Zurich Insurance Company Ltd. (Singapore Branch)

MAS Notice 124 Disclosures

For the financial year ended 31 December 2016

Table of Contents

a) Who we are and what we do

Zurich Insurance Group consisting of Zurich Insurance Group Ltd and its subsidiaries (the 'Group' or 'Zurich') is a leading multi-line insurer that serves its customers in global and local markets. With about 54,000 employees, the Group provides a wide range of general insurance and life insurance products and services. The Group serves individuals, small businesses, and mid-sized and large companies, including multinational corporations, in more than 210 countries.

Corporate responsibility is an important part of our Zurich Commitment to care for our customers, employees, shareholders and the communities in which we live and work. We act responsibly by taking environmental, social and governance issues into account throughout our business.

- **Our Mission** Our mission is to help our customers understand and protect themselves from risk.
- **Our Vision** Our ambition is to become the best insurance company and takaful operator in the world, as measured by our customers, our distributors, our employees and our shareholders.
- **Our Values** Our values, as defined by the Zurich Basics, our code of conduct, shape our culture and define our behaviors. They are: Integrity, Customer Centricity, Excellence, Sustainable Value Creation and Teamwork.

The Zurich Commitment

We care about our Customers. Our customers are the individuals, families, businesses and institutions that face risk every day. We must earn their trust – and the commitment of the agents, brokers and others that help us serve them. We must deliver the insights, products and services that empower them to understand and protect themselves from those risks. As One Zurich, we can and must exceed their expectations. And when adversity strikes, we must be there for each of them with the solutions and financial strength to deliver on our promise.

We care about our People. Our people are the diverse women and men who together strive to make Zurich the best global insurer. We value their passion and personal integrity, and recognise those as a basis of our strength. We must invest in their capabilities and expertise so that each may fulfill his or her individual potential. We must celebrate success, and learn from mistakes. We must live up to our common set of values, and hold each other accountable.

We care about our Shareholders. Our shareholders are the individuals and institutions that provide the financial strength that backs our promises. We must deliver a fair, reliable and sustainable return on their investment. We must do so with a clear focus on our core business of insurance, an uncompromising commitment to financial and portfolio discipline, and investing in our future.

We care about our Communities. Our communities are where our customers, our people and our shareholders live and work. While we can be proud of the contribution to society Zurich makes through our core business of insurance, we must also give back to our communities through our talent, time and resources.

Business and Strategy

On November 17, 2016, Zurich announced a new strategy that positions the company for future success. Building on its solid foundations, Zurich will strengthen its position as a global multi-line insurer by enhancing commercial capabilities and developing a more focused retail proposition. At the same time, we will continue to invest for the future and reinforce capabilities to make our business more efficient and deliver excellent client service. And Zurich is determined to deliver sustainable earnings that will support an increase in the return of capital to our shareholders over time.

The Segments

The Group pursues a customer-centric strategy and is managed by regions with the addition of the Farmers and Commercial Insurance businesses. The previous segment structure (General Insurance and Global Life) was abolished on July 1, 2016 and a new structure was created by combining the life and non-life insurance businesses, applying a unified go-to-market approach. On October 1, 2016 the Group combined its corporate and commercial businesses into a single global business called Commercial Insurance as part of its process to simplify and strengthen its organization. The Commercial Insurance business unit brings together corporate and commercial insurance expertise worldwide under a single umbrella. The Group's operating structure reflects the businesses operated by the Group and how these are strategically managed to offer different products and services to specific customer groups. The new operational group structure is being phased in and becomes fully effective in the financial year 2017. The Group's reportable business units for 2016 are as follows:

- General Insurance is the segment through which the Group provides a variety of motor, home and commercial products and services for individuals, as well as small and large businesses.

- Global Life pursues a strategy with market-leading propositions in unit-linked and protection products as well as fee-based solutions managed through three global pillars (Bank Distribution, Corporate Life & Pensions and other Retail) to develop leading positions in its target markets.

- Farmers provides, through Farmers Group, Inc. (FGI) and its subsidiaries, non-claims related, administrative and management services to the Farmers Exchanges as attorney-in-fact. FGI receives fee income for the provision of services to the Farmers Exchanges, which are owned by their policyholders and managed by Farmers Group, Inc. a wholly owned subsidiary of the Group. This segment also includes all reinsurance assumed from the Farmers Exchanges by the Group. Farmers Exchanges are prominent writers of personal and small commercial lines of business in the U.S.

The other businesses are:

- Other Operating Businesses predominantly consist of the Group's headquarters and Holding and Financing activities. In addition, certain alternative investment positions not allocated to business operating segments are included within Holding and Financing.

- Non-Core Businesses include insurance businesses that the Group does not consider core to its operations and that are therefore mostly managed to achieve a beneficial run-off. Non-Core Businesses also include the Group's remaining banking activities. Non-core businesses are mainly situated in the U.S., Bermuda, the United Kingdom and Ireland.

Zurich in Singapore

In Singapore, Zurich provides a wide range of insurance offerings. Under its general insurance entity, Zurich Insurance Company Ltd (Singapore Branch) (the "Branch") provides risk solutions and general insurance to commercial/corporate customers.

Zurich Insurance Company Ltd (Singapore Branch)

Zurich Insurance Company Ltd (Singapore Branch) is a Branch of Zurich Insurance Company Ltd, the principal operating insurance company of Zurich Insurance Group. The Branch provides risk solutions and general insurance both in the onshore and offshore market to commercial and corporate customers in the Singapore market.

The Branch offers a broad range of products and solutions including, property, liability, accident and health, marine, financial lines, engineering, trade credit, and political risk.

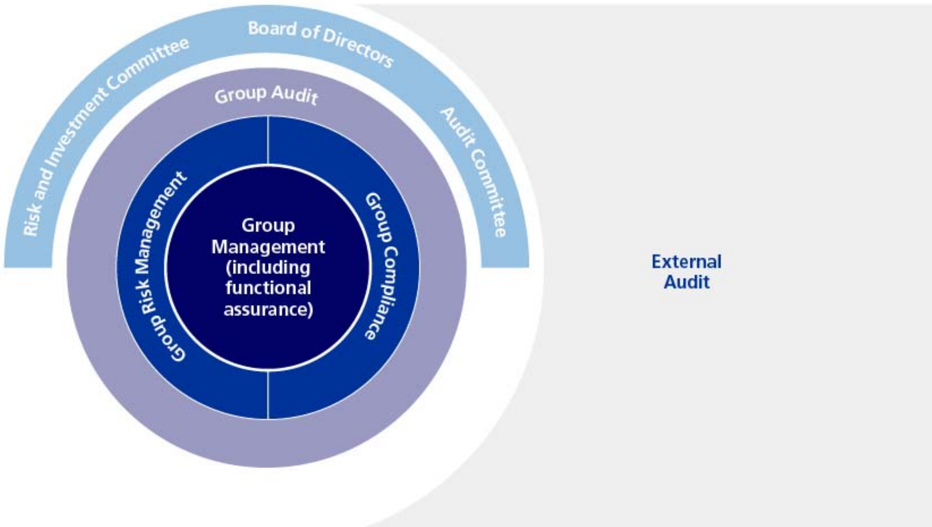
b) Governance matters

Governance at the Group Level

The Group is committed to effective corporate governance for the benefit of its shareholders, customers, employees and other stakeholders based on the principles of fairness, transparency and accountability. Structures, rules and processes are designed to provide for proper organisation and conduct of business within Zurich and to define the powers and responsibilities of its corporate bodies and employees.

Zurich Insurance Group Ltd, a Swiss corporation, is the holding company of the Group and its shares are listed on the SIX Swiss Exchange. Zurich Insurance Group Ltd was incorporated on April 26, 2000, in Zurich, Switzerland. It is recorded in the Commercial Register of the Canton of Zurich under its registered address at Mythenquai 2, 8002 Zurich.

At Zurich, various governance and control functions coordinate to help ensure that risks are identified and appropriately managed and internal controls are in place and operating effectively. The following diagram shows the respective framework at the Group level. For more information on the Group's corporate governance framework, please refer to the Zurich Insurance Group Annual Report 2016.



- **Group Management**
  Group Management owns processes, controls and technical reviews related to assurance activities. This includes and is supported by assurance work provided by the management's review functions (e.g., underwriting, actuarial, claims) and the legal and finance functions.
- **Oversight**
  Group Risk Management is responsible for Zurich's Enterprise Risk Management framework. The Group Chief Risk Officer regularly reports risk matters to the Group CEO, senior management committees and the Risk and Investment Committee of the Board.

  Group Compliance is responsible for providing assurance to management that compliance risks within its mandate are appropriately identified and managed. The Group Compliance Officer regularly reports to the Audit Committee and has also an additional reporting line to the Chairperson of the Audit Committee and appropriate access to the Chairman of the Board.
- **Independent Assurance**
  Group Audit is responsible for auditing risk management, control and governance processes. The Head of Group Audit regularly meets with the Chairman of the Board and the Chairperson of the Audit Committee and attends each meeting of the Audit Committee.

  External Audit is responsible for auditing the Group's financial statements and for auditing Zurich's compliance with specific regulatory requirements. The Audit Committee regularly meets with the External Auditors.
- **Board – Audit Committee and Risk and Investment Committee**
  The Board is ultimately responsible for the supervision of the assurance activities. Its Audit and Risk and Investment Committees receive regular updates from Group Risk Management, Group Audit, External Audit and Group Compliance throughout the year.

Corporate Governance Framework for Zurich Insurance Company (Singapore Branch)

The Branch is committed to effective corporate governance in line with the Group's framework.

Our executive committee and its responsibilities

Reginald Peacock

Chief Executive Officer

Brendan Dunlea

Chief Underwriting Officer

Ross Chappell

Chief Financial Officer

Anne Constant

Chief Operations Officer

Melissa Mithra

Risk Officer

Sebastian Schuez

Head of Customer, Distribution and Market Development

GP Teo

Head of Claims

Victoria Pretty

HR Business Partner

The executive committee is responsible for the strategic direction of the Branch. Its principal functions include:

- Developing and approving the overall strategy;
- Ensuring our obligations to our stakeholders are met;
- Ensuring that we have adequate resources to execute the intended strategy;
- Ensuring that we maintain our financial strength and have sufficient economic resources to meet regulatory requirements;
- Providing oversight of risk appetite and to ensure that there are appropriate internal controls in place to adequately control and monitor risk such that it remains within our risk appetite;
- Ensuring that we remain true to our corporate values; and
- Approving all major new contractual arrangements that the Branch enters into. Such contracts may include large reinsurance transactions, significant outsourcing arrangements and investment management services.

The above functions cannot be delegated to another person or functional area of the Branch. The executive committee sets annual objectives and monitors the achievement of the Branch's objectives through regular committee meetings each month.

The executive committee is also responsible for ensuring compliance with applicable laws and regulations and is committed to dealing with the regulator in an open, cooperative, and transparent manner.

Integrated Assessment and Assurance

The Branch, in line with Group policy, follows an integrated approach for the Assessment and Assurance functions called Integrated Assessment and Assurance ("IAA"). The IAA is the way the Assessment and Assurance functions work together to coordinate their activities and to support management in its responsibilities.

IAA is a coordinated view from the Assurance Functions to provide confidence that:

- risks are identified;
- those risks are appropriately managed; and
- mitigation actions are implemented and controls are operating effectively.

Integrated means:

- Alignment of activities to avoid unnecessary duplication and gaps;
- Co-operation and information sharing among the Assurance Functions; and
- Coordinated reporting to stakeholders, reflecting all Assurance Functions' views.

The Assessment and Assurance Functions include:

- Risk Management;
- Compliance; and
- Internal Audit.

Each Assurance Function maintains its distinct mandate and responsibility to fulfill it.

Internal Audit coordinates reporting of assurance findings to governance committees and assures the quality of that reporting. Close coordination is also maintained with Legal, External Audit and management's review functions (i.e. Technical Underwriting Reviews, Claims Reviews, and Actuarial Peer Reviews).

Certain assurance functions are localised at the Branch and the rest are supported by the Regional Team:

- **Risk Management** Risk Management is supported locally by a risk officer.
- **Compliance** Compliance is also supported by Singapore based compliance officers.
- **Internal Audit** Internal Audit is supported by a Zurich Regional internal audit team.

The diagram below illustrates the roles and responsibilities of the core Assessment and Assurance functions:

Risk Management
- Coordinate risk identification, risk assessment and financial quantification of risk to achieve a holistic view of the organisation 's risk.
- Resonsible for coordinating risk reporting.
- The resultant risk landscape will inform the risk based assurance activities of the other functions.

Compliance
- Specialist function that contributes insights regarding compliance matters.
- Coordinates with other assurance functions in the discharge of its mandate.

Internal Audit
- Facilitate alignment of assurance methodology and assurance coverage (including raising any gaps in assurance coverage) - includes assurance work of Internal Audit, Compliance, External Audit, Technical Underwriting, and Claims.
- Resonsible for coordinating assurance reporting.

This alignment of contributors to assurance is referred to as the
Assurance Coordination Mandate

The Assurance Coordination Mandate

The IA process is governed by the (“ACM”). This regular interaction of the core Assessment and Assurance providers is to review the risk landscape, our assurance against those risks and agree items that should be escalated to management, adopting a Group wide Matters to Raise and Matters to note approach. The Branch holds the ACM every quarter with participation from Risk Management, Legal & Compliance, Internal Audit. After the ACM, the integrated assessment reporting is submitted to the Risk and Control Committee (“RCC”) in line with Group governance standards.

IAA Reporting Suite

The IAA Reporting Suite is produced by the Assessment and Assurance Providers, as part of the ACM. The document provides an overview of the risk landscape, our assessment and our assurance activities designed to address the top risks, and to escalate any further issues to management.

Document Title	Description
1. **Executive Summary**	A summary of the IAA reports and highlights of key topics for discussion.
2. **Risk Landscape**	Overview of the risks for the relevant country/region, the mitigating actions and status of the risks.
3. **Assurance Coordination Report**	Communicate to management that we understand the top risks of the country/region and have targeted our work to give assurance that these risks are being managed appropriately.
4. **Matters to Raise ("MTR")**	MTR covers the main areas of concern which the Assessment and Assurance Providers want to escalate to the ACM and Branch Management team.
5. **Matters to Note ("MTN")**	The MTN are additional areas that the Assessment and Assurance Providers would like the ACM to note but are not deemed to be as significant as Matters to Raise.

c) Risk Management

Overview of our risk management framework

The mission of risk management is to promptly identify, measure, manage, report and monitor risks that affect the achievement of strategic, financial and operational objectives. This includes calibration of the risk profile in line with the Group's risk tolerance in response to new threats and opportunities so as to optimise returns.

The Group's major risk management objectives are to:

- Protect the capital base by monitoring that risks are not taken beyond the Group's risk tolerance;
- Enhance value creation and contribute to an optimal risk-return profile by providing the basis for an efficient capital deployment;
- Support the Group's decision-making processes by providing consistent, reliable and timely risk information; and
- Protect Zurich's reputation and brand by promoting a sound culture of risk awareness and disciplined and informed risk taking.

In order to achieve its mission and objectives, the Branch has implemented the risk management framework established by the Group.

Risk Management Framework

At the heart of the risk management framework is a governance process with clear responsibilities for taking, managing, monitoring and reporting risks. This articulates the roles and responsibilities for risk management throughout the organization, from the Chief Executive Officer (CEO) to the businesses and functional areas, thus embedding risk management in the business. This is covered in the "Risk Governance" section.

To support the governance process, the Branch relies on Group-wide policies and guidelines. The Zurich Risk Policy is the main risk governance document across the entire Group. It specifies the Group's risk tolerance, limits and authorities, reporting requirements, procedures to approve exceptions and procedures for referring risk issues to senior management and the Board of Directors. Limits are specified per risk type, reflecting the Group's willingness and ability to take risk, considering earnings stability, economic capital adequacy, financial flexibility and liquidity, franchise value and reputation, the Group's strategic direction and operational plan, and a reasonable balance between risk and return, aligned with economic and financial objectives. The Zurich Risk Policy is regularly updated to reflect new insights and changes in the Group's environment and overall risk tolerance. Adherence to the Zurich Risk Policy is assessed on an on-going basis.

The Branch assesses risks systematically and from a strategic perspective through its proprietary Total Risk Profiling™ (TRP) process, which allows Zurich to identify and evaluate the probability and severity of a risk scenario. The Branch then develops, implements and monitors improvements. The TRP process is integral to how Zurich deals with change, and is particularly suited to evaluating strategic risks as well as risks to Zurich's reputation. At both a Company and Group level, this process is conducted annually, reviewed regularly and tied to the planning process.

One of the key elements of the Group's risk management framework is to foster risk transparency by establishing risk reporting standards throughout the Group. The Branch regularly reports on its risk profile, current risk issues, adherence to its risk policies and improvement actions both at a local and on a Group level. The Company has procedures in place for the timely referral of risk issues to senior management and Group.

Various governance and control functions coordinate to help ensure that objectives are being achieved, risks are identified and appropriately managed and internal controls are in place and operating effectively. This coordination is referred to as IA (see section b), which preceeds the quarterly Risk and Control Committee meetings.

Through these processes, responsibilities and policies, Zurich embeds a culture of disciplined risk taking across the Group. The Branch continues to consciously take risks for which it expects an adequate return. This approach requires sound judgment and an acceptance that certain risks can and will materialise in the future.

Risk Governance

The Chief Executive Officer ("CEO") oversees the overall Branch's performance with regard to risk management and control, strategic, financial and business policy issues.

The Risk Officer provides the CEO with an independent assessment of risk management and supports the Branch's overall governance framework. The Risk Officer is a member of various committees, in order to provide a common and integrated approach to risk management, to allow for quantification and appropriate mitigation of risks identified in these committees. These committees include the following:

- **Asset/Liability Management and Investment Committee (ALMIC)** deals with the Branch's asset/liability exposure and investment strategies. This is chaired by the CFO and meets on a quarterly basis.

- **Virtuous Circle (VC)** seeks to share business knowledge and insights so that there is a common understanding in reserve analysis, financial plans, underwriting and pricing decisions. This committee is chaired by the CFO and meets on a quarterly basis.

- **Reserve Committee (RC)** is chaired by the chief regional actuary and local CFO to present and review the actuarial recommendations on the reserve projection. The committee provides a structure and forum for transparent and timely discussions on the loss reserving results on a quarterly basis.

- **Information Governance Council (IGC)** oversees information security and spans across a cross functional team of experts across Group Information Security, Operations, IT, Legal and Compliance, and Risk Management. This committee is chaired by the Information Governance Officer and meets on a quarterly basis.

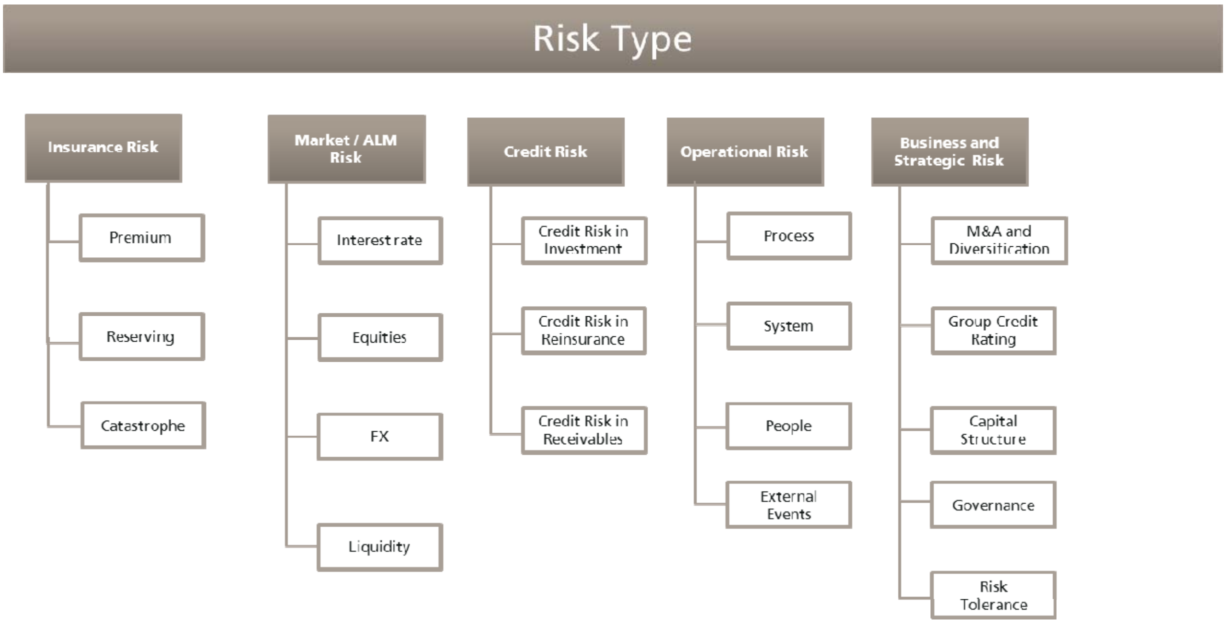
- **Outsourcing Committee (OC)** provides operational oversight in relation to both new and existing outsourcing arrangements within the Branch. This is chaired by the COO and meets on a quarterly basis.

- **Risk & Control Committee (RCC)** oversees the Branch's risk governance framework, including risk management and control, risk policies and their implementation, as well as risk strategy, risk insights and robust monitoring. The Risk Committee also reviews the Branch's aggregate risk profile and ensures adherence to the Group's risk limits. This is chaired by the CEO and includes all assurance functions and key business leads.

- **Executive Committee (EXCO)** is responsible for the ultimate management across business strategy, finance, performance and corporate governance. This is chaired by the CEO and members include all department heads across various functional areas.

Risk Governance by Risk Types

The governance framework for risk management is the reporting, escalation and delegation structure that ensures all risk is appropriately managed and the aggregate portfolio of risk held remains within risk appetite. The various key categories of risk modelled in the Zurich Economic Capital Model (Z-ECM) have been outlined as follows per Group Policy:



Strategic, reputation and other risks that are not covered by the Z-ECM and not shown in the risk types chart are, however, addressed by the ZRP.

1. Insurance Risk

Overview

Insurance risk is the inherent uncertainty regarding the occurrence, amount or timing of insurance liabilities. The exposure is transferred to the Branch through the underwriting process. The Branch actively seeks to write those risks it understands and that provides a reasonable opportunity to earn an acceptable profit. Also, the Branch aims to manage that transfer of risks, and minimise unintended underwriting risks, through such means as:

- Establishing limits for underwriting authority
- Requiring specific approvals for transactions above established limits or new products
- Using a variety of reserving and modeling methods
- Ceding insurance risk through external proportional or non-proportional reinsurance treaties and facultative single-risk placement. The Group centrally manages reinsurance treaties.

The following provides an overview of the Singapore's main lines of business:

- **Property** includes fire risks (for example fire, explosion and business interruption), natural perils (for example earthquake, windstorm and flood), **engineering lines** (for example boiler explosion, machinery breakdown and construction) and **marine** (cargo);and

- **Liability** includes general/public and product liability, excess and umbrella liability, professional liability including medical malpractice, and errors and omissions liability.

- **Special lines** include directors and officers, accident and health, credit and surety.

A fundamental component of managing insurance risk is underwriting discipline. The Branch follows the Group philosophy on underwriting strategy. The Group's underwriting strategy is to take advantage of the diversification of general insurance risks across lines of business and geographic regions. The Group seeks to optimise shareholder value by achieving its mid-term return on equity targets. Doing so necessitates a prudent, stable underwriting philosophy that aims to take advantage of its competitive strengths while avoiding risks with disruptive volatility. At the core of the Group's underwriting is a robust governance process. Underwriting discipline is a fundamental part of managing insurance risk.

In line with Group policy, the Branch implements four major processes for underwriting governance – underwriting strategy, authorities, referrals and reviews.

From a governance perspective, the Branch sets limits on underwriting capacity, and cascades authority to individuals based on their specific expertise. The Branch sets appropriate pricing guidelines with a focus on consistent technical pricing across the organisation. As part of these guidelines, the Branch requires the setting of a technical price according to common standards. The technical price is set in a way that allows a return on risk-based capital in line with the Group's target. The ratio of actual premium to technical price is a key performance metric, which is monitored regularly. Technical reviews confirm whether underwriters perform within authorities and adhere to underwriting philosophies and policies. Also, the Branch has governance procedures to review and approve potential new products to evaluate whether the risks are well understood and justified by the potential returns.

Premium Risk

Premium risk that the Branch faces relates to the possibility that premium collected from the insured is insufficient to cover the amount of claims payments as well as related expenses. This can arise if the assumptions in the pricing tools are not calibrated to reflect the cost of writing policies (claims and expenses) or deterioration in claims experience which have not been reflected in the pricing assumptions.

The branch uses pricing tools which have been developed by actuaries globally or regionally within the Zurich Group and calibrated for the Singapore experience. Different pricing tools are used across each line of business (e.g. property, casualty, financial lines).

Pricing tools are subject to annual actuarial reviews and follow a thorough peer review process as per Zurich internal guidelines.

Reserving Risk

The Branch faces the risk that actual losses emerging on claims provisions may be higher than anticipated. Because of this uncertainty, general insurance reserves are regularly measured, reviewed and monitored. The total loss and loss adjustment expense reserves are based on work performed by qualified and experienced actuaries at the Regional and Group level.

To arrive at the reserve estimates, the actuaries take into consideration, among other things, the latest available facts, historical trends and patterns of loss payments, exposure growth, court decisions, economic conditions, in particular inflation, and public attitudes that may affect the ultimate cost of settlement. Inflation is monitored on a country basis; the monitoring process relies on both Zurich's economic view on inflation and specific claims activity, and feeds into actuarial models and underwriting processes such as technical price reviews.

In most instances, these actuarial analyses are conducted at least twice a year for on-going business according to agreed timetables. Analyses are performed by product lines, types, extent of coverage and year of occurrence.

Catastrophe Risk

Understanding the potential effects of natural catastrophes is a critical component of risk management. While specific catastrophes are unpredictable, modeling helps to determine potential losses should a catastrophic event occur. The Group uses a combination of third-party and in-house models to manage its underwriting and accumulations in order to stay within intended exposure limits and to guide the levels of reinsurance required.

The Group models exposures in a center of excellence for consistency in approach and to form a global perspective on accumulations. The Branch works with the center of excellence to help improve the overall quality of data, by analysing and comparing data quality levels, providing priorities for data quality improvements and supporting implementation with advice and external data, where required. The Group models potential losses from property policies located in hazard-prone areas with material exposure. Other non-property related losses are quantified based on adjustments. The risk modeling principally addresses climate-induced perils such as windstorms, river floods, tornadoes and hail, and geologically induced perils such as earthquakes. The Branch uses the outputs from these models as a guide for the levels of reinsurance it needs to purchase.

In line with our capital and solvency requirements, we have built a reinsurance framework which leads us to place selected risks with Zurich Group Reinsurance. Where circumstances change or matters come to our attention that significantly alter our view on our risk exposure of a particular policy or portfolio of policies we will purchase reinsurance/retrocession cover to curtail potential losses such that they remain within our risk appetite.

Our reinsurance arrangements include facultative, excess of loss, proportional and catastrophe.

2. Market / Asset Liability Management Risk

Market Risk

Market risk is the risk associated with the Branch's balance sheet position where the value of investment assets or cash flow depends on financial markets. Applicable fluctuating risk drivers resulting in market risk to the Branch include:

- Interest rates and credit spreads;
- Equity prices; and
- Currency exchange rates.

The Branch holds quarterly Asset Liability Management Investment Committee ("ALMIC") meetings to discuss the investment outlook, portfolio performance and investment strategies. As at 31 December 2016, the portfolio for the Branch is invested in fixed income and equities. Therefore the main drivers are interest rate risk, equity risk and credit risk. FX risk is negligible since a large part of the portfolio is denominated in Singapore dollars. As at December 2016, the expected shortfall at 99% confidence level stood at SGD8 mil, or translating to 7.1% of the total market value.

The Branch has policies and limits to manage market risk. It aligns its strategic asset allocation (SAA) to its risk-taking capacity. Group centralises management of selected asset classes to control aggregation of risk, and provides a consistent approach to portfolio construction and selection of external asset managers. The ALMIC committee reviews include the relative and absolute performance of the portfolio, interest rate risk across various maturity buckets and adherence to the aggregate positions with risk limits. Stress testing is also conducted on a periodic basis to understand the changes of key drivers and assess the overall impact on the portfolio.

On a daily basis, the Investment Management Team provides oversight to monitor the investment portfolio and inform the Branch when there are significant market movements. Risk mitigation actions are taken (where necessary) to manage fluctuations affecting asset/ liability mismatch and risk-based capital.

Risk from interest rates and credit spreads

Interest rate risk is the risk of loss resulting from changes in interest rates, including changes in the shape of yield curves. The Branch is exposed to interest rate risk stemming from debt securities, reserves for insurance contracts, liabilities for investment contracts, employee benefit plans and loans and receivables.

The Branch has established sector limits and concentration limits by single issuers depending on the respective credit rating in the fixed income portfolio. The Branch has furthermore set a limit on the net interest sensitivity measured as DV10, which is the net monetary impact per 10bp move in interest rates.

The Branch has limits on holdings in real assets and limits on deviations of asset interest rate sensitivities from liability interest rate sensitivities. The Branch also manages credit spread risk, which describes the sensitivity of the values of assets and liabilities due to changes in the level of credit spreads. Movements of credit spreads are driven by expected probability of default, expected losses in cases of defaults of issuers, the uncertainty of default probabilities and losses, as well as actual defaults of issuers.

Currency Risk

Currency risk is the risk of loss resulting from changes in exchange rates. The Branch operates internationally through Global Programs and therefore is exposed to the financial impact arising from changes in the exchange rates of various currencies. The Branch's reporting currency is Singapore dollar, but its assets, liabilities, income and expenses are denominated in various currencies, with the most significant non Singapore dollar currency exposure being the U.S. dollar.

On the local balance sheets there is the risk that a currency mismatch may lead to fluctuations in a balance sheet's net asset value. The Branch manages this risk by matching foreign currency positions on local balance sheets within prescribed limits. Residual local mismatches are reported centrally in order to make use of the netting effect across the Group. The Group then hedges residual mismatches from local balance sheets (The Branch) through a central balance sheet within an established limit. The monetary currency risk exposure on local balance sheets is considered immaterial.

Liquidity Risk

Liquidity risk is the risk that the insurer may not have sufficient liquid financial resources to meet its obligations when they fall due, or would have to incur excessive costs to do so. The Branch's policy is to maintain adequate liquidity and contingent liquidity to meet its liquidity needs under both normal and stressed conditions. To achieve this, the Branch monitors and manages its liquidity needs on an ongoing basis.

The Branch uses the Group-wide liquidity management policies and specific guidelines on how to plan, manage and report liquidity. As part of its liquidity management, the Branch maintains sufficient cash and cash equivalents and high-quality, liquid investment portfolios to meet outflows under expected and stressed conditions. The Branch performs asset liability matching as part of our ALMIC meetings to align the duration of our investments in line with our insurance liabilities.

3. Credit Risk

Credit risk is the risk associated with a loss or potential loss from counterparties failing to fulfill their financial obligations. The Branch's exposure to credit risk is derived from the following main categories of assets:

- Cash and cash equivalents
- Debt securities
- Reinsurance assets
- Receivables

As at 31 December 2016, cash and equivalents amounted to S$ 16.58mil (2015: S$ 9.61mil).

From an investment credit risk perspective, the Branch invests in high quality debt securities. AAA rated and quasi government fixed income investments accounted for 93.4% of the portfolio as at 31 December 2016.

As part of its overall risk management strategy, the Branch cedes insurance risk through proportional, non-proportional treaties as well as facultative reinsurance. While these cessions mitigate insurance risk, the recoverable from reinsurers and receivables arising from ceded reinsurance expose the Branch to credit risk. The Group also maintains a list of authorised reinsurer that the Branch's needs to follow in selecting external reinsurers. As at 31 December 2016, 99% of the Branch's reinsurance credit risk is rated A+ and above.

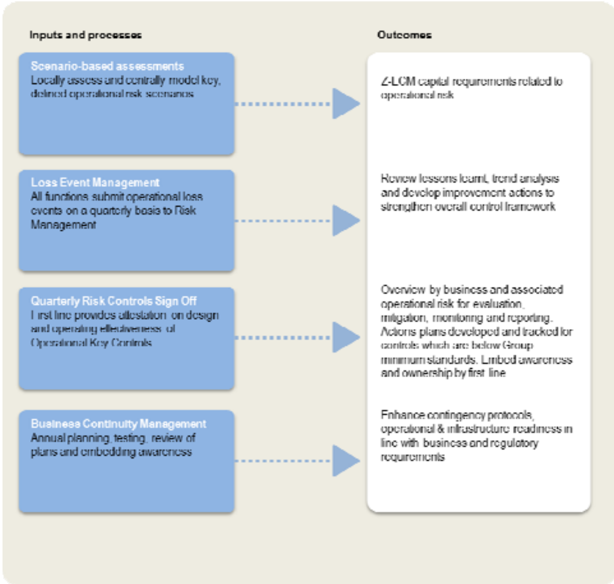
From a receivables credit perspective, the largest exposure is related to brokers and arises where premiums are collected from customers to be paid to the Branch. The Branch has policies and standards to manage and monitor credit risk related to brokers and intermediaries. Our standard terms stipulate settlement of debts within 30 to 90 days of the premium due date and we reserve the right to terminate cover for overdue payments.

As at 31 December 2016, the Branch's management has made a provision for receivables related impairment of S$3.22mil (2015: S$2.48mil) for premiums uncollectible as at year end.

4. Operational Risk

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people, and systems or from external events such as outsourcing, catastrophes, legislation, or external fraud.

The Branch has a comprehensive framework with a common approach to identify, assess, quantify, mitigate, monitor and report operational risk. This framework, as set out by Group, is summarised below.



The holistic operational risk framework includes the following components:

- Use of a scenario-based approach (Top-Down Scenarios) to assess, model and quantify the capital required for operational risk. Mitigating actions are developed to strengthen the control framework around related business processes.

- Loss Events Management - Documenting and evaluating actual loss events above a threshold specified in the Zurich Risk Policy in a Group-wide database. Improvement actions are put in place to avoid recurrence of past operational loss events. Trend analysis is conducted on a periodic basis to review such incidents as well.

- Quarterly Risk and Control Attestation - Assessing the design and operating effectiveness of controls through the quarterly risk and control attestation process. Improvement actions are put in place to mitigate risks and achieve minimum control standards as stipulated by Group.

- Business Continuity Management activities such as Business Continuity Planning, Business Impact Analysis and Crisis Management

Since 2014, the Branch has enhanced the internal control environment focusing on significant financial reporting controls as well as operational key controls in the areas of underwriting, claims, investment management and operations and technology. An internal control certification process is conducted quarterly which is signed off by department heads and the CEO.

The Branch continues to focus on Information Security, with special emphasis on protecting customer and company information, improving security with its vendors and monitoring information access. Governance of data security is maintained by the Information Governance Council, which includes a cross functional team of experts across Group Information Security, Operations, IT, Legal & Compliance and Risk Management.

In 2015, in line with Group's initiative, the Group has enhanced its anti-fraud framework to further improve the Company's ability to prevent, detect and respond to fraud. An anti crime delegate has been appointed to support the roll-out of the Group's framework across internal and external fraud.

Business continuity remains a core component with an emphasis on recovery from events such as operational disruptions and pandemics. The business continuity plan is reviewed on an annual basis to identify key processes and systems and endorsed by the Executive team. Testing is also conducted annually both locally and in collaboration with regional Zurich entities.

Compliance risk management

As part of the Group's approach to managing operational risk, material compliance risks are independently assessed on an annual basis. Zurich has Group Compliance policies to address exposures or topics that apply to a large part or all of the Group's organization. These policies are implemented by the local compliance function, following standard implementation protocols including gap analysis, risk assessment, process enhancements, local standards and local training material. The local compliance function regularly assesses compliance risk with a standard tool. They report compliance risks and the mitigation to the Senior Management, along with other compliance program reporting activities. Significant control issues or issues affecting more than one business unit may be escalated at Group level, where the Zurich Insurance Group's Board Risk and Audit Committees oversee the resolution of such issues.

5. Strategic / Business Risks

Strategic risks corresponds to the risk that the Branch is unable to achieve its strategic targets.

Strategic risk can arise from:

- Inadequate assessment of strategic plans
- Ineffective implementation of strategic plans
- Unexpected changes to assumptions underlying strategic plans

Risk considerations are a key element in the strategic decision-making process. The Branch assesses strategic risks systematically through the Group's proprietary Total Risk Profiling™ ("TRP") process, which allows the Branch to identify and evaluate the probability of a risk scenario occurring, as well as the severity / impacts. Across the risk themes, each assigned risk owner develops, implements and monitors associated mitigating actions plans.

The TRP process is integral to how Zurich evaluates strategic risks, deals with business changes and assesses key risks to Zurich's reputation. This strategic exercise is performed annually, integrated with the business planning process and reviewed quarterly by the CEO during the Risk & Control Committee meetings.

Reputational risk management

Risks to the Branch's reputation include the risk that an act or omission by the any of its employees could result in damage to Zurich's and the Branch's reputation or loss of trust among its stakeholders. Every risk type has potential consequences for the Branch's of the Group's reputation, and therefore, effectively managing each type of risk helps the Branch reduce threats to its reputation.

Additionally, the Branch endeavours to preserve its reputation by adhering to applicable laws and regulations, and by following the core values and principles of Zurich Basics, the Group's code of conduct, which includes integrity and good business practice.

d) Insurance liabilities

The Branch establishes loss reserves, which are estimates of future payments of reported and unreported claims for losses and related expenses, with respect to insured events that have occurred. Reserving is a complex process dealing with uncertainty, requiring the use of informed estimates and judgments. Any changes in estimates or judgments are reflected in the results of operations in the period in which estimates and judgments are changed.

Significant delays may occur in the notification and settlement of claims, and a substantial measure of experience and judgment is involved in assessing outstanding liabilities, the ultimate cost of which cannot be known with certainty as of the balance sheet date. The reserves for losses and loss adjustment expenses are determined on the basis of information currently available. However, it is inherent in the nature of the business written that the ultimate liabilities may vary as a result of subsequent developments. The methods used are consistent across all our business segments.

Relevant Regulations Underpinning our Reserving

Our insurance liabilities are set in accordance with Monetary Authority of Singapore ("MAS") (Insurance valuation and capital regulations 2004). In this regard the insurance liabilities comprises of:

- Premium liabilities
- Claim liabilities;

As defined by MAS (Insurance valuation and capital regulation 2004),

(a) premium liabilities shall be the higher of —

- (i) the unearned premium reserves of the fund calculated as the aggregate of unearned premium reserves for each policy; or
- (ii) the unexpired risk reserves, calculated as the sum of:
  - (a) the value of the expected future payments arising from future events insured under policies in force as at the valuation date, including any expense expected to be incurred in administering the policies and settling relevant claims; and

(b) any provision for any adverse deviation from the expected experience, calculated based on the 75 per cent level of sufficiency.

(b) claim liabilities, which shall be an amount not less than the sum of:

(a) the value of the expected future payments in relation to all claims incurred prior to the valuation date (other than payments which have fallen due for payment on or before the valuation date), whether or not they have been reported to the insurer, including any expense expected to be incurred in settling those claims; and

(b) any provision for any adverse deviation from the expected experience, calculated based on the 75 per cent level of sufficiency.

The amount of unearned premium reserves is calculated using the 1/365 method based on gross premiums written less premiums on reinsurance, reduced by the actual commission to the corresponding premiums.

Our Methodology

Best Estimate of Claims Liabilities

The Branch's actuarial estimates of the claims liability:

- reflects the best estimate of the likely future claims experience. They are neither deliberately overstated nor understated;
- are undiscounted;
- include allowance for late reported claims and development of reported claims; and
- include allowance for the Branch's indirect claims handling expenses.

This estimate of the claim liabilities was separately analysed by our onshore funds ("SIF") and offshore funds ("OIF") as defined by the Singapore Insurance Act Cap 142. This is further subdivided into various classes of business as well as large and small claims.

The incurred chain ladder method ("ICD"), expected loss ratio method ("ELR") and Incurred Bornhuetter-Ferguson ("BF") method have been used in determining the outstanding claims liabilities.

Loss ratio results for the most recent accident year are often based on a BF Incurred method for short tail classes, and ELR method for long tail classes. The ELR takes into account the past claims experience and plan loss ratios.

For long tail prior accident years, the BF Incurred method is used for the more recent prior accident years, and the CL Incurred method is used for the older accident years. This is to reflect the slow development patterns for long tail and the greater level of uncertainty in the early development periods.

For short tail classes, the CL Incurred method tends to be adopted for most prior accident years for attritional losses as these claims normally develops fairly consistently. The BF Incurred method has been adopted for the more recent prior accident years for large losses as these losses take longer to develop, and also to avoid having no reserves in the accident quarters where the incurred is zero.

The unallocated loss adjustment expenses (ULAE) reserve is calculated as 2% of large gross outstanding claims (excluding Received Business, with a cap of SG$1m applied on each gross case reserve) and 4% of small gross outstanding claims (excluding Received Business).

The best estimate gross (or net) outstanding claims liabilities is the sum of the ultimate gross (or net) claims costs and ULAE reserve less any claims payments made.

Best Estimate of Premium Liabilities

The premium liabilities are estimated as the unearned premium reserves net of deferred acquisition costs ("DAC") plus any additional reserve required to meet any expected losses on the unearned portion of that business written. This includes expenses associated with administering the settlement of the claims. As with the actuarial estimates of the claims liability, the actuarial estimates of the premium liability:

- reflects the best estimate of the likely future claims experience on the unearned portion. They are neither deliberately overstated nor understated;
- are undiscounted;
- includes allowance for policy administration expense and claims handling expenses.

The methodology used for estimating the premium liability can be summarised as follows:

- ultimate gross loss ratios including claims handling costs by classes of business are selected based on the historical performance and the rate changes;
- the selected loss ratios together with an allowance for reinsurance costs, reinsurance recovery and future policy administration expenses is applied to the unearned premium (gross of DAC) to arrive at the unexpired risk reserve (URR);
- best estimate premium liabilities are the maximum of unearned premium reserve (net of DAC) or URR.

Assessment of Uncertainty

It is normal and should be expected that there will be variations between our estimates and the ultimate cost of claims. The reasons for this may be:

- Models chosen for analysis and projection are unlikely to exactly match the actual claim process;
- Random fluctuations in the claims experience result in uncertainty in assumptions regarding future experience;
- Future economic and environmental conditions are not known and may differ from those experienced in the past; and
- Future random claim fluctuations will result in uncertainty in the projected payments.

Each of these sources of potential variation introduces uncertainty into the valuation process and it is difficult to quantify these uncertainties. For the Branch, the uncertainties are increased due to:

- it being a relatively newly established company with little historical experience upon which to base our analysis on; and
- the relatively small size of its portfolio, which causes the projection of future trends to be more uncertain.

Discount Rates

Both the outstanding claims liabilities and premium liabilities are on an undiscounted basis.

Given the low interest rate environment currently being experienced in Singapore, the impact of any discounting has a negligible impact on the final recommendation of the policy liabilities. As such, no discounting effect was allowed for in the final recommendation.

e) Capital adequacy

The Branch's capital management objective is to maintain a strong capital position with liquidity to meet our obligations towards our policyholders and to cover regulatory capital requirements.

Our regulator, the MAS, requires us to have capital resources not less than:

a) The sum of the total risk requirement of all our insurance funds (i.e. a capital adequacy ratio of 120%); or

b) A minimum amount $5m, whichever is the higher.

Should one of the above limits be breached or be likely to be breached we are required to inform the regulator immediately. In practice, the risk requirement of our insurance funds significantly exceeds the $5m minimum noted above.

In addition, we are required to report to the MAS, as a financial resources warning event, any instance where it becomes likely that our capital adequacy ratio will fall, or has fallen, to below 120%.

In addition to the Branch's overall solvency, we are required to maintain solvency at the fund level (i.e. for SIF and OIF) such that the capital resources of the fund exceeds the regulatory risk requirement of the fund.

The Branch's capital position is monitored on a monthly basis. In case of capital injection, Zurich Insurance Company Ltd (Singapore Branch), as a Branch, has access to Zurich Insurance Company Ltd to obtain capital injection through a letter of responsibility.

Measuring Capital

Regulatory solvency is a key focus for the Branch. As such the Branch's capital model is aligned to the requirements of the MAS Risk Based Capital Framework. Under this Framework, our assets and liabilities are subjected to various charges to determine our solvency position. The various risk charges that are applied in the Branch's model are consistent with those prescribed by regulations.

Capital Position

During the financial year of 2016, the Branch was compliant with the externally imposed capital requirements. The capital ratio at the end of 2016 was 291% and 2015 was 230%.

f) Financial investments

Our Investment Objectives

The Branch's overarching investment objective is to achieve an adequate investment return to meet future liabilities and to optimise the risk/return characteristics of the Branch's investment assets whilst maintaining compliance, at all times, with the regulatory requirements of the MAS and Group's Risk Policy.

Accounting for our Investments

Recognition and subsequent treatment

We recognise each investment on the day we commit to purchase the investment. It is recognised at fair value and we apply fair value accounting with all movements in investments taken directly to profit or loss as they occur. An investment is derecognised when the rights to receive cashflows from the investment have expired or have been transferred. Investment income is recognised in the income statement.

Valuation

For fixed maturity securities, fair values are generally based upon quoted market prices.

Policies and Processes

The Branch considers the regulatory requirements of the MAS and the Zurich Group Risk Policy when making investments. It seeks to invest in a portfolio of high quality assets according to the Strategic Asset Allocation (SAA) and investment mandates approved by the local investment committee. Eligible investment instruments include publicly traded equity, treasury bills, investment grade government, government related, supranational and corporate bonds. Fixed income assets are managed by external assets managers based on agreed investment guidelines while the branch performs the oversight function.

Each asset class has a benchmark to measure its relative performance. The local investment committee will meet quarterly to ensure the investments are aligned with the strategy.

The SAA and investment mandates ensure the branch to maintain a diversified (industry, issuer, maximum exposure per counterparty) investment grade fixed income portfolio.

As noted in **Section c) Risk Management**, we operate an asset / liability management framework. The branch invests only in liquid asset classes to meet liabilities as they fall due.