



JUBILEE ALLIANZ GENERAL INSURANCE (K) LIMITED

Insurance Liability Valuation as at 31 December 2024

March 2025

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1. Scope and Purpose

- 1.1 Jubilee Allianz General Insurance (K) Limited ("Jubilee Allianz") engaged Zamara Actuaries, Administrators & Consultants Limited ("Zamara") to undertake the valuation of insurance liabilities as at 31 December 2024 ("Valuation Date").
- 1.2 The Insurance Liability Valuation of a general insurance company is a requirement prescribed by the Insurance Regulatory Authority ("IRA") of Kenya in accordance with the Guideline on Valuation of Technical Liabilities for General Insurers. The Liability Valuation consists of determining best estimates (using prescribed methodologies where required) of the Outstanding Claims Liabilities and the Premium Liabilities of the insurer.
- 1.3 Further, this valuation has been conducted in line with the requirements of the financial reporting standard for Insurance Contracts, the IFRS 17 Standard ("the Standard").
- 1.4 We, Zamara Actuaries, Administrators & Consultants Limited ("Zamara") have completed our calculations in respect of the Insurance liability valuation of the General Insurance Business of Jubilee Allianz General Insurance (K) Company Limited ("Jubilee Allianz") as at 31 December 2024 as requested by management.
- 1.5 This report is addressed to the management of Jubilee Allianz and it is for their use only. It is however prepared on the understanding that it will be of use to the Regulatory Authority. This report should therefore not be regarded as suitable for use by any other persons or for any other purpose. Zamara Actuaries, Administrators & Consultants Limited or any representatives of our firm are not responsible whatsoever for any judgements or conclusions that may be drawn by third parties from this report.
- 1.6 The Insurance Liability Valuation is limited to the Jubilee Allianz General Insurance (K) Company Limited information, not the consolidated Group information (i.e. this valuation only covers business underwritten in Kenya, and excludes business underwritten by foreign offices belonging to the Group).

2. Reliances and Limitations

- 2.1 The projections are based on a number of assumptions as to future conditions and events. The outcome of these conditions and events may be different from the assumptions made. Therefore, the estimates provided are our best estimates of future claims. We will continue to monitor the trends in claims experience and adjust our assumptions accordingly where necessary. In the final results provided, the methodologies used include an implicit allowance for inflation.
- 2.2 A number of reasonability checks were conducted on the data provided. However, Zamara cannot ensure that the data captured on the systems is correct. For the purposes of this Insurance Liability Valuation, Zamara has assumed the data to be correct. Any material changes in the underlying data may invalidate our projections.
- 2.3 Reserving techniques used in the preparation of this Valuation Report are subject to errors due to random fluctuations including process error and parameter error.

3. Definitions

The terminology used in this report is defined as follows:

3.1 The Premium Allocation Approach ("PAA")

This is the simplified approach of the General Measurement Model (The default measurement model) for contracts that have short coverage periods or those that have passed PAA eligibility test.

3.2 Liabilities for Remaining Coverage ("LRC")

The reserves relating to the unearned portion of insurance and reinsurance contracts. LRC is made up of:

- Unearned Premium Reserve ("UPR")
- Deferred Acquisition Cost ("DAC")
- Additional PAA Reserve/Loss Component

3.3 <u>Liabilities for Incurred Claims ("LIC")</u>

The reserves relating to the earned portion of insurance and reinsurance contracts. LIC is made up of:

- Discounted Best Estimate Liabilities, i.e. IBNR and OCR
- Risk Adjustment for Non-Financial Risks

3.4 <u>Unearned Premium Reserve ("UPR")</u>

This reserve represents the total of premiums written that have not yet been earned as at the valuation date. The figures in this report are balances as at the valuation date.

3.5 Unexpired Risk Reserve ("URR")

The reserve held to cover the cost of claims and expenses incurred during the period of unexpired risk. This is equivalent to UPR+AURR for unprofitable portfolios but is lower than UPR for profitable portfolios.

3.6 Additional Unexpired Risk Reserve/Loss Component ("AURR")

The reserve held more than the Unearned Premium Reserve, to allow for any expectation that the Unearned Premium Reserve will be insufficient to cover the cost of claims and expenses incurred during the period of unexpired risk.

3.7 <u>Loss Recovery component</u>

This refers to the amount of expected recoveries from a reinsurer or other third party for losses that have been recognized in the measurement of an insurance contract liability. It offsets a part of the liability in 3.6 above.

3.8 Deferred Acquisition Costs ("DAC")

DAC is the proportion of acquisition costs that relates to the unearned portion of the premiums

3.9 Outstanding Claims Reserve ("OCR") / Case Estimates

These amounts refer to claims that have been reported by the valuation date but have not yet been settled. These are the case estimates that are provided by Jubilee Allianz.

3.10 Incurred But Not Enough Reported ("IBNER") claims

A reserve reflecting expected changes (increases and decreases) in estimates for reported claims only (that is, excluding any "true" or "pure" IBNR claims)

3.11 Pure Incurred But Not Reported (Pure "IBNR") claims

A reserve to provide for claims that have not been reported as at the valuation date for accident years including and prior to the valuation date without including any development of reported claims.

3.12 Incurred But Not Reported ("IBNR") claims

A reserve to provide for claims that have not been reported as at the valuation date and further development of reported claims. This relates to accident years including and prior to the valuation date. The estimate of IBNR in this report does not include claims outstanding or case estimates. It comprises "pure" IBNR and IBNER.

3.13 <u>Initial Expected Loss Ratio ("IELR")</u>

The expected ultimate loss ratio that is estimated at the start of the contract without knowledge of future claim experience.

3.14 Outstanding Claims Liabilities

Refers to the claims incurred prior to the valuation date, which have been reported and not yet settled or which have been incurred but not yet reported (i.e. the sum of IBNR and case reserves as defined above).

3.15 <u>Unallocated Loss Adjustment Expense Reserve ("ULAE")</u>

The reserve held to cover claims handling expenses that are not allocated to the processing of a specific insurance claim.

3.16 Risk Adjustment ("RA")

This is an additional margin to the discounted best estimate liabilities to provide a further level of confidence in the BEL, intended to reflect the compensation that the entity requires for bearing the uncertainty about the amount and timing of cashflows that arises from non-financial risk.

3.17 <u>Discounting</u>

This is the determination of the present value of future cash flows to allow for the time value of money.

3.18 Yield Curve

This is a representation of the interest rates on bonds over different terms to maturity. It is used to derive the discount rates to be used in the determination of the present value of the future cashflows.

3.19 The Standard

The International Financial Reporting Standard 17 issued by the International Accounting and Standards Board on Insurance Contracts. It establishes principles for the recognition, measurement, presentation and disclosure of insurance contracts within the scope of the Standard. It replaces the IFRS 4 Standard.

3.20 Valuation Date

The valuation date for this Insurance Liability Valuation is 31 December 2024.

4. Summary of Results

4.1. The table below summarises the claims and the premium liabilities for Jubilee Allianz General (K) Limited as at 31 December 2024.

Reserve	Reserves as at 31 December 2024 (K Shs '000)		
Reserve	Insurance Contracts	Reinsurance Contracts	
	Liability for Incurred Claims	Asset for Incurred Claims	
Discounted BEL	5,936,067	2,046,949	
Risk Adjustment	827,339	124,864	
Total	6,763,405	2,171,813	
	Liability for Remaining Coverage	Asset for Remaining Coverage	
UPR	1,783,211	576,825	
DAC	(229,415)	(153,991)	
Loss Component	336,155	21,611	
Total LRC	1,889,951	444,445	
Total	8,653,356	2,616,258	

- 4.2. The total reserves estimated for insurance contracts were K Shs 8.7 billion while the total reserves estimated for reinsurance contracts were K Shs 2.6 billion, implying a net insurance liability of 6.0 billion.
- 4.3. The analysis in the sections that follow indicates that the results above are deemed sufficient to cover anticipated future claims based on current estimates and assumptions. The results also align with the minimum regulatory and acceptable actuarial standards.
- 4.4. Jubilee Allianz's products are measurable under the PAA measurement approach as described in section **7.2.1** below.
- 4.5. The reserves were calculated using a combination of chain-ladder, Bornhuetter Ferguson and expected loss ratio methods, supported by historical claims data and current market conditions.
- 4.6. The discount rates used were determined using the NSE yield curve, based on a reference portfolio of government bonds as at 31 December 2024.
- 4.7. Recovery rate assumptions were determined based on the history of Jubilee Allianz's reinsurance recoveries, after which they were used to determine the reinsurance recovery amounts.
- 4.8. Large losses were carefully analyzed and appropriately adjusted in the reserve estimates in line with the Company's reserving policy.

5. Data Provided and Reconciliation

5.1 Data

Jubilee Allianz provided Zamara with the following data for the Insurance Liability Valuation as at 31 December 2024:

5.2 Claims Paid Data

Individual gross claims paid data was provided for the period from January to December 2024.

The following details were provided per claim:

- Claim number
- Date of loss
- Date of notification
- Date of payment
- Class of business
- Gross claim amount
- Reinsurance claim amount

If Jubilee Allianz believes that the allocation of paid claims to the portfolios/classes of business in the data received by Zamara is materially misstated, then the reserves in this report may be under or overestimated.

5.3 Claims Outstanding Data

Individual gross claims outstanding data was provided as at 31 December 2024.

The following details were provided per claim:

- Claim number
- Date of loss
- Date of notification
- Class of business
- Gross claim amount
- Reinsurance recoveries

If Jubilee Allianz believes that the allocation of outstanding claims to the portfolios/classes of business in the data received by Zamara is materially misstated, then the reserves in this report may be under or over-estimated.

5.4 Premium Data

Individual premium data was provided for the period from January to December 2024. The premium data was provided on an individual policy level and included the following details:

- Policy number
- Start date
- End date
- Class of Business
- Gross written premium
- Net Premium
- Gross Commissions
- Reinsurance Commissions

If Jubilee Allianz believes that the allocation of premiums to the classes of business in the data received by Zamara is materially misstated, then the reserves in this report may be under or overestimated.

5.5 Other Data

Management Accounts were provided for the period from January to December 2024.

Jubilee Allianz provided the following additional data and information:

- IFRS 17 Attributable expenses
- Methodology basis and calculations for the Non-Performance Risk

The data received for the 31 December 2024 valuation was combined with data received for previous valuations in order to form the complete data set required for the valuation process.

5.6 Data Reconciliation

Gross Written Premium

	For the Year until 31 December 2024			
Class of Business	Gross W	hs '000)		
	Data	Financials	Difference	
Aviation	4,705	4,705	0.0%	
Engineering	81,558	81,558	0.0%	
Fire Domestic	71,967	71,967	0.0%	
Fire Industrial	1,200,553	1,200,553	0.0%	
Marine	122,765	122,765	0.0%	
Miscellaneous	88,248	88,248	0.0%	
Motor Commercial	541,037	541,037	0.0%	
Motor Private	1,172,004	1,172,004	0.0%	
Personal Accident	3,342	3,342	0.0%	
Public Liability	407,197	407,197	0.0%	
Theft	27,376	27,376	0.0%	
Workmen's Compensation	868,701	868,701	0.0%	
Total	4,589,454	4,589,454	0.0%	

The Gross Written Premium data reconciled satisfactorily to the financials provided both at a class wise level and at an aggregate level.

The Gross Written Premium in the period from January to December 2024 was K Shs 4.6 billion compared to K Shs 4.7 billion written in the period from January to December 2023. This represents a decrease of 2.6% in business written.

Gross Claims Paid

	For the Year until 31 December 2024			
Class of Business	Gros	000)		
	Data	Financials	Difference	
Aviation	-	-	0.0%	
Engineering	25,983	25,983	0.0%	
Fire Domestic	61,354	61,354	0.0%	
Fire Industrial	1,513,749	1,513,749	0.0%	
Marine	27,341	27,341	0.0%	
Miscellaneous	24,042	24,042	0.0%	
Motor Commercial	404,650	404,650	0.0%	
Motor Private	719,619	719,619	0.0%	
Personal Accident	543	543	0.0%	
Public Liability	49,020	49,020	0.0%	
Theft	11,517	11,517	0.0%	
Workmen's Compensation	258,590	258,590	0.0%	
Total	3,096,409	3,096,409	0.0%	

The Gross claims paid data reconciled satisfactorily at an aggregate and class wise level.

The Gross Claims Paid in the period from January to December 2024 was K Shs 3.1 billion compared to K Shs 1.9 billion paid in the period from January to December 2023. This represents an increase of 62.8% in gross claims paid mainly attributable to large losses under the Fire Industrial class.

Gross Claims Outstanding

	As at 31 December 2024				
Class of Business	Gross Claims Outstanding (K Shs '000)				
	Data	Financials	Difference		
Aviation	-	-	0.0%		
Engineering	70,433	70,433	0.0%		
Fire Domestic	28,583	28,583	0.0%		
Fire Industrial	838,479	838,479	0.0%		
Marine	103,302	103,302	0.0%		
Miscellaneous	158,159	158,159	0.0%		
Motor Commercial	611,004	611,004	0.0%		
Motor Private	757,306	757,306	0.0%		
Personal Accident	18,997	18,997	0.0%		
Public Liability	494,472	494,472	0.0%		
Theft	38,986	38,986	0.0%		
Workmen's Compensation	1,001,310	1,001,310	0.0%		
Total	4,121,031	4,121,031	0.0%		

The Gross claims paid data reconciled satisfactorily at an aggregate and class wise level.

The Gross Claims Outstanding at 31 December 2024 was K Shs 4.1 billion compared to K Shs 5.5 billion as at 31 December 2023. This represents an decrease 25.4% in gross claims outstanding.

Reconciliation Overall Commentary

• Overall, the reconciliation process above affirms the data integrity check for this assessment and clarifies Jubilee Allianz's financial performance.

6. Business Segmentation

- 6.1.1. Jubilee Allianz aggregates its insurance products into portfolios with similar risks in line with the relevant policy and methodology choice document on the aggregation and grouping of insurance contracts and in accordance with the IFRS 17 Standard.
- 6.1.2. Jubilee Allianz underwrites the following statutory classes of business: Aviation, Engineering, Fire Domestic, Fire Industrial, Marine, Miscellaneous, Motor Commercial, Motor Private, Personal Accident, Public Liability, Theft and Workmen's Compensation.
- 6.1.3. We were comfortable that the insurance portfolio grouping adopted by Jubilee Allianz represents homogenous risks that have similar risks and hence are managed together even from a pricing perspective. Accordingly, policies underwritten over any one year will fall in the same cohort. The segmentation adopted facilitates a natural comparison between earned premiums and incurred claims.

7. Methodology

7.1. IRA prescribed Methodology

The IRA has included prescribed methodologies for the determination of best estimate liabilities of insurance reserves.

7.1.1 IRA prescribed Methods for Claims Liabilities

- 7.1.1.1 These comprise of a reserve for claims that have been reported as at the valuation date but have not yet been settled (known as the Outstanding Claims Reserve ("OCR")) and a reserve for claims that have been incurred prior to the valuation date but not yet reported to the insurer (known as the Incurred But Not Reported ("IBNR") reserve).
- 7.1.1.2 The IRA prescribed methodologies in the determination of the OCR are as follows;
 - Case Estimate Method using the sum of case estimates as at the valuation date;
 - Average Cost per Claim Method using the average cost of claims incurred;
 - Other methods recognised by the IRA.
- 7.1.1.3 The IRA prescribed methodologies for IBNR are as follows:

Chain-Ladder Method

Using an estimate of the settlement pattern of claims incurred/claims paid.

Average Cost per Claim Method

 Using a combination of the average cost of claims incurred and the projected future number of claims

Bornhuetter-Ferguson Method

 Using a combination of the Chain-Ladder Method and an Initial Expected Loss Ratio to account for the expectations of the business

Standard Development Model

• Using factors prescribed by the IRA to take account of the different risk profiles of different lines of business (only allowed for companies with less than 3 years of experience).

- 7.1.1.4 The Guidelines require that at least two of the prescribed methodologies for the determination of IBNR be considered before a best estimate is selected.
- 7.1.1.5 The IRA has indicated that the appointed actuary may use a method that is not listed above if it is considered more appropriate.

7.1.2 IRA prescribed Methods for Premium Liabilities

- 7.1.2.1 Premium Liabilities are composed of a reserve for policies that have not yet expired at the valuation date (known as the Unearned Premium Reserve ("UPR")) and a reserve to allow for the expectation that the UPR may not be sufficient to cover the expected cost of claims and expenses arising from the period of unexpired risk (known as the Additional Unexpired Risk Reserve ("AURR")).
- 7.1.2.2 For an insurance company, the IRA prescribes that either of the following methods can be used for the determination of the UPR:
 - 24ths method corresponding to a risk profile that is spread evenly over each month
 of cover (corresponding to monthly reserving); and
 - 365ths method corresponding to a risk profile that is spread evenly over each day of cover (corresponding to daily reserving).
- 7.1.2.3 The IRA does not prescribe a methodology for the determination of the AURR and this is up to the discretion of the Appointed Actuary.

7.2. IFRS 17 Methodology

7.2.1 Measurement Methods

- 7.2.1.1. Jubilee Allianz has adopted the Premium Allocation Approach (PAA) for the measurement of all insurance contracts and the reinsurance contracts held.
- 7.2.1.2. Jubilee Allianz's adoption of the PAA follows from the assessment of the standard policy durations of the polices as at the transition date, where majority of the insurance contracts issued were observed to be short term with average coverage periods of one year or less.
- 7.2.1.3. Under IFRS 17, Jubilee Allianz's reinsurance contracts are measured and recognized separately from the underlying direct insurance contracts. However similar requirements on calculations apply to reinsurance contracts.

7.2.2 **Discounting**

- 7.2.2.1. The Standard requires that estimates of future cashflows are adjusted to reflect the time value of money, and the financial risks related to those cashflows, to the extent that the financial risks are not included in the estimates of the cashflows.
- 7.2.2.2. The discount rate applied should reflect the time value of money, the characteristics of the cashflows and the liquidity characteristics of insurance contracts.
- 7.2.2.3. The rates should also be consistent with observable current market prices for instruments with cashflows with similar characteristics as the insurance contracts in terms of timing, currency, and liquidity.
- 7.2.2.4. Jubilee Allianz utilised the NSE yield curve as at 31 December 2024, based on a reference portfolio of government bonds, to carry out discounting.
- 7.2.2.5. No allowance was made for the illiquidity premium owing to the short-term nature of the general insurance contracts written by Jubilee Allianz. In addition, there is unavailability of readily available information to aid in determining illiquidity premium in the local market.
- 7.2.2.6. Discount rates used are as per section **A.1** of the appendices.

7.2.3 Risk Adjustment

- 7.2.3.1. The IFRS 17 Standard requires that the estimates of the present value of future cashflows are adjusted to reflect the compensation that the entity requires for bearing the uncertainty about the amount and timing of cashflows that arise from non-financial risk.
- 7.2.3.2. The Standard does not specify a technique for computing the Risk Adjustment for Non-Financial Risk but requires that the Risk Adjustment is consistent with the level of uncertainty associated with the insurance contracts by considering factors such as frequency and severity of the cashflows, duration of the contracts, probability distribution, etc.
- 7.2.3.3. The Standard also requires that the confidence level, based on which the Risk Adjustment is computed is disclosed, and should an entity employ a technique other than the confidence level to determine the Risk Adjustment, the entity should disclose the confidence level implied by the resulting risk adjustment.
- 7.2.3.4. Jubilee Allianz has adopted a Value at Risk (VaR) approach to determine the Risk Adjustment factor (or percentage), which is applied to the present value of future cashflows for each class. Further, Jubilee Allianz has adopted a 75% confidence level in line with regulatory guidelines and industry best practice. The Over-Dispersed Poisson Bootstrapping approach was adopted for the derivation of the Risk adjustment factors as at the Valuation Date.
- 7.2.3.5. The methodology and Risk Adjustment factor used per class of business is as per the section **A.1** of the appendices.

7.2.4 Expense Allocation

- 7.2.4.1. The Standard requires that costs which do not relate to the fulfilment of contracts are excluded in the estimation of fulfilment cashflows. It further requires that overhead costs are allocated to group of contracts using methods that are systematic and rational and are consistently applied to all costs that have similar characteristics.
- 7.2.4.2. Jubilee Allianz has adopted an expense allocation policy which splits the company's expenses into attributable and non-attributable expenses.
- 7.2.4.3. The Company's expense allocation criteria governs the allocation of expenses to groups of insurance contracts for accurate measurement, projection and financial reporting.
- 7.2.4.4.The Company excludes non-attributable overhead costs such as:
 - Administrative overhead costs: e.g. corporate head office costs
 - Costs associated with business development unrelated to specific insurance contracts;
 - Research and development not tied to existing portfolios
- 7.2.4.5. Directly attributable expenses are used in the measurement of the future cashflows and they are incurred as a result of issuing, fulfilling, or servicing the insurance contracts.
- 7.2.4.6. Jubilee Allianz categorises its directly attributable expenses into:
 - Acquisition costs: Commission payments, underwriting costs, and policy issuance expenses;
 - Claims handling expenses: Costs related to settling claims, including salaries of claims adjusters; and
 - Policy administration expenses: Costs for maintaining policies, customer service, and managing benefits.
- 7.2.4.7. The Company allocates directly attributable expenses across groups of insurance contracts systematically and rationally, based on similarity of risk, relying on the same modalities that guide contract grouping using drivers such as the premium volume.

7.2.5 <u>Liabilities for Incurred Claims</u>

7.2.5.1. Outstanding Claims Reserves ("OCR")

7.2.5.1.1. The OCR is made up to all claims reported to the insurer but are yet to be settled, i.e., the case estimates as recorded in the system and provided as outstanding claims.

7.2.5.2. <u>Incurred But Not Reported Reserves ("IBNR")</u>

 We selected the most appropriate methodology depending on the volume of data in each class of business, and in line with the IRA prescribed methodologies as outlined in section 7.1. above.

- The three methods we used for the projection of claims for this valuation were the Loss Ratio method, the Basic Chain-Ladder Method ("BCL") and the Bornhuetter-Fergusson Method ("BF"), dependent on the development of claims per cohort.
- Claims data was grouped into annual triangles by accidents period (the origin period) and payment period (Development Period).
- The methods mentioned above were applied to gross claims paid and gross claims incurred data. One-off large claims that would distort the development of claims were excluded in the triangulations but were included in the determination of the ultimate claims for each cohort. A separate reserve for these large losses has not been estimated. However, consideration of the historical performance with the large losses experienced, was considered in coming up with the appropriate assumptions for the current valuation.
- Since each cohort is projected independently, it is possible for the most appropriate method to be selected for each cohort. Our choice on whether to use BCL or BF methods was informed by how much each cohort was developed. The BCL Method was preferred where the claims development was greater than 75% (based on the selected development factors). More information on the development triangles for each class of business is as in the appendices.

7.2.5.3. BCL

- Development factors were calculated using the last seven years of data. Ultimate development factors were calculated for each of the development periods. Development factors were excluded if they were deemed to be outliers.
- Ultimate development factors were applied to the paid and incurred data per cohort and an ultimate claim amount for each cohort calculated. The future incurred but not reported claims were allocated to future payment periods in line with the development patterns calculated. The outstanding claims reported to date, including any extreme large loses, were then subtracted from the total future claims to give the resulting IBNR figure per cohort.

i.e., IBNR = Ultimate claim amount

less: total paid claims to date less: total claims outstanding

7.2.5.4. Assumptions underlying the BCL method

- The BCL method assumes that past claims experience is indicative of future experience, i.e. that claims recorded to date will continue to develop in a similar manner in the future as they have developed in the past.

- An implicit assumption is that, for an immature accident period, the claims observed thus far provide information about the claims yet to be observed.
- Further assumptions made in the application of the BCL are as follows:
 - Claims processing has been consistent;
 - There has been a stable mix of types of claims; and
 - Inflation has been stable.

7.2.5.5. <u>BF</u>

- The BF method is an extension of the BCL method as the incremental and ultimate development factors calculated (in accordance with the BCL method) form a critical component of a reserve estimate determined using the BF method.
- The BF method is used on more recent accident years (depending on the volume of data available) since the estimates produced using the BCL for these accident years cannot necessarily be relied upon with a sufficient degree of confidence. The BF method is a weighted average approach that uses an assumed loss ratio, termed the Initial Expected Loss Ratio ("IELR") in combination with the original BCL projection.

Assumptions underlying the BF method

- Since the BF method is a weighted average between an Initial Expected Loss Ratio and the projected claims incurred using the BCL method, the assumptions underlying the BF method are very similar to those underlying the BCL method.
- The only major additional assumption underlying the BF method is based on the choice of the Initial Expected Loss Ratio.
- The Initial Expected Loss Ratio chosen was assessed by comparing the historic incurred to date, paid to date, and ultimate loss ratios. These loss ratios were all calculated per cohort.

7.2.5.6. Loss Ratio Method

- The Loss Ratio method results in the estimation of ultimate claims by allowing for the incorporation of expected experience to date and the average assumed Ultimate Loss Ratio.
- The estimate of ultimate claims is then calculated as:

Average ultimate loss ratio assumed * exposure per cohort

- The IBNR is arrived at by subtracting the total claims reported to date (paid and outstanding claims).

Assumptions underlying the Loss Ratio Method

- An estimate of the average ultimate loss ratio needs to be assumed. Zamara used the incurred to date, paid to date, and ultimate loss ratios observed in previous accident years.
- Although Zamara conducted reasonability checks on the loss ratios, if the assumed loss ratios are not indicative of future experience, the calculated outstanding claims may be under- or over estimated.

7.2.5.7. <u>Unallocated Loss Adjustment Expenses ("ULAE")</u>

- Based on the definition of ULAE, the methodology used to determine this reserve was based on the estimation of the proportion of historical claims paid that relates to unallocated claim expenses.
- Key to estimation ULAE is a ratio ("r"), which represents the ratio of the expected unallocated claims handling expenses to over the claims paid over a period. This ratio is then applied to the IBNR and OCR as defined in the formula below:

$$ULAE = r * \{IBNR + (0.5 * OCR)\}$$

Assumptions Underlying the ULAE Computation Method (Kittles Method)

- Payments for ULAE are proportional to payments for claims
- Timing of payments for ULAE follow the timing of payments for claims
- The insurer's relationship of paid ULAE to paid claims has achieved a steady state such that the paid-to-paid ratio is a reasonable approximation of the relationship between ultimate ULAE and ultimate claims
- The historical relationship between ultimate ULAE and paid claims represents the relationship expected between future ULAE and future claims payments
- The ULAE associated with open and pure IBNR claims are proportional to the case estimates and IBNR claims
- Half of a claim's ULAE is expended when a loss is reported, the other half when it is paid

7.2.6 <u>Liabilities for Remaining Coverage ("LRC")</u>

7.2.6.1. Adopted Methodology

Given the short-term nature of the insurance contracts that Jubilee Allianz underwrites, the Premium Allocation Approach ("PAA") was adopted in the valuation of liabilities for remaining coverage.

7.2.6.2. <u>Unearned Premium Reserve ("UPR") & Deferred Acquisition Costs ("DAC")</u>

The accuracy of the UPR and DAC is based on the credibility of the data provided in the respective registers, including how the data is captured in the data system and reconciliation with financials per class of business.

The UPR and DAC were calculated using a time-apportionment basis, in particular, the 365ths method. This implicitly assumes that the risk profile of the business is spread evenly over the year.

7.2.6.3. Loss Component

The Loss Component is an additional reserve held to cater for expected inadequacies of the UPR to cover claims and expenses relating to the unearned duration of insurance contracts.

This is determined as the excess of the fulfilment cashflows, including risk adjustment, with respect to the unearned duration of insurance contracts over the UPR less DAC.

i.e. URR = Fulfilment cashflows relating to unexpired duration (discounted with risk adjustment)

plus: DAC less: UPR

The Loss Component is determined for each class of business.

To determine the recoverable portion of the loss component, we applied recovery rate assumptions to the insurance loss component.

7.2.6.4. Allowance for Non-performance of Reinsurance Contracts Held

The Standard (IFRS 17.63) requires that the measurement of reinsurance contracts held must include an adjustment for the risk of non-performance by the reinsurer/issuer of the reinsurance contract. This adjustment reflects the likelihood and extent to which the reinsurer may default on its obligations.

This non-performance risk adjustment should be incorporated into the fulfilment cash flows of the reinsurance contract.

The cash flows related to the reinsurance contracts held should be adjusted to reflect the credit risk of the reinsurer. This includes expected losses due to default, insolvency, or other forms of non-performance (e.g., effects of collateral and losses from disputes).

The discount rates used to determine the present value of fulfilment cash flows should also reflect the characteristics of the reinsurance contracts, including the non-performance risk.

IFRS 17 requires entities to disclose significant judgments and assumptions made in estimating the non-performance risk of reinsurance contracts held.

Entities must also provide information about the methods used to assess the non-performance risk and the rationale behind the chosen methods.

The risk of non-performance for each reinsurance arrangement is computed as follows:

RNP = $\sum_{k=1}^{t}$ (undiscounted gross incurred claims * (1 - Recovery Rate) * Probability of Default t * Loss Given Default r * Exposure at Default e)

Where the probability of default is:

Expected Credit Losses (ECL) = Probability of Default ("PD") * Loss given Default ("LGD") * Exposure at Default (EAD)

- PD: The likelihood of a reinsurer to default
- LGD: Following default, this is the proportion of the loss that is not recoverable
- EAD: The full potential loss following default having adjusted for any collateral/guaranteed amount.

8. Insurance Liability Valuation Findings

8.1. Valuation Results for the January to December 2024 Financial Year

- 8.1.1. The insurance liability valuation as at 31 December 2024 was performed in line with the IFRS 17 Standard.
- 8.1.2. The following section highlights the results from the internal IFRS 17 run and our comments on the results.

8.2. Insurance Liabilities

8.2.1. Liability for Incurred Claims

- 8.2.1.1. The Gross IBNR per class of business was estimated using one or a combination of the methods explained in section 7 of this report, while the case estimates were as provided by management.
- 8.2.1.2. ULAE was computed based on the methodology and assumptions outlined in section 7.2.5.
- 8.2.1.3. Computations of the effect of discounting and the risk adjustment were carried out as outlined in section 7.2.2 and section 7.2.3, and inline with Jubilee Allianz's claim and expense unwinding experience, derived from the claims development pattern.
- 8.2.1.4.Below is a summary of the liability for incurred claims against Jubilee Allianz's insurance contracts, as at 31 December 2024 per class of business.

	For the Year Ending 31 December 2024		
Class of Business	Liability	for Incurred Claims (Kl	ES '000)
	Discounted BEL	Risk Adjustment	Total
Aviation	-	-	-
Engineering	94,806	24,555	119,360
Fire Domestic	44,391	3,285	47,676
Fire Industrial	1,017,577	112,951	1,130,528
Marine	132,430	35,756	168,186
Miscellaneous	173,545	36,618	210,163
Motor Commercial	968,016	99,706	1,067,722
Motor Private	1,320,285	101,662	1,421,947
Personal Accident	23,945	9,506	33,451
Public Liability	556,389	131,864	688,253
Theft	48,899	8,508	57,407
Workmen's Compensation	1,555,783	262,927	1,818,711
Total *The discounted REL constitutes the undiscounter	5,936,067	827,339	6,763,405

*The discounted BEL constitutes the undiscounted BEL (IBNR, OCR and ULAE) and the corresponding effect of discounting. The breakdown of the discounted BEL has been separately provided in the appendices.

- 8.2.1.5. The estimated undiscounted best estimate liability as at 31 December 2024 was K Shs 6.7 billion while the effect of discounting was K Shs 0.7 billion, resulting into a discounted best estimate liability of K Shs 5.9 billion.
- 8.2.1.6. The risk adjustment represents 13.9% of the discounted liabilities as at the Valuation Date.

8.2.2. <u>Liability for Remaining Coverage</u>

- 8.2.2.1. The UPR, DAC and Loss Component per class of business was estimated based on the methodology outlined in section 7.2.6.
- 8.2.2.2.Zamara relied on the Company's expense attribution to carry out the profitability assessment that resulted into recommendations/conclusions regarding the loss component as detailed below.

	For t	the Year Ending 3	31 December 202	24	
	Liability for Remaining Coverage (K Shs '000)				
Class of Business	UPR	DAC	Loss Component	Total	
Aviation	1,167	-	-	1,167	
Engineering	37,817	(3,957)	-	33,860	
Fire Domestic	23,570	(4,458)	14,520	33,633	
Fire Industrial	380,655	(68,952)	-	311,703	
Marine	31,817	(1,695)	-	30,122	
Miscellaneous	27,592	(2,165)	-	25,427	
Motor Commercial	265,492	(26,131)	114,854	354,215	
Motor Private	603,509	(58,338)	203,100	748,272	
Personal Accident	2,610	(455)	-	2,154	
Public Liability	167,327	(14,403)	-	152,924	
Theft	8,775	(789)	3,681	11,667	
Workmen's Compensation	232,879	(48,072)	-	184,807	
Total	1,783,211	(229,415)	336,155	1,889,951	

- 8.2.2.3.0. From the investigation, the fulfilment cashflows in respect of remaining coverage for the respective classes exceed the Contractual Service Margin ("CSM") i.e., the UPR liability net of the DAC asset".
- 8.2.2.4. Jubilee Allianz carries out expense allocation as outlined in section 7.2.4. Given that this allocation reflects the Company's experience, we recommend monitoring of the unprofitable cohorts, including considerations of repricing, portfolio restructuring and reviews of their respective product benefits amongst other interventions. The Company should also consider developing an Early Warning Indicator policy for the purpose of identifying early signs of onerous contracts or unfavorable profitability trends.

8.3. Reinsurance Assets

8.3.1. Asset for Incurred Claims

- 8.3.1.1. The Reinsurance IBNR per class of business was estimated from the Gross IBNR using the recovery rate assumptions derived from the assessment of Jubilee Allianz's recoveries over the last seven complete years (2018 to 2024) were considered to be the most appropriate, as they captured the most recent changes in the reinsurance arrangements.
- 8.3.1.2. We allowed for a smoothing experience within the reinsurance recoveries over the referenced period. The reinsurance case estimates were as provided by management within the case estimate registers as outlined in section 5.3.
- 8.3.1.3. There was no reinsurance ULAE allowed for within the best estimate asset in line with the fundamental principal regarding the necessity of the ULAE reserve for insurers.
- 8.3.1.4. Computations of the effect of discounting and the risk adjustment were carried out similarly to the underlying insurance cashflows.
- 8.3.1.5. The Risk of Non-performance (RNP) for the reinsurance arrangements was estimated based on the internal methodologies adopted by Jubilee Allianz in line with the approach described in the previous section.

8.3.1.6. Below is a summary of the asset for incurred claims against Jubilee Allianz's insurance contracts, as at 31 December 2024 per class of business.

	For the Year Ending 31 December 2024				
Class of Business	Asset for Incurred Claims (Kshs '000)				
	Discounted BEL	Risk Adjustment	Total		
Aviation	-	-	-		
Engineering	61,833	3,772	65,605		
Fire Domestic	10,645	649	11,294		
Fire Industrial	688,951	42,026	730,976		
Marine	42,990	2,622	45,612		
Miscellaneous	84,469	5,153	89,621		
Motor Commercial	64,173	3,915	68,088		
Motor Private	44,101	2,690	46,791		
Personal Accident	2,452	150	2,602		
Public Liability	206,376	12,589	218,965		
Theft	10,982	670	11,652		
Workmen's Compensation	829,977	50,629	880,605		
Total	2,046,949	124,864	2,171,813		

The discounted BEL constitutes the undiscounted BEL (IBNR, OCR and NPR) and the corresponding effect of discounting. The BEL includes an allowance for Risk of Non-performance. The breakdown of the discounted BEL has been separately provided in the appendices.

8.3.1.7. The total asset for incurred claims was K Shs 2.2 billion as at the Valuation Date and was made up of discounted best estimate liability of K Shs 2.0 billion and risk adjustment of K Shs 124 million.

8.3.2. Asset for Remaining Coverage

8.3.2.1. The reinsurance UPR, DAC and Loss recovery per class of business was estimated based on the methodology outlined in section 7.2.6.

	For the Year Ending 31 December 2024				
Class of Business	Asset for Remaining Coverage (KES '000)				
	UPR	DAC	Loss Recovery	Total	
Aviation	1,167	(389)	-	777	
Engineering	29,295	(7,324)	-	21,971	
Fire Domestic	2,548	(819)	4,157	5,886	
Fire Industrial	258,167	(70,907)	-	187,260	
Marine	5,981	(1,403)	-	4,578	
Miscellaneous	14,548	(3,227)	-	11,321	
Motor Commercial	1,418	(177)	8,716	9,957	
Motor Private	4,487	(1,231)	7,779	11,035	
Personal Accident	-	-	-	-	
Public Liability	121,859	(27,314)	-	94,544	
Theft	171	(43)	960	1,088	
Workmen's Compensation	137,183	(41,155)	-	96,028	
Total	576,825	(153,991)	21,611	444,445	

9. Reserve Adequacy

- 9.1 The adequacy of the IBNR estimate held as at 31 December 2024, in respect of accident years January to December 2023 and prior, has been assessed in this section:
- 9.2 Pure IBNR relates to both claims paid and claims outstanding. Pure IBNR for claims paid relates to claim payments that emerged in 2024 for accident periods in 2023 and prior, and no OCR was held for the specific claims as at January to December 2023, but the respective losses had occurred.
- 9.3 Pure IBNR in respect of claims outstanding relates to OCR amounts that emerged as at 31 December 2024 for accident periods January to December 2023 and prior and no OCR was held for the specific claims as at 31 December 2024.
- 9.4 The emerging Incurred But Not Enough Reported (IBNER) compares the claims incurred as at 31 December 2024 i.e., the sum of the claims paid in the current year and the OCR as at 31 December 2024, to the OCR as at January to December 2023, i.e., a test for the sufficiency of the OCR as at January to December 2023.
- 9.5 A positive amount for the emerging IBNER means that the OCR as at January to December 2023 was not enough, and a negative value means that the OCR as at January to December 2023 was more than enough, in other words referred to as a release of reserves. The Utilization is the sum of the Pure IBNR and the emerging IBNER.
- 9.6 The results in this section were used alongside those in section 9 to determine the best estimate liability. The respective assessments have been carried out per class of business to granularize the experience within each portfolio and therefore guide the projection assumptions within each one of them.

9.7 We determined the sufficiency of Jubilee Allianz's IBNR estimate held as at 31 December 2024 as follows:

9.8

	Reserves Adequacy Amounts in K Shs '000s				
Class of Business	January to December 2023 and Prior Losses			As at 31 December 2024	
Class of Business	Gross IBNR as at 31 December 2023	Pure IBNR	Emerging IBNER	IBNR Utilisation	% Utilisation
Aviation	530	-	-	-	0.0%
Engineering	23,505	4,731	6,738	11,469	48.8%
Fire Domestic	11,412	1,499	-7,174	-5,675	-49.7%
Fire Industrial	176,453	35,491	-208,146	-172,655	-97.8%
Marine	32,160	16,897	-17,106	-208	-0.6%
Miscellaneous	17,308	9,414	-9,226	188	0.0%
Motor Commercial	403,977	120,225	-121,072	-847	1.1%
Motor Private	521,987	73,301	-14,189	59,112	-0.2%
Personal Accident	22,111	1,904	-33,910	-32,006	14.6%
Public Liability	117,147	74,053	-163,650	-89,598	-144.7%
Theft	12,580	2,613	-13,185	-10,572	-76.5%
Workmen's Compensation	675,397	210,983	-70,171	140,812	-84.0%
Total	2,014,037	551,110	-651,091	-99,981	-5.0%

- 9.9 From the table above, the previous year's IBNR is yet to be fully utilised at the total level as at the Valuation Date.
- 9.10 The Pure IBNR of K shs 551 million represents utilization of 26% of the IBNR held as at the previous valuation date which is commendable.
- 9.11 The IBNER stood at K shs -651 million as at the Valuation Date. This follows from a clean up exercise undertaken by the insurer where the outstanding claims reserves were reviewed with several claims settled for nil or the reserves revised downwards.

10. Conclusions and Recommendations

- 10.1. Zamara was comfortable that the reserves suggested as at 31 December 2024 were at a sufficient best estimate level, provided that the assumptions and loss ratios assumed were in line with Jubilee Allianz's overall estimated loss ratios.
- 10.2.Zamara conducted checks to ensure that projected ultimate loss ratios were in line with past accident periods' loss ratios; however, if the business or processes changed significantly from previous periods then the estimated IBNR could prove to be inaccurate.
- 10.3. Zamara recommends the following best estimate liabilities and reinsurance assets for Jubilee Allianz as at 31 December 2024:

Reserve	Reserves as at 31 December 2024 (K Shs '000)		
Reserve	Insurance Contracts	Reinsurance Contracts	
	Liability for Incurred Claims (LIC)	Asset for Incurred Claims (AIC)	
Discounted BEL	5,936,067	2,046,949	
Risk Adjustment	827,339	124,864	
Total	6,763,405	2,171,813	
	Liability for Remaining Coverage	Asset for Remaining Coverage	
UPR	1,783,211	576,825	
DAC	(229,415)	(153,991)	
Loss Component	336,155	21,611	
Total LRC	1,889,951	444,445	
Total	8,653,356	2,616,258	

- 10.4.It is implied from the above table that Zamara recommends Jubilee Allianz to set aside a net liability of K Shs 6.0 billion as at 31 December 2024. The net liability takes account of both the liabilities and assets from the unearned and expired periods.
- 10.5. From our investigation, the respective liabilities as a proportion of the gross earned premium for the Company are reasonable and commensurate with Jubilee Allianz's product mix largely consisting of short-term contracts. We recommend continuous monitoring of such indicative ratios within an early warning policy and system/framework.
- 10.6. Following Jubilee Allianz's IFRS 17 implementation, we recommend an update to the relevant internal policies and procedures that constitute the Company's reserve risk management.

For and on behalf of Zamara Actuaries, Administrators and Consultants Limited

James I. O. Olubayi
Fellow of the Institute and Faculty of Actuaries
Appointed Actuary: Jubilee Allianz General Insurance (K) Limited

Nairobi 15 March 2025

A.1. Jubilee Allianz's Product Descriptions

A.1.1. The following descriptions provide a comprehensive overview of Jubilee Allianz General Insurance (K) Limited's general insurance products, each designed to address specific risks and needs within various market segments.

a) Aviation

Protects aircraft against physical damage and provides liability coverage for third-party bodily injury and property damage. It includes hull insurance, passenger liability, and coverage for loss or damage to cargo.

b) Engineering

Offers protection for various projects and machinery. It includes Contractor's All Risk (CAR), Erection All Risk (EAR), and Machinery Breakdown (MB) insurance.

c) Fire Domestic

Covers damage or loss to residential properties caused by fire, lightning, explosion, and related perils. It can also include contents insurance for personal belongings.

d) Fire Industrial

Protects industrial and commercial properties against fire, lightning, explosion, and other specified perils. It includes coverage for buildings, machinery, stock, and consequential loss.

e) Marine

Provides protection for goods transported by sea, air, or land. It includes Cargo insurance for loss or damage to goods and Hull insurance for physical damage to ships.

f) Miscellaneous

Encompasses various types of insurance that do not fall under standard categories. This can include fidelity guarantee, money insurance, and travel insurance.

g) Motor Commercial

Provides protection for commercial vehicles against loss or damage due to accidents, and third-party liabilities. It includes cover for trucks, vans, and buses.

h) Motor Private

Covers private vehicles against loss or damage due to accidents, theft, fire, and third-party liabilities. It includes comprehensive, third-party fire and theft, and third-party only policies.

i) Personal Accident

Provides compensation in the event of accidental death, injury, or disability. It covers expenses, loss of income, and funeral expenses.

j) Public Liability

Protects businesses against legal liabilities arising from third-party bodily injury or property damage occurring on their premises or due to their operations.

k) Theft

Covers loss or damage to property and contents due to theft or attempted theft. It includes coverage for residential and commercial properties.

l) Workmen's Compensation

Provides compensation to employees for injuries, disabilities, or death resulting from workplace accidents. It covers expenses, loss of wages, and rehabilitation costs.

A.2. Reserving Assumptions

A.2.1. The table below outlines a summary of the key reserving assumptions used in our general insurance reserve estimation process. These assumptions are based on a combination of historical data, industry standards, and actuarial judgment, and are critical to ensuring the accuracy and adequacy of our reserve calculations.

Assumption	Basis for Assumption	Impact on Reserves
Claims Development Patterns	Historical claims data, industry benchmarks	Estimation of IBNR and overall reserves
Loss Ratios	Historical experience, market trends	Estimation of ultimate claims costs
Frequency and Severity	Historical data, exposure trends	Calculation of known and unknown claims
Inflation Rates	Economic forecasts, historical trends	Adjusting future claims costs
Discount Rate	Time value of money, investment returns	Present value of reserves
Risk Margin	Regulatory requirements, risk appetite	Buffer for adverse deviation
Reinsurance Recoveries	Reinsurance contracts, recovery patterns	Net reserve requirement
Claims Handling Expenses	Historical expense data, future projections	Coverage of full claims costs
Policy Changes	Recent changes, anticipated regulations	Compliance with standards
Catastrophe Loading	Historical data, probabilistic modelling	Coverage for extreme events

A.2.2. These assumptions are integral to our reserving methodology, providing a robust framework for estimating reserves that adequately cover future claims obligations. The rationale behind each assumption ensures that our reserve levels are both prudent and reflective of the current risk environment, thereby maintaining financial stability and regulatory compliance.

A.2.3. Zamara utilised the following assumptions in computing the reinsurance share of IBNR.

Class of Business	Recovery Rate
Aviation	98.6%
Engineering	72.2%
Fire Domestic	34.5%
Fire Industrial	82.3%
Marine	32.2%
Miscellaneous	39.5%
Motor Commercial	3.6%
Motor Private	1.6%
Personal Accident	44.0%
Public Liability	40.9%
Theft	41.7%
Workmen's Compensation	75.6%

A.2.4. These recovery factors consider the proportion of claims expected to be recovered through reinsurance arrangements. By applying these factors to the gross IBNR, the company obtains a realistic measure of its financial exposure, which informs the reserve adequacy and therefore Jubilee Allianz's financial stability.

Yield Curve as at 31 December 2024

A.2.5. The yield curve adopted was the NSE yield curve as at 31 December 2024.

Year	Discount Rate
1	11.41%
2	12.3%
3	13.44%
4	14.16%
5	14.14%
6	13.87%
7	13.6%
8	13.47%
9	13.61%
10	13.6%
11	13.54%
12	13.48%
13	13.41%
14	13.54%
15	13.72%

Risk Adjustment as at 31 December 2024

A.2.6. Jubilee Allianz adopted a Value at Risk (VaR) approach to calculate the RA factors, calibrated at the 75% level of confidence. The RA factor was the applied to the present value of future cashflows for each class.

Class of Business	Risk Adjustment Factor
Aviation	0.0%
Engineering	25.9%
Fire Domestic	7.4%
Fire Industrial	11.1%
Marine	27.0%
Miscellaneous	21.1%
Motor Commercial	10.3%
Motor Private	7.7%
Personal Accident	39.7%
Public Liability	23.7%
Theft	17.4%
Workmen's Compensation	16.9%
Reinsurance Contracts	6.1%

A.3. Claims Triangles

- A.3.1. Below are the gross claims incurred triangles as well as assumptions and methods per class of business.
- A.3.2. The following are the meanings of abbreviations used:

Abbreviatio n	Meaning
ICL	Chain Ladder using triangles of claims incurred amounts (where this method is included, the triangles relate to claims incurred triangles)
IBF -	Bornhuetter-Fergusson using triangles of claims incurred amounts.
PCL	Chain Ladder using triangles of claims paid amounts (where this method is included, the triangles relate to claims paid triangles)
PBF	Bornhuetter-Fergusson using triangles of claims paid amounts.
Other	the experience is assumed to be fully developed.
Loss Ratio	Loss Ratio method
IEULR	Initial Expected Ultimate Loss Ratio. The loss ratio used in the Bornhuetter- Ferguson and Loss Ratio methods.

All monetary amounts below are in K Shs '000s.

a) <u>Aviation</u>

	Development Year							
Loss Year	0	1	2	3	4	5	6	
2018	-	-	-	-	-	-	-	
2019	-	-	-	-	-	-		
2020	-	-	-	-	-			
2021	-	-	-	-				
2022	-	-	-					
2023	-	-						
2024	-							

Method	IEULR	Selected Ultimates	Ultimate Loss Ratio
Other	0.0%	-	0.0%
Other	0.0%	-	0.0%
Other	0.0%	-	0.0%
Other	0.0%	-	0.0%
Other	0.0%	-	0.0%
Other	0.0%	-	0.0%
Other	5.0%	-	0.0%

Selection	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
		l			l	l .	

b) Engineering

	Development Year							
Loss Year	0	1	2	3	4	5	6	
2018	17,476	74,914	82,208	83,130	83,130	83,130	83,130	
2019	8,209	21,445	30,708	38,783	38,783	38,783		
2020	3,009	13,883	13,930	13,930	13,991			
2021	6,363	14,319	19,169	19,281				
2022	1,904	5,868	6,066					
2023	6,039	14,812						
2024	217							

Method	IEULR	Selected Ultimates	Ultimate Loss Ratio
PCL	0.0%	99,115	57.4%
PCL	0.0%	82,394	14.8%
PCL	0.0%	13,991	10.5%
PCL	0.0%	19,290	14.9%
PCL	0.0%	6,447	8.2%
PCL	0.0%	33,272	26.1%
PBF	47.4%	27,485	36.3%

Selection	3.3777	1.1660	1.0624	1.0005	1.0000	1.0000	1.0000

Fire Domestic

	Development Year								
Loss Year	0	1	2	3	4	5	6		
2018	12,698	15,504	15,633	15,689	15,720	15,729	15,729		
2019	7,161	9,473	9,603	9,603	9,700	9,700			
2020	3,499	6,424	6,424	6,424	6,424				
2021	1,372	2,047	2,047	2,047					
2022	8,989	14,552	14,645						
2023	12,856	15,986							
2024	35,647								

Method	IEULR	Selected Ultimates	Ultimate Loss Ratio
PCL	0.0%	23,741	28.5%
PCL	0.0%	25,095	18.8%
PCL	0.0%	6,426	14.9%
PCL	0.0%	7,064	7.5%
PCL	0.0%	14,734	37.8%
PCL	0.0%	18,496	35.0%
PBF	106.0%	87,929	95.0%

Selection	1.4602	1.1500	1.0017	1.0040	1.0004	1.0000	1.0000

c) Fire Industrial

	Development Year							
Loss Year	0	1	2	3	4	5	6	
2018	97,883	194,341	191,102	244,777	257,972	257,431	218,402	
2019	46,446	97,813	102,040	105,948	105,734	103,906		
2020	108,528	217,507	230,842	215,792	195,850			
2021	152,628	174,699	189,781	180,944				
2022	135,466	149,395	157,208					
2023	140,811	179,615						
2024	249,790							

Method	IEULR	Selected Ultimates	Ultimate Loss Ratio
ICL	0.0%	319,451	25.0%
ICL	0.0%	141,054	12.7%
ICL	0.0%	195,850	27.5%
ICL	0.0%	180,944	24.7%
ICL	0.0%	292,389	22.8%
ICL	0.0%	1,882,373	21.5%
IBF	59.9%	739,364	40.9%

Selection	1.9824	1.4489	1.0628	1.0624	1.0029	1.0001	1.0000

e) <u>Marine</u>

	Development Year							
Loss Year	0	1	2	3	4	5	6	
2018	6,513	30,414	33,984	37,512	46,688	48,249	48,249	
2019	10,537	20,416	20,838	20,838	20,975	21,751		
2020	9,040	45,040	46,016	46,016	46,335			
2021	5,217	6,326	7,911	8,020				
2022	14,505	25,674	29,610					
2023	9,824	13,748						
2024	4,494							

Method	IEULR	Selected Ultimates	Ultimate Loss Ratio
PCL	0.0%	48,249	26.7%
PCL	0.0%	21,751	15.3%
PCL	0.0%	47,936	27.2%
PCL	0.0%	35,042,376	16.2%
PCL	0.0%	36,933	21.3%
PBF	31.5%	48,323	23.4%
PBF	36.5%	41,048	35.0%

Selection	3 8632	1 <i>4</i> 277	1 1038	1.0923	1 0345	1 1 0000	1 0000
Jeicellon	3.0032	1.74//	1.1000	1.0323	1.0545	1.0000	1.0000

f) <u>Miscellaneous</u>

		Development Year								
Loss Year	0	1	2	3	4	5	6			
2018	2,616	15,150	16,169	16,169	16,169	16,237	19,085			
2019	17,660	27,514	27,762	27,905	27,993	28,367				
2020	3,994	5,997	10,625	10,953	11,207					
2021	3,553	5,873	6,107	6,531						
2022	3,772	6,060	6,453							
2023	21,621	29,499								
2024	11,872									

Method	IEULR	Selected Ultimates	Ultimate Loss Ratio
PCL	0.0%	20,039	31.2%
PCL	0.0%	29,785	40.7%
PCL	0.0%	11,925	16.7%
PCL	0.0%	7,110	10.9%
PCL	22.9%	7,513	26.4%
PBF	22.9%	46,669	37.7%
Expected Loss Ratio	58.1%	125,238	58.1%

Selection	2.2458	1.7719	1.0694	1.0232	1.0133	1.0000	1.0500
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g) Motor Commercial

		Development Year							
Loss Year	0	1	2	3	4	5	6		
2018	228,223	322,034	353,142	352,233	383,526	380,167	392,769		
2019	238,361	312,529	380,798	448,703	465,641	479,592			
2020	237,687	286,277	327,597	355,249	347,409				
2021	211,309	270,653	307,274	306,018					
2022	244,612	317,293	306,380						
2023	296,463	329,765							
2024	285,403								

Method	IEULR	Selected Ultimates	Ultimate Loss Ratio
ICL	0.0%	394,733	56.5%
ICL	0.0%	496,042	67.4%
ICL	0.0%	361,404	67.3%
ICL	0.0%	330,364	86.2%
ICL	0.0%	361,464	97.8%
ICL	0.0%	463,064	86.7%
IBF	86.0%	489,740	95.0%

Selection	1.4111	1.1140	1.0928	1.0377	1.0300	1.0050	1.0050

h) Motor Private

	Development Year								
Loss Year	0	1	2	3	4	5	6		
2018	722,209	876,316	911,938	930,100	954,274	966,754	969,855		
2019	659,021	745,887	812,085	891,321	931,310	928,989			
2020	492,605	551,270	627,159	675,881	665,032				
2021	523,262	598,897	685,622	671,556					
2022	461,518	584,563	564,965						
2023	459,043	485,893							
2024	555,198								

Method	IEULR	Selected Ultimates	Ultimate Loss Ratio
ICL	0.0%	995,492	80.4%
ICL	0.0%	962,987	67.5%
ICL	0.0%	675,890	62.9%
ICL	0.0%	713,142	84.1%
ICL	0.0%	658,488	83.1%
ICL	76.7%	648,335	70.9%
IBF	74.1%	874,118	83.0%

Selection	1.2666	1.1448	1.0976	1.0449	1.0131	1.0032	1.0000
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i)

j) Personal Accident

		Development Year								
Loss Year	0	1	2	3	4	5	6			
2018	16,516	153,243	188,350	198,261	202,474	218,226	218,226			
2019	18,444	22,053	23,785	39,727	39,755	39,759				
2020	5,519	10,805	15,201	15,210	15,210					
2021	81	2,872	2,898	2,898						
2022	1,524	5,741	5,741							
2023	15,873	15,873								
2024	539									

Method	IEULR	Selected Ultimates	Ultimate Loss Ratio
PCL	0.0%	307,024	75.5%
PCL	0.0%	39,759	18.0%
PCL	0.0%	16,200	86.0%
PCL	0.0%	3,138	24.2%
PBF	10.0%	6,875	20.1%
PBF	33.1%	22,346	52.0%
PBF	33.1%	2,745	35.0%

Selection	3.6335	1.2277	1.3809	1.0167	1.0650	1.0000	1.0000

k) Public Liability

		Development Year							
Loss Year	0	1	2	3	4	5	6		
2018	4,732	7,490	12,062	27,285	35,480	36,205	36,511		
2019	787	4,328	7,856	7,891	7,910	7,910			
2020	3,974	11,263	12,944	13,006	15,397				
2021	490	7,313	20,575	26,391					
2022	479	1,071	1,189						
2023	3,860	7,116							
2024	1,821								

Method	IEULR	Selected Ultimates	Ultimate Loss Ratio
PCL	0.0%	36,511	16.4%
PCL	0.0%	7,977	7.6%
PCL	0.0%	116,632	15.9%
PCL	0.0%	33,015	28.2%
PBF	25.3%	37,375	11.1%
PBF	20.6%	55,375	15.6%
PBF	19.4%	70,605	17.8%

Selection 3.209	1.6997	1.3885	1.2201	1.0167	1.0085	1.0000
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m) Theft

	Development Year								
Loss Year	0	1	2	3	4	5	6		
2018	16,941	43,482	46,769	50,758	56,602	56,613	56,613		
2019	7,409	23,791	24,529	25,634	25,676	25,676			
2020	8,824	20,074	20,174	20,174	20,174				
2021	4,677	13,432	13,542	13,542					
2022	2,706	6,950	7,632						
2023	9,145	17,536							
2024	2,406								

Method	IEULR	Selected Ultimates	Ultimate Loss Ratio
PCL	0.0%	68,601	43.1%
PCL	0.0%	25,676	47.4%
PCL	0.0%	62,531	51.7%
PCL	0.0%	13,951	46.9%
PCL	0.0%	42,652	29.9%
PCL	0.0%	38,170	62.0%
PBF	87.8%	31,527	64.9%

Selection	2 5204	1.0456	1.0326	1.0300	1.0001	1.0000	1 0000
Selection	2.3204	1.0430	1.0320	1.0300	1.0001	1.0000	1.0000

n) Workmen's Compensation

	Development Year						
Loss Year	0	1	2	3	4	5	6
2018	7,635	32,966	38,839	40,987	47,530	50,169	54,186
2019	6,891	60,014	85,573	96,495	100,266	102,696	
2020	1,620	39,896	67,415	73,010	74,200		
2021	12,488	80,412	124,396	148,938			
2022	13,810	85,069	183,392				
2023	50,550	133,433					
2024	13,613						

Method	IEULR	Selected Ultimates	Ultimate Loss Ratio	
PCL	0.0%	54,457	57.9%	
PCL	0.0%	281,320	50.7%	
PCL	0.0%	172,936	51.0%	
PCL	0.0%	220,537	44.0%	
PBF	55.8%	505,270	34.1%	
PBF	55.8%	613,018	48.1%	
PBF	55.8%	544,062	54.3%	

Selection	6.2996	2.1558	1.1973	1.0547	1.0343	1.0801	1.0050

A.4. Reserve Breakdown

Undiscounted Gross Best Estimate Liabilities

All Amounts Below are in (K Shs '000)		Acquisition Costs			
Class of business	Gross IBNR	Gross OCR	Gross UPR	ULAE	Gross DAC
Aviation	-	-	1,167	-	-
Engineering	25,626	70,433	37,817	5,497	3,957
Fire Domestic	16,230	28,583	23,570	2,757	4,458
Fire Industrial	248,486	838,479	380,655	60,322	68,952
Marine	31,085	103,302	31,817	7,474	1,695
Miscellaneous	21,155	158,159	27,592	9,055	2,165
Motor Commercial	408,177	611,004	265,492	64,474	26,131
Motor Private	630,308	757,306	603,509	91,149	58,338
Personal Accident	5,498	18,997	2,610	1,355	455
Public Liability	81,957	494,472	167,327	29,739	14,403
Theft	11,778	38,986	8,775	2,825	789
Workmen's Compensation	620,080	1,001,310	232,879	101,247	48,072
Total	2,100,379	4,121,031	1,783,211	375,894	229,415

Undiscounted Reinsurance Best Estimate Liabilities

All Amounts Below are in (K Shs '000)		Acquisition Costs		
Class of business	RI IBNR	RI OCR	RI UPR	RI DAC
Aviation	-	-	1,167	389
Engineering	18,509	57,572	29,295	7,324
Fire Domestic	5,605	7,493	2,548	819
Fire Industrial	204,511	643,192	258,167	70,907
Marine	10,000	42,896	5,981	1,403
Miscellaneous	8,360	95,573	14,548	3,227
Motor Commercial	14,773	64,187	1,418	177
Motor Private	10,339	43,924	4,487	1,231
Personal Accident	2,421	596	-	-
Public Liability	33,529	220,402	121,859	27,314
Theft	4,916	8,596	171	43
Workmen's Compensation	468,905	552,320	137,183	41,155
Total	781,867	1,736,751	576,825	153,991

Discounted BEL for LIC and Effects of Discounting

	For the Year Ending 31 December 2024							
Class of Business	Liability for Incurred Claims (KES '000)							
	(A) IBNR+OCR+ULAE	(B) Risk Adjustment	(C) Discounting	(A+B+C) Total				
Aviation	-	-	-	-				
Engineering	101,556	24,555	(6,750)	119,360				
Fire Domestic	47,569	3,285	(3,178)	47,676				
Fire Industrial	1,147,287	112,951	(129,710)	1,130,528				
Marine	141,861	35,756	(9,431)	168,186				
Miscellaneous	188,368	36,618	(14,823)	210,163				
Motor Commercial	1,083,654	99,706	(115,638)	1,067,722				
Motor Private	1,478,763	101,662	(158,478)	1,421,947				
Personal Accident	25,850	9,506	(1,905)	33,451				
Public Liability	606,169	131,864	(49,779)	688,253				
Theft	53,589	8,508	(4,690)	57,407				
Workmen's Compensation	1,722,638	262,927	(166,854)	1,818,711				
Total	6,597,304	827,339	(661,238)	6,763,405				

Discounted BEL for AIC and Effects of Discounting

	For the Year Ending 31 December 2024							
	Asset for Incurred Claims (Kshs '000)							
Class of Business	(A) IBNR+OCR	(B) Risk Adjustment	(C) Discounting	(D) Risk of Non- Performance	(A+B+C+D) Total			
Aviation	-	-	-	-	-			
Engineering	76,084	3,772	(12,686)	(1,565)	65,605			
Fire Domestic	13,098	649	(2,184)	(269)	11,294			
Fire Industrial	847,731	42,026	(141,345)	(17,436)	730,976			
Marine	52,898	2,622	(8,820)	(1,088)	45,612			
Miscellaneous	103,936	5,153	(17,330)	(2,138)	89,621			
Motor Commercial	78,963	3,915	(13,166)	(1,624)	68,088			
Motor Private	54,265	2,690	(9,048)	(1,116)	46,791			
Personal Accident	3,017	150	(503)	(62)	2,602			
Public Liability	253,940	12,589	(42,340)	(5,223)	218,965			
Theft	13,513	670	(2,253)	(278)	11,652			
Workmen's Compensation	1,021,260	50,629	(170,278)	(21,005)	880,605			
Total	2,518,704	124,864	(419,951)	(51,805)	2,171,813			

Better with Zamara

Actuaries | Administrators | Consultants | Insurance Brokers | Reinsurance Brokers Zamara Place, Ground Floor, P.O.Box 52439-00200 Nairobi Chiromo Road, Waiyaki Way, Westlands KENYA | UGANDA | TANZANIA | RWANDA | MALAWI | NIGERIA | DRC | UAE