issues facing insurance companies. It is important for the financial soundness of the insurance company, and ultimately for the protection of policyholders, that insurance liabilities are valued in a realistic and consistent manner;

Whereas it is ultimately the responsibility of the Board and Senior Management to place an appropriate valuation on the insurance company's liabilities after considering actuarial and other advices;

Now, therefore, in accordance with Articles 5(4), 24(2), 26(3), 27(2), 31(1), 32(2), 33(1)(a), and Article 64(2) of Proclamation No.746/2012 as amended by Insurance Business (Amended) Proclamation No. 1163/2019, the National Bank of Ethiopia hereby issues this Directive.

1. Short Title

This Directive may be cited as **Valuation of Insurance Liabilities Directive No. SIB//2025.**

2. Definitions

In this Directive, unless the context requires otherwise:

2.1 “**best estimate**” means assumptions regarding future experience, which in the professional judgment of an insurance company or reinsurance company, are most likely to materialise based on the available past recent experience;

2.2 “**case estimate**” means the reserve for outstanding reported claims where each outstanding claim is individually assessed to arrive at an estimate of total payments to be made;

2.3 “**catastrophe**” means an event which gives rise to exceptionally large aggregate losses;

2.4 “**claims frequency**” means the number of claims in a particular period per class of insurance business;

2.5 “**contractual service margin**” means the unearned profit that an insurance company will recognize as it provides services in the future under the insurance contracts;

2.6 “**discount rate**” means the gross rate used to discount expected future cash flows that reflect the expected investment earnings applicable to the assets backing the liabilities being valued;

2.7 “**gross premium valuation method**” means a method of determining the actuarial liabilities of a life insurance company by taking the present value of benefits and expense less the present value of gross premium;

2.8 “**Incurred but Not Reported or IBNR**” means an amount of money set aside to settle claims incurred but not yet reported;

2.9 “**Incurred But Not Enough Reported or IBNER**” means an amount of money set aside to settle the expected cost of claims in excess of the case estimate held;

2.10 “**liability for remaining coverage**” means the fulfillment cash flows that relate to coverage that will be provided under the contract in future periods, plus the remaining contractual service margin;

2.10 “**liability for incurred claims**” mean the fulfillment cash flows for claims and expenses already incurred but not yet paid;

2.11 "**premium deficiency provision**" means the amount of money held in excess of the unearned premium provision where the unearned premiums may not be sufficient to meet future claims and expenses during the period of unexpired risk;

2.12 "**technical provisions**" mean the liabilities of an insurance company from the business that has been written;

2.13 "**unearned premium provision**" means the amount of money set aside from premiums written to cover for the risks for the unexpired period of the insurance policy and

2.14 "**risk margin**" means the component of the value of the insurance liabilities that relates to the inherent uncertainty that outcomes will differ from the best estimate.

3. Scope of Application

This Directive shall be applicable to all insurance companies and an Ethiopian reinsurance company.

4. Valuation of Technical Provisions for Non-Life Insurance Business

4.1 A non-life insurance company shall maintain, at the minimum, the following technical provisions.

a. Unearned Premium Provision.
b. Additional Unexpired Risk Reserve or Premium Deficiency Provision
c. Outstanding Reported Claims Provisions.
d. IBNR
e. IBNER.
f. Margin for Adverse Deviation.

4.2 The valuation of the Unearned Premium Provision shall be determined using the following methods.

a. the 1/365th method.

b. the 1/24th method.

c. in the case of the Unearned Premium Provision for a reinsurance company engaged in non-life insurance business, the 1/8th method or any other method approved by the National Bank.

4.3 The Additional Unexpired Risk Reserve or Premium deficiency provision shall be determined if the sum of expected claim costs exceeds the Unearned Premium Provision for unexpired contracts or the combined ratio for a particular class of business exceeds 100%.

4.4 The valuation of the outstanding reported claims for a non-life insurance company or reinsurance company shall be determined in the following ways-

a. by considering the number of claims reported and their average claim cost; or

b. case-by-case estimation for each claim.

4.5 The claims handling expense provision shall cover the estimated expenses of settling all claims, both reported and unreported, and outstanding as at the valuation date and shall be based on the insurance company's own historical experience.

4.6 The valuation of the Incurred but Not Reported (IBNR) provisions for a non-life insurance company shall be determined using the following methods-

a. the Basic Chain Ladder Method (both on incurred and paid claims).

b. the Bornhuetter-Ferguson Method (both on incurred and paid claims).

c. the Average Cost Per Claim Method.

d. the Cape Cod method; or

e. any other generally acceptable actuarial method.

4.7 The methods to be adopted for the valuation of technical provisions shall depend on:

a. the particular characteristics of the class of business;

b. the reliability and volume of the available data;

c. past experience of the insurance company and the industry;
d. the robustness of the valuation's models; and
e. considerations of materiality.

4.8 The Bornhuetter-Ferguson method that requires the use of a loss ratio assumption; such an assumption of the loss ratio, should be backed up by historical data of an insurance company engaged in non-life insurance business.

4.9 The Incurred but Not Enough Reported (IBNER) provision shall be computed using the loss development actuarial methods or by estimating the difference between the actual claim payments and the case estimates.

4.10 A non-life insurance company or reinsurance company shall use a minimum of two generally accepted actuarial methods in determining the value of its IBNR provisions and reflect these results in its valuation report.

4.10 Where an insurance company adopts another valuation method for the valuation of technical provisions, the insurance company shall disclose.

a. the reasons for adopting the different valuation method; and
b. the details of the alternative assumptions and methodologies that the insurance company shall rely on in.

5. Risk Margin Requirements for Non-Life Business

5.1 A non-life insurance company shall include a margin for adverse deviation to allow for inherent uncertainty of the best estimate of the provisions, variability of the claims experience within a class of business; and the margin shall be based on the historical experience of the insurance company.

5.2 The risk margin is the component of the value of the insurance liabilities that relates to the inherent uncertainty that outcomes will differ from the best estimate. It is aimed at ensuring that the value of the insurance liabilities is established at an appropriate and sufficient level.

5.3 Risk margins must be determined, for each class of business and in total, on a basis that reflects the experience of the insurance company.

5.4 In the determination of the risk margin, the insurance company shall disclose the approach used and the level of confidence adopted.

5.5 The risk margin shall be determined on a basis that the value the insurance liabilities of the insurance company shall be greater than 75 per cent level of sufficiency using the Value at Risk (VaR).

5.6 When selecting the methodology and assumptions to be used in determining the risk margin for a class of business, consideration should be given to a range of factors, including:

a. the robustness of the valuation models.

b. the reliability and volume of the available data and other information.

c. past experience of the insurance company and the general insurance industry; and

d. the particular characteristics of each class of business.

6. <u>Data Requirements for Non-Life Business</u>

6.1 A non-life insurance company shall ensure that data used in the calculation of technical provisions is complete and appropriate for the purpose.

6.2 A non-life insurance company shall ensure that sufficient historical information is available to allow for the identification of relevant patterns before calculation of technical provisions.

6.3 A non-life insurance company shall ensure that the actuary or the actuarial function assesses the accuracy and completeness of data through sufficiently comprehensive series of checks which should be documented to allow the detection of any relevant limitations of the data, and where material limitations are identified, the sources of those limitations should also be identified.

6.4 An insurance company shall ensure that the actuary or the person in the actuarial function documents data limitations including;

a. a description of the shortcomings comprising its causes and any references to other documents where they were identified;
b. a summary explanation on the impact of the shortcomings in the scope of the calculation of technical provisions regarding its materiality and how it affects this process;
c. a description of the actions taken by the actuarial function to detect the shortcomings; and
d. a description of how such situations can be remedied in a short term for the intended purpose and any relevant recommendations to be applied to enhance data quality in the future.

6.5 The actuary or person in the actuarial function shall make recommendations on the procedures that could be performed in order to increase the quality and the quantity of available data.

7. Reporting Requirements for Non-Life Business

7.1 A non-life insurance company shall carry out the determination of the values of its technical provisions per class of business.

7.2 Only homogenous classes shall be aggregated, and clearly documented with clear rationale. A homogeneous risk group encompasses a collection of policies with similar risk characteristics.

7.3 An insurance company shall annually submit the reserve's valuation report signed by the appointed actuary of the insurance company. The report shall contain:

a. a statement that the applied method is in compliance with the stipulations of this directive;
b. an actuarial opinion on data quality, sufficiency and completeness;

c. an actuarial opinion on the reserving;

d. a detailed description of the reserve's valuation; and

e. Definite explanation of special terms and concepts in the report.

7.4 The actuarial valuation report shall contain the following information.

a. The title, company, and valuation date;

b. The executive summary;

c. The scope of the report;

d. The data requirements;

e. The valuation methodology and assumptions including the risk margin and discount rate;

f. The analysis of experience;

g. The adequacy of reserves;

h. The valuation results;

i. The conclusions;

j. The sign off by the actuary or head of the actuarial control function and

k. The sign off by the CEO.

7.5 Annual valuation reports shall be undertaken by the insurance company and shall be submitted to the National Bank within ninety days of the end of the financial year.

7.6 Quarterly valuation reports shall be undertaken by the insurance company and shall be submitted to the Bank within thirty days of the end of each quarter.

7.7 Annual valuation reports for insurance companies engaged in non-life insurance business shall be signed off by the independent appointed actuary.

8. Valuation of Technical Provisions for Life Insurance Business

8.1 A life insurance company shall use the gross premium valuation method while undertaking the valuation of its technical provisions.

8.2 An insurance company's technical provisions for life insurance business shall be the sum of best estimate provisions and the risk margins.

8.3 An insurance company shall calculate the best estimate provision on a gross basis without deduction for the amounts recoverable from reinsurance contracts.

8.4 The method used by an 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 Board of the insurance company.

8.5 Where an insurance company adopts another valuation method for the valuation of technical provisions, it shall disclose.

a. the reasons for adopting the different valuation method; and
b. the details of the alternative assumptions and methodologies that the insurance company shall rely on in.

8.6 In the case of individual life insurance business, the gross premium valuation method shall consider all the relevant cash flows and use the appropriate discounting rates.

8.7 The provision in respect of unit-linked business shall be composed partly of the unit fund and non-unit fund.

8.8 The liability relating to the unit fund shall be the number of units allocated to the policy multiplied by the prevailing unit price as at the valuation date.

8.9 The liability relating to the non-unit fund shall be the amount required to ensure that the insurance company is able to meet the death benefits, other benefits and expenses under the policy.

8.10 Investment contracts shall be valued using the interest rate earned from the investments less any expenses and taxes incurred while taking into account the policyholder's savings or deposits and accrued interest to the valuation date.

8.11 The insurance technical provisions for group life business shall consist of premium and claims provisions.

9. Best Estimate Requirements for Life Business

9.1 The best estimate liability is determined as the value of the expected future payments and premiums under the policy, gross of reinsurance, based on obligations at the reporting date. This best estimate liability is equal to:

a. the value of expected future benefit payments; plus.
b. the value of expected future expenses; less.
c. the value of expected future premiums.

9.2 In projecting the expected future cash flows, the life insurance company shall make assumptions about the expected future experience, taking into account all factors which are considered to be material to the calculation, including:

a. investment earnings;
b. inflation;
c. taxation;
d. expenses;
e. mortality and morbidity; and
f. policy discontinuance.

9.3 The assumptions must reflect a best estimate of the likely experience.

9.4 The best estimate assumption for mortality for valuation purposes shall be the assurance and annuity mortality table approved by the National Bank.

9.5 The best estimate for mortality and morbidity experience may be adjusted to take into consideration, where appropriate:

a. the age, sex, smoking habit, occupation, industry, health, and lifestyle of the insured lives in the portfolio;
b. the duration since policy issued;
c. the size of policy;

d. seasonal variations;
e. environmental factors;
f. the past experience of the portfolio; and
g. any changes in future experience.

9.6 In the determination of the best estimate lapse and surrender rates assumptions, the use of the insurance company's experience data shall be considered. The changing insurance company practices and market conditions that may affect the lapse and surrender pattern of the policies in the future should also be taken into account.

9.7 The best estimate assumption for lapse and surrender rates may take into consideration, where appropriate.

a. the policy plan and options;
b. the life insured's attained age;
c. the duration since the policy was issued;
d. the method of payment and frequency of premium;.
e. the premium paying status;
f. the policy size; and
g. the policy competitiveness, surrender charges, persistency bonuses, charges upon withdrawal and other incentives and disincentives for withdrawal.

9.8 The future bonus rates assumption assumed in the valuation should take into account the policy assets and bonus policy of the company. In setting the bonus rates assumption, reference should be made to the latest bonus investigation study that supports the derivation of the current applicable bonus and dividend rates.

10. Risk Margin Requirements for Life Business

10.1 The risk margin is the component of the value of the technical provisions that relates to the inherent uncertainty in the best estimate. As the risk margins represent an additional component of the technical provisions, it is therefore aimed at ensuring that the value of the technical provisions is established at an adequate level.

10.2 The risk margins relating to mortality, longevity, morbidity, lapses, and expenses shall be determined for policies under consideration.

10.3 In the determination of the risk margin, the insurance company shall disclose the approach used and the level of confidence adopted.

10.4 The risk margin shall be determined on a basis that the value the insurance liabilities of the insurance company shall be greater than 75 per cent level of sufficiency using the Value at Risk (VaR).

10.5 The insurance company shall be required to disclose the margins used to determine the technical provisions as prescribed in the table format below.

Assumption	**Risk Margin Adopted**
Mortality	x% increase for assurance
Longevity	x% decrease for annuities
Morbidity	x% increase in morbidity rates
Lapse	x% increase in lapse rates
Expenses	x% increase in the baseline expense assumption

11 <u>Discount Rate Requirements for Life Business</u>

11.1 The gross rate used to discount expected future cash flows must, to the extent the benefits under the policy are contractually linked to the performance of the assets held.

11.2 The discount rate shall reflect the expected investment earnings applicable to the assets backing the liabilities being valued.

11.3 A discount rate shall be risk-free, based on the current observable, objective rates that relate to the nature, structure and term of the future liability cash flows is to be used.

11.4 The risk-free discount rates shall be based on the yield curve published by the National Bank.

11.5 An insurance company shall adjust the estimates of future cash flows to reflect the time value of money and the financial risks related to those cash flows.

11.6 The discount rates used must reflect the characteristics of the cash flows and the liquidity characteristics of the insurance contracts.

11.7 The insurance company shall disclose the approach adopted when deriving the discount rate to be used and provide reasons for the allowance for the illiquidity of the insurance contracts when deriving the discount rate.

12 Data Requirements for Life Business

12.1 An actuary shall describe the source of data including any reliance on third parties in supplying the data for valuation purposes.

12.2 Before using any data for analysis, an actuary shall be required to form a professional judgment whether:

a. the data are sufficient to perform the analysis;
b. the data requires enhancement before performing the analysis;
c. adjustments or assumptions need to be applied to the data before the Actuary can perform the analysis; and
d. the data contains material defects and requires more extensive review; and in such case, the actuary should perform such review before completing the analysis and indicate the criteria used for such a review.

12.3 The opinion formed by the actuary regarding the appropriateness of the data used, whether for deriving various assumptions for the valuation of liabilities or the actual valuation of liabilities, must be disclosed in the valuation report.

12.4 The actuary shall ensure that the data used in undertaking the valuation of liabilities is appropriate, accurate, consistent, and complete.

12.5 The responsibility of ensuring that the data supplied to the actuary is accurate lies with the insurance company.

12.6 The actuary should also comment on any material limitations in the data used for undertaking the valuation of liabilities.

12.7 Appropriate adjustments must be made for any data errors and omissions found and this should be disclosed in the appropriate section in the valuation report together with recommendations to ensure the non-recurrence of such errors and omissions.

12.8 The Actuary shall consider setting up additional policy liabilities if he or she is unable to satisfy himself or herself that the data used are appropriate, accurate and complete.

13 Reporting Requirements for Life Business

13.1 An insurance company shall annually submit to the National Bank reserves valuation report signed by the appointed actuary of the insurance company. The report shall contain the following:

a. a statement that the applied method is in compliance with the stipulations of this directive;
b. an actuarial opinion on the reserving;
c. a detailed description of the reserve's valuation; and
d. definite explanation of special terms and concepts in the report

13.2 The actuarial valuation report shall contain the following information.

a. The title, company, and valuation date,
b. The executive summary,
c. The scope of the report,
d. The data requirements,

e. The valuation methodology and assumptions including the risk margin and discount rate,
f. The analysis of experience,
g. The adequacy of reserves,
h. The valuation results,
i. The conclusions,
j. The sign off by the actuary or head of the actuarial control function, and
k. The sign off by the principal officer.

13.3 Annual valuation reports shall be undertaken by the insurance company and shall be submitted to the National Bank within ninety days of the end of the financial year.

13.4 Quarterly valuation reports shall be undertaken by the insurance company and shall be submitted to the National Bank within thirty days of the end of each quarter.

13.5 Annual valuation reports for insurance companies engaged in non-life insurance business shall be signed off by the independent appointed actuary.