

# Endurance Specialty Holdings Ltd. Financial Condition Report For the financial year ended December 31, 2016

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### Introduction

This report has been prepared in compliance with the public disclosure requirements of the Insurance (Group Supervision) Rules 2011 of the Bermuda Monetary Authority. In fulfillment of the public disclosure rules, this report contains information regarding Endurance Specialty Holdings Ltd. ("ESHL") and its group of companies ("the Group"). This report has been prepared on a group consolidated basis and thus the information provided is reflective and inclusive of all entities within the Endurance Group of companies. In this report where indicated, information specific to Endurance Specialty Insurance Ltd. ("ESIL"), the Bermuda domiciled, Class 4, designated insurer of the Group has been provided to meet the disclosure requirements of the Bermuda Monetary Authority. All financial information reported is on the basis of United States generally accepted accounting principles except where noted. The amounts reported (including tables) are expressed in thousands of United States dollars, except for ratios, share and per share amounts.



### Part 1. Business & Performance

<u>Item 1.b. Group Supervisor:</u> Bermuda Monetary Authority

BMA House 43 Victoria Street Hamilton HM 12 BERMUDA

<u>Item 1.c. Group Auditor:</u> Ernst & Young Ltd

3 Bermudiana Road Hamilton HM 08 BERMUDA

# Item 1.d. Ownership Details:

ESHL, a Bermuda domiciled holding company, is the parent company for the Group consisting of thirty-seven regulated and non-regulated companies.

ESHL has ordinary shares outstanding as of December 31, 2016 that are listed and publicly traded on the New York Stock Exchange under the symbol "ENH". The top ten shareholders of record of ESHL ordinary shares as at December 31, 2016 are as follows:

Top Shareholders	Shares Held	% Outstanding
The Vanguard Group, Inc.	4,956,953	7.3%
BlackRock Institutional Trust Company, N.A.	4,566,115	6.8%
Dimension Fund Advisors, L.P.	3,833,588	5.7%
Charman (John Robert)	3,352,873	5.0%
Fidelity Management & Research Company	2,771,635	4.1%
Champlain Investment Partners, LLC	2,420,940	3.6%
J P Morgan Securities LLC	2,176,167	3.2%
State Street Global Advisors (US)	1,820,697	2.7%
AQR Capital Management, LLC	1,677,990	2.5%
Carlson Capital, L.P.	1,623,164	2.4%

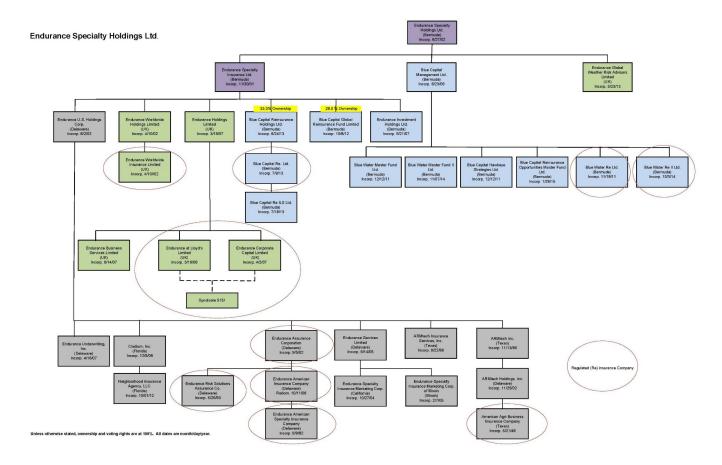
# Endurance Specialty Insurance Ltd.

ESIL is a wholly owned subsidiary of Endurance Specialty Holdings Ltd.



# Item 1.e. Group Structure

The Group consists of thirty-seven various entities domiciled in Bermuda, the Unites States and the United Kingdom with branch operations in Switzerland and Singapore, as noted in the chart below. ESHL is a holding company headquartered in Bermuda with ten wholly-owned insurance operating entities based in Bermuda, the United States and the United Kingdom. The Group underwrites property and casualty insurance and reinsurance on a global basis.





### Item 1.f. Business Written:

The Group focuses on the underwriting of specialty lines of insurance and reinsurance, which require dedicated, specialized underwriting skills and resources in order to be profitably underwritten. Our operations are organized into two business segments - Insurance and Reinsurance.

- Insurance This segment is comprised of four lines of business: agriculture, casualty and other specialty, professional lines, and property, marine/energy and aviation. The agriculture line of business is comprised of multi-peril crop insurance, crop hail, livestock risk protection and other agriculture risk management products. The casualty and other specialty line of business is comprised of the insurance and facultative reinsurance of third party liability exposures, including casualty and healthcare liability. The professional line of business includes directors' and officers' liability, errors and omissions, employment practices liability, environmental liability and pension trust liability insurance. The property, marine/energy and aviation line of business is comprised of the insurance and facultative reinsurance of commercial properties, inland marine and ocean marine insurance, energy insurance, and general liability and property coverages for a wide range of general aviation risks.
- Reinsurance This segment is comprised of five lines of business: catastrophe, property, casualty, professional lines, and specialty. The catastrophe line of business includes reinsurance for catastrophic perils on a treaty basis. The property line of business includes proportional and excess of loss reinsurance of personal and commercial exposures. The casualty line of business is comprised of third party liability exposures, clash and workers' compensation coverages. The professional line of business includes directors' and officers' liability, errors and omissions, employment practices liability, environmental liability and pension trust liability reinsurance. The specialty line of business includes the reinsurance of aviation and space business and proportional and non-proportional reinsurance of hull and cargo insurance business, and proportional and excess of loss coverages of contract and commercial surety business, personal accident coverages, political risk coverages, weather risk management products and agriculture coverages for weather related perils as well as protection from yield and price risks.

Management measures Insurance and Reinsurance segment results on the basis of the combined ratio, which is obtained by dividing the sum of the net losses and loss expenses, acquisition expenses and general and administrative expenses by net premiums earned. When purchased within a single line of business, ceded reinsurance and recoveries are accounted for within that line of business. When purchased across multiple lines of business, ceded reinsurance and recoveries are allocated to the lines of business in proportion to the related risks assumed. The Group does not manage its assets by segment; accordingly, investment income and total assets are not allocated to the individual business segments. General and administrative expenses incurred by segments are allocated directly. Remaining general and administrative expenses not incurred by the segments are classified as corporate expenses and are not allocated to the individual business segments. Ceded reinsurance and recoveries are recorded within the business segment to which they apply.



The following table provides a summary of the Group's segment revenues and results for the year ended December 31, 2016:

	Insurance	Insurance Reinsurance	
Revenues			
Gross premiums written	\$ 2,570,494	\$ 1,631,676	\$ 4,202,170
Ceded premiums written	(1,514,240)	(317,995)	(1,832,235)
Net premiums written	1,056,254	1,313,681	2,369,935
Net premiums earned	1,009,375	1,354,285	2,363,660
Other underwriting loss	<del>_</del>	(909)	(909)
	1,009,375	1,353,376	2,362,751
Expenses			
Net losses and loss expenses	684,178	636,874	1,321,052
Acquisition expenses	149,763	310,720	460,483
General and administrative expenses	140,742	107,404	248,146
	974,683	1,054,998	2,029,681
Underwriting income	\$ 34,692	\$ 298,378	333,070
	-		
Net investment income			176,590
Corporate expenses			(51,706)
Net foreign exchange gains			74,684
Net realized and unrealized losses			(12,419)
Net impairment losses recognized in earnings			(10,769)
Amortization of intangibles			(84,624)
Interest expense			(43,860)
Income before income taxes			\$ 380,966
Net loss ratio	67.9%	47.1%	55.9%
Acquisition expense ratio	14.8%	22.9%	19.5%
General and administrative expense ratio (1)	13.9%	7.9%	12.7%
Combined ratio	96.6%	77.9%	88.1%

<sup>(1)</sup> Total general and administrative expense ratio includes general and administrative expenses and corporate expenses.



The following table provides gross premiums written by segment and line of business for the years ended December 31, 2016, 2015 and 2014:

	2016	2015		2014	
\$	760,877	\$	840,445	\$	866,025
	657,558		514,203		396,113
	461,552		344,482		263,538
1	690,507		386,771		190,452
	2,570,494		2,085,901		1,716,128
	506,300		311,914		343,213
	250,447		209,392		287,326
	245,092		176,506		159,533
	256,337		248,610		174,656
	373,500		288,538		213,220
	1,631,676		1,234,960		1,177,948
\$	4,202,170	\$	3,320,861	\$	2,894,076
	\$ s s s s s s s s s s s s s s s s s s s	\$ 760,877 657,558 461,552 690,507 2,570,494 506,300 250,447 245,092 256,337 373,500 1,631,676	\$ 760,877 \$ 657,558 461,552 690,507 2,570,494  506,300 250,447 245,092 256,337 373,500 1,631,676	\$ 760,877 \$ 840,445 657,558 514,203 461,552 344,482 1 690,507 386,771 2,570,494 2,085,901 506,300 311,914 250,447 209,392 245,092 176,506 256,337 248,610 373,500 288,538 1,631,676 1,234,960	\$ 760,877 \$ 840,445 \$ 657,558 514,203 461,552 344,482 690,507 386,771 2,570,494 2,085,901 506,300 311,914 250,447 209,392 245,092 176,506 256,337 248,610 373,500 288,538 1,631,676 1,234,960

The following table provides the geographic distribution of gross premiums written for the years ended December 31, 2016, 2015 and 2014:

	 2016	2015	2014
United States	\$ 2,823,950	\$ 2,305,301	\$ 2,054,431
Worldwide	794,289	566,664	456,078
Europe	265,100	209,729	172,077
Japan	82,864	58,524	45,618
Asia	105,838	75,165	38,442
Australasia	49,727	41,309	61,994
Other	80,402	64,169	65,436
Total	\$ 4,202,170	\$ 3,320,861	\$ 2,894,076

The Group attributes gross premiums written to the geographic region in which the risks originate.

Increases in gross premiums written for 2016 versus 2015 and 2014 were driven by the following factors:

- An increase in gross premiums written in the property, marine/energy and aviation line of business in the Insurance segment, due primarily to business generated by new underwriting teams added over the last twenty four months in the U.S. and the U.K., including new business resulting from the acquisition of Montpelier Re Holdings Ltd. ("Montpelier");
- An increase in gross premiums written in the casualty and other specialty and professional lines of business in the Insurance segment, including excess casualty and various professional liability coverages, due to the expansion of the Group's Insurance underwriting personnel over the last twenty four months, including new business resulting from the acquisition of Montpelier;



- An increase in gross premiums written in the specialty line of business in the Reinsurance segment, primarily due to growth in international marine, aerospace, trade credit and surety and agriculture business written by new underwriting teams, partially offset by non-renewals and increased ceding company retentions;
- An increase in gross premiums written in the catastrophe and property lines of business in the Reinsurance segment compared to 2015 primarily due to new business resulting from the Group's acquisition of Montpelier, partially offset by targeted line size reductions;
- An increase in gross premiums written in the casualty and professional lines of business in the Reinsurance segment compared to 2015 and 2014 due to new business written and increased premiums on renewal business, partially offset by non-renewal of policies that no longer met profitability targets; and
- A decrease in gross premiums written in the agriculture line of business in the Insurance segment due to lower commodity prices and from reductions in the Group's crop hail portfolio

Net premiums written in 2016 increased \$419.5 million, or 21.5%, compared to 2015. The change in net premiums written from 2016 compared to 2015 was driven primarily by growth in gross premiums written in both the Insurance and Reinsurance segments. Partially offsetting this increase was growth in ceded premiums written in 2016 compared to 2015. Ceded premiums increased across all lines of business, except in the agriculture line of business in the Insurance segment. The Group purchased additional quota share, facultative and excess of loss reinsurance across most lines of business in the Insurance segment. In the Reinsurance segment, ceded premium written increased as the Group purchased increased levels of protection, including additional proportional and excess of loss retrocessional coverage within the catastrophe line of business, and additional proportional coverage on the specialty line of business.

Net premiums earned in 2016 increased \$385.2 million, or 19.5% compared to 2015, principally due to the increase in gross premiums written and the earning of Montpelier premiums acquired in 2015, partially offset by increased ceded premiums.



# Item 1.g.(i). Investments:

The Group and its subsidiaries' investments are governed by its investment policy which provides guidelines and limits on the weighting of investments by class. The application of the prudent person principle within the Group's investment policy is discussed in *Item 3.d. Asset Investing*. Fixed maturity investments are the predominant asset class with the balance consisting of equity securities and alternative and specialty funds.

The fair value of the Group's investments by class as of the years ended December 31, 2016 and 2015 was:

	Dece	<b>December 31, 2016</b>		cember 31, 2015
Fixed maturity investments				
U.S. government and agencies securities	\$	1,001,882	\$	818,468
U.S. state and municipal securities		18,357		22,406
Foreign government securities		178,919		160,976
Government guaranteed corporate securities		3,917		57,753
Corporate securities		2,147,693		1,849,934
Residential mortgage-backed securities		1,461,286		1,311,373
Commercial mortgage-backed securities		618,848		812,886
Collateralized loan and debt obligations		371,256		405,128
Asset-backed securities		510,663		507,255
Total fixed maturity investments		6,312,821		5,946,179
Short-term investments		408,704		419,796
Total fixed income investments	\$	6,721,525	\$	6,365,975
Equity securities				
Equity investments	\$	500,968	\$	511,191
Preferred equity investments		173		17,623
Total equity securities	\$	501,141	\$	528,814
Alternative Funds				
Hedge funds	\$	482,865	\$	704,966
Private investment funds		76,451		80,690
Other investments funds		28,992		23,465
Total alternative funds		588,308		809,121
Specialty Funds				
High yield loan funds		_		63,496
Total specialty funds		_		63,496
Total other investments		588,308		872,617
Total Investments	\$	7,810,974	\$	7,767,406



Net investment income for the Group by asset class for the years ended December 31, 2016, 2015 and 2014 was:

	2016	2	015	2014
Fixed income investments	\$ 165,210	\$	132,786	\$ 118,084
Equity securities	12,639		8,209	5,689
Other investments	12,442		(13,553)	19,609
Cash and cash equivalents	2,824		2,870	2,445
	193,115		130,312	145,827
Investment expenses	(16,525)		(16,486)	(14,284)
Net investment income	\$ 176,590	\$	113,826	\$ 131,543

During the years ended December 31, 2016, 2015 and 2014, the Group recognized net realized and unrealized gains on its investments and derivatives of:

	2016	2015	2014
Gross realized gains on investment sales	\$ 39,033	\$ 65,881	\$ 35,921
Gross realized losses on investment sales	(61,752)	(28,636)	(16,515)
Net unrealized losses on trading securities	12,480	(24,257)	_
Intangible asset impairment loss	_	<del></del>	(5,450)
Change in fair value of derivative financial instruments	(2,180)	(328)	327
Net realized and unrealized (losses) gains	\$ (12,419)	\$ 12,660	\$ 14,283

The annualized net earned yield and total return of the Group's investment portfolio for the years ended December 31, 2016, 2015 and 2014 and market yield and portfolio duration as of December 31, 2016, 2015 and 2014 were as follows:

	2016	2015	2014
Annualized net earned yield <sup>(1)</sup>	1.98%	1.47%	2.03%
Total return on investment portfolio <sup>(2)</sup>	2.56%	0.31%	2.79%
Market yield <sup>(3)</sup>	2.61%	2.49%	1.94%
Portfolio duration <sup>(4)</sup>	3.04 years	2.74 years	2.91 years

- (1) The actual net earned income from the investment portfolio after adjusting for expenses and accretion of discount and amortization of premium from the purchase price divided by the average book value of assets.
- (2) Net of investment manager fees; includes realized and unrealized gains and losses.
- (3) The internal rate of return of the investment portfolio based on the given market price or the single discount rate that equates a security price (inclusive of accrued interest) for the portfolio with its projected cash flows. Excludes other investments and operating cash.
- (4) Includes only cash and cash equivalents and fixed income investments managed by the Group's investment managers.

During 2016, the yield on the benchmark three year U.S. Treasury bond fluctuated within a 96 basis point range, with a high of 1.61% and a low of 0.65%. Trading activity in the Group's investment portfolio in 2016 included increased allocations to corporate debt securities, U.S. government and government agencies securities, agency residential mortgaged-backed securities and foreign government securities, and reductions in non-agency mortgage-backed securities, collateralized loan and debt obligations, U.S. government and agency guaranteed corporate securities, municipal securities, equity securities and other investments. The duration of the Group's fixed maturity portfolio was 3.04 years at December 31, 2016 and 2.74 years at December 31, 2015. The increase in duration from 2015 to 2016 was due to an increase in interest rates that impacted the Group's fixed income portfolio.

For further information relating to the Group's investment portfolio performance, see the ESHL Annual Report on Form 10-K for the year ended December 31, 2016, filed with the Securities and Exchange Commission and published on our website, www.endurance.bm ("the 2016 Form 10-K") - *Notes to the Consolidated Financial Statements, Note 4, pages 130-137, and Item 7. - MD&A, Investment Portfolio section, pages 84-89.* 



# Item 1.g.(ii) Material Income and Expenses:

# Gross and Net premiums Written and Earned

See discussion of premium movements in *Item 1. f.* above.

# Net Losses and Loss Expenses

The Group's reported net losses and loss expenses are significantly impacted by the occurrence or absence of catastrophic events and subsequent loss emergence related to such events. The following table shows the net losses after adjustment for reinstatement premiums and other loss sensitive accruals recorded by the Group in connection with catastrophes for the years ended December 31, 2016, 2015 and 2014.

2016					
<b>Event Date</b>	Event	N	et Loss		
	(U.S. dollars in millions)				
February 2016	Earthquake in Taiwan	\$	6.2		
February and March 2016	Jubilee oil field		9,400		
April 2016	Convective storms in the United States		22,600		
April 2016	Earthquake in Japan		9,600		
May 2016	Wildfires in Canada		30.4		
May 2016	Convective Storms in Germany		4.1		
June 2016	Hailstorms in the Netherlands		10.0		
September 2016	Typhoon Meranti in Asia		8.3		
October 2016	Hurricane Matthew in the United States		59.8		
November 2016	Earthquake in New Zealand		14.5		
	Total impact on net loss and loss expenses		174.9		
	Less: reinstatement premiums		(21.5)		
	Net losses after adjustment for reinstatement premiums	\$	153.4		

2015					
<b>Event Date</b>	Event	Ne	Net Loss		
	(U.S. dollars in millions)				
February 2015	Winter storm in the United States	\$	12.9		
April 2015	Windstorm in the United States		7.4		
May 2015	Windstorm in the United States		6.4		
August 2015	Tianjin explosions		14.1		
August 2015	Unipetrol fire		9.2		
	Total impact on net loss and loss expenses		50		
	Less: reinstatement premiums		(3.1)		
	Net losses after adjustment for reinstatement premiums	\$	46.9		



	2014		
<b>Event Date</b>	Event	Net Loss	
	(U.S. dollars in millions)	_	
February 2014	Windstorm in Japan	\$	7.2
April 2014	Windstorms in the United States		8.1
May 2014	Windstorms in the United States		2.9
June 2014	Windstorms in the United States		5.6
June 2014	Windstorm Ela in Europe		21.1
November 2014	Windstorm in Australia		6.3
	Other loss events in 2014		5
	Total impact on net loss and loss expenses		56.2
	Less: reinstatement premiums		(5.1)
	Net losses after adjustment for reinstatement premiums		51.1

For 2016, catastrophe related losses added 7.0 percentage points to the Group's net loss ratio after adjustment for reinstatement premiums and other loss sensitive accruals compared to 2.3 percentage points in 2015 and 2.9 percentage points in 2014. The Group's net loss ratio was higher in 2016 compared to 2015 and 2014 due to an increase in catastrophe losses, higher than expected attritional losses and decreased favorable prior year loss reserve development.

During 2016, 2015 and 2014, the Group's previously estimated ultimate losses for prior accident years were reduced by \$221.6 million, \$243.5 million and \$233.8 million, respectively, as the loss emergence related to prior accident years was lower than expected. The overall net reduction in the Group's estimated losses for prior accident years experienced in 2016 emerged across all lines of the Group's Insurance and Reinsurance segments, except for Insurance professional lines. Favorable prior year loss reserve development in 2016 was lower than in 2015 in the Insurance segment as reported losses in the casualty and other specialty line of business were closer to expectations in the current year. Favorable prior year loss reserve development in 2016 was lower than in 2015 in the Reinsurance segment primarily due to reported losses in the casualty and property lines of business being closer to expectations in the current year.

The Group participates in lines of business where claims may not be reported for many years. Accordingly, management does not believe that reported claims are the only valid means for estimating ultimate obligations. Ultimate losses and loss expenses may differ materially from the amounts recorded in the Group's consolidated financial statements. These estimates are reviewed regularly and, as experience develops and new information becomes known, the reserves are adjusted as necessary. As a result of the incorporation of the Group's own loss reporting patterns and loss history related to its short tail business, including catastrophe reinsurance and property insurance and reinsurance business lines, the Group would expect its prior year loss reserve development and adjustments for short tail business to be less than recorded in prior years. Reserve adjustments, if any, are recorded in earnings in the period in which they are determined. The overall loss reserves were established by the Group's actuaries and reflect management's best estimate of ultimate losses.

### **Acquisition Expenses**

Acquisition expenses consist of commissions and brokerage expenses that are typically a percentage of the premiums on insurance policies or reinsurance contracts successfully written. General and administrative expenses consist primarily of personnel expenses and general operating expenses directly attributable to the Group's insurance and reinsurance operations. Corporate expenses are expenses not allocated directly to the insurance and reinsurance operations.

The acquisition expenses of the reinsurance segment of the Group's business written are generally higher than those in the insurance segment.



### Part 2. Governance Structure:

The governance structure of the Group stems from the Board of Directors of ESHL (the "Board of Directors" or "Board"). The Board of Directors is elected by ESHL's shareholders to oversee and guide the Group's management and business. The Board has adopted a set of Corporate Governance Guidelines to assist in the exercise of its responsibilities. The Corporate Governance Guidelines are published on ESHL's website, www.endurance.bm, under Investors, Corporate Governance. The Board of Directors, its committees and the senior executives of the Group have incorporated various levels of governance and reviews to ensure that the Group's Enterprise Risk Management ("ERM") framework and best practices are implemented properly to meet its various regulatory and corporate requirements.

### Item 2.a. Parent Board and Senior Executives

# Endurance Specialty Holdings Ltd. (Group)

ESHL's Board of Directors as at December 31, 2016 consisted of 14 directors. The directors as at December 31, 2016 were as follows:

- John R. Charman, Chairman of the Board
- William H. Bolinder, Lead Director
- John T. Baily
- Norman Barham
- Galen R. Barnes
- Philip M. Butterfield
- Steven W. Carlsen, PhD
- Morgan W. Davis
- Susan S. Fleming, PhD
- Nicholas C. Marsh
- William J. Raver
- Scott D. Moore
- Robert A. Spass
- Ian Winchester

Information regarding the background and expertise of each Director can be found in ESHL's 2016 Definitive Proxy Statement filed with the Securities Exchange Commission on Form DEF 14A (the "Proxy Statement"), under *Governance, Proposal No. 1* - *Nominees for Director, pages 7 - 12.* The Proxy Statement is published on our website.

The Group has seven Senior Executives as follows:

- John R. Charman, Chief Executive Officer
- John V, Del Col, General Counsel and Executive Vice President
- Christopher B. Gallagher, Chief Risk Office and Group Actuary
- Brian Goshen, Chief Administrative Officer
- John A. Kuhn, Chief Executive Officer, Global Insurance
- Michael J. McGuire, Chief Financial Officer
- Stephen H. R. Young, Chief Executive Officer, Global Reinsurance

### Endurance Specialty Insurance Ltd.

ESIL's Board of Directors consisted of three members as at December 31, 2016, two of which were members of the Group's Board and one from the Senior Executives of the Group and ESIL. The directors as at December 31, 2016 were:

- John R. Charman
- William H. Bolinder
- John V. Del Col

The Senior Executives of ESIL are the same as those listed above for the Group.



# Item 2.a.(i) Structure, Roles, and Responsibilities

The Board of Directors and its committees and the membership of each committee (with the chair of each committee in bold) as at December 31, 2016 is noted as follows:



Details on the responsibilities of the Group's Board of Directors and its leadership structure are found in our Proxy Statement, *Governance section, subsection - Board Responsibilities and Leadership Structure, pages 12-13.* A description of the Board's various standing committees as well as a table of each Directors membership on these committees is found with our Proxy Statement, *Governance, subsection - Committees of the Board of Directors, pages 16-18.* 

Various operational and corporate risk governance responsibilities of the ESHL Board have been delegated to a Board Committee as defined within the respective Committee charters. Typical responsibilities include ensuring that each significant operational area maintains appropriate policies and procedures, and that these policies and procedures are reviewed on at least an annual basis. In addition, the Audit Committee Charter empowers the committee to review any accounting and internal control policies and procedures within the Group. Governance activities of the Board are documented within Board minutes, drafted and maintained in accordance with applicable law.

The structure of the Group's senior executives is illustrated in the organizational chart below:



### Item 2.a.(ii) Remuneration Policies and Performance-Based Criteria

The Group's Board of Directors compensation is outlined within the section labeled 'Compensation of Directors' on pages 22 - 23 of the Proxy Statement.

The Compensation and Performance based criteria for the Senior Executives of the Group and ESIL consists of four principal elements of compensation: base salary, annual incentive compensation, long-term incentive compensation, and employee benefits/ other compensation. Base salary is the guaranteed element of the Group's compensation structure and is paid to its employees for ongoing performance throughout the year. The Group's annual incentive compensation program supports the Group's strategy by linking a significant portion of its employees' total compensation to the achievement of critical business goals on an annual basis. All of the Group's employees, (other than John Charman, the Group's Chairman and Chief Executive Officer), are eligible to earn annual incentive compensation.



The Compensation Committee believes the inclusion of long-term incentive compensation in the Group's compensation structure fosters the appropriate perspective in management, given that the ultimate profitability of the insurance or reinsurance underwritten by the Group may not be fully known for years. In addition, the Compensation Committee seeks to align the interests of the Group's employees with the Group's shareholders to the greatest extent practicable. Finally, long-term incentive compensation, which potentially is forfeited in the event of the departure of an employee from the Group, has the ability to retain valuable executive talent within the organization. Each of the Senior Executive Officers (other than Mr. Charman) is eligible to earn long-term incentive compensation.

The Group offers a core set of employee benefits in order to provide its employees with a reasonable level of financial support in the event of illness or injury and enhance productivity and job satisfaction through programs that focus on employees' health and well-being. The benefits provided are similar for all of the Group's employees, subject to variations as a result of local market practices. The Group's basic benefits include medical, dental and vision coverage, disability insurance and life insurance. The Group also offers all employees the opportunity to participate in the Group's defined contribution retirement savings plans.

### Item 2.a.(iii) Supplementary Pension and/or Early Retirement Schemes

The Group does not have any supplementary pension programs or early retirement schemes for any of the members of its Board of Directors nor any of the senior executives.

### Item 2.a.(iv) Shareholder Controllers and Material Transactions

The Group does not have any shareholder controllers.

The Group did not have any material transactions in the reporting period with persons who exercise significant influence or senior executives other than those associated with the compensation arrangements previously disclosed.

During 2016, subsidiaries of two of the Group's top ten shareholders have provided services to the Group.

Fidelity Institutional Asset Management, a subsidiary of FMR, LLC ("Fidelity"), provides investment management services to the Group. Fidelity and its affiliates previously owned greater than 5% of ESHL's ordinary shares outstanding and was considered a related party. At December 31, 2016 Fidelity and its affiliates were no longer considered a related party as Fidelity's share ownership was less than 5%.

Since 2002, subsidiaries of BlackRock Inc. ("BlackRock") have provided the Group and certain of its subsidiaries with various investment management, investment accounting and risk analysis services. BlackRock owned approximately 4.9 million or 7.3% of ESHL' ordinary shares outstanding at December 31, 2016 and were therefore considered a related party.

### Item 2.b. Fitness & Propriety

# Item 2.b.(i) Parent Board and Senior Executives

The Board of Directors' Nominating and Corporate Governance Committee oversees the process utilized by the Group inclusive of ESIL in assessing the fitness and propriety of a member of its Board. The Proxy Statement outlines the process for Director nominations. (See Proxy Statement, *Governance section, subsection Director Nominee Process, pages 18-19*).

Similarly the Board of Directors applies the same concepts and ideologies in evaluating the fitness and propriety of the Senior Executives. Potential candidates are sought who exhibit the same personal characteristics and attributes as noted for Board of Directors nominees.

# Item 2.b.(ii) Professional Qualifications

The professional qualifications of the members of our Board of Directors, and our Senior Executives to carry out their duties are noted in the Proxy Statement, under *Governance*, *Proposal No. 1 - Director Qualifications*, *pages 19-20*; and within *Part III*, *Item 10*, of the 2016 Form 10-K.



# Item 2.c. Risk Management and Solvency Self-Assessment

Our ERM framework is rooted in our risk appetite and a system of governance with responsibilities for identifying, managing, monitoring and taking risk. Our risk appetite, as authorized by our Board of Directors, represents the risk that we are willing to accept. We employ a system of quantitative risk limits of our key risks both on an aggregated and stand-alone basis to provide transparency and understanding of our risk profile. To support our governance framework, we have developed and documented risk policies that articulate the roles and responsibilities for risk management throughout the organization, including assigning key risks and associated controls to our various governance committees.

On a group basis, we monitor our:

- Capital position relative to internal requirements, as measured by our economic capital model, and the requirements of our regulators and rating agencies;
- Underwriting risk exposure relative to limits for losses arising from Catastrophic Natural Peril and Man Made events;
- Reserve Risk though our exposure to medium and long tailed lines of business;
- Investment risk through a system of limits incorporating exposure to asset class, credit rating, duration and currency;
- Liquidity by stressing cash outflow scenarios relative to available cash and cash equivalents and other forms of liquidity; and
- Counterparty exposure nominally and to loss scenarios for ceded reinsurance and for non-reinsurance counterparties.

We continuously monitor adherence to our risk tolerances and report back to the Board Risk Committee each quarter.

The Risk Team manages the Group's risk register, which is a detailed repository of the Group's key risks and controls. The risk register assists in our objective to identify, assess, measure, monitor and manage risks. This is achieved through the following actions:

- Reviewing key strategies and objectives;
- Establishing risk owners and developing a risk universe;
- Ranking risks already known to us and identifying any new or emerging risks;
- Prioritizing and evaluating each risk (by assessing likelihood and impact);
- Reviewing and rating mitigating controls on their effectiveness;
- Reporting residual risks outside of appetite to the Executive Team and the Risk Committee of the Board each quarter;
- Monitoring risks and controls on an ongoing basis.

Consistent with the three lines of defense model of risk management, the identification, monitoring and management of individual risks are performed primarily by the business units themselves. The materiality of risks is assessed and regularly discussed with management. Additionally, management tracks risks at an entity level through accumulation reports, risk register reports, and any risk metrics that may signal possible issues that may be present. Any exceptions in these reports are discussed between management and business units and action plans are devised for any needed remediation to reduce or prevent risks.

The Group conducts its Own Risk & Solvency Assessment ("ORSA") each year to assist the Board in making strategic decisions. The ORSA process allows us to assess the current and potential future risks facing the Group to better understand our risk profile and to ensure that the Group is operating within its risk profile. The ORSA also informs the Executive Team and the Board on the level of capital resources needed to support the business plan. The Bermuda Solvency Capital Requirement ("BSCR"), which encompasses the primary risk exposure areas as stated above, provides a risk-based capital tool in determining appropriate levels of capitalization. The BSCR employs a standard mathematical model that correlates the risk underwritten by the Group to the capital that is dedicated to our business. The framework that has been developed applies a standard measurement format to the risk associated with our assets, liabilities and premiums, including a formula to take account of catastrophe risk exposure.

The Group's ORSA process starts with the assessment of the risk appetite framework as it relates to the business strategy of the Group. This risk appetite framework provides the structure of how the Group evaluates risk from the entity level down to the individual businesses. Risk metrics support the risk appetite framework in evaluating risk exposure, and guide day-to-day decision making.



The current financial statement and financial forecast of the Group is analysed in relation to the risk appetite and the strategic plan. This step is critical in the Group's understanding of where the business is headed and how the risk profile of the Group can change in the medium term. This enables the Group to assess the current risk profile, and the health of the capital position in relation to this risk profile. The Group relies on the risk ranking provided by the BSCR to gauge the capital needs of the current risk profile and to ensure consistency with the business plan. This view of the risk profile is augmented with the assessment of key operational risk profiles and discussions of emerging risks that may impact the ongoing business.

Armed with the knowledge of the current risk profile, current and future solvency assessments are performed and compared against the Group's own view of adequate capital and regulatory capital. As the financial forecast is subject to a number of external and internal risks that may prevent the business from achieving its stated objectives, the base financial forecast undergoes a number of stress tests that may impact the solvency position, including a reverse stress test.

Headed by the Chief Risk Officer and Group Actuary, the Risk Function is responsible for conducting the annual ORSA process. The Risk Function works with the Compliance team and other operational functions to monitor changes in the global operating environment, regulatory requirements, and marketplace that could impact risk management practices and to assess the effectiveness of the risk management practices, policies and procedures.

The Board Risk Committee is informed of the capital at risk and any changes to our regulatory capital, and rating agency capital, each quarter. This ensures that the Committee continues to have a sound working knowledge of the BSCR formula, and the rating agency models, including their strengths and weaknesses. The annual process is culminated in the preparation of the Group Solvency Self-Assessment ("GSSA"), in which the various ORSA processes and results are presented to the Executive Team and the Board Risk Committee for appropriate challenge and approval. Once approved, the GSSA report is submitted to the BMA for supervisory review.

### Item 2.d. & 2.d.(i). Internal Controls

The Group operates an internal control system in accordance with its 'three lines of defense' model of internal control. Specifically:

- Operational Management Controls, being those operated within core business functions where risk is owned and managed (the first line of defense);
- A Risk Management Function and a Compliance Function, which monitor and facilitate the implementation of effective
  risk management and control practices and provides assistance and guidance to the first line of defense in reporting
  adequate risk information through the Group's operations (the second line of defense); and
- An (Internal) Audit Function, which provides assurance to the Group's Board as to the effectiveness of the first and second lines of defense through a risk-based program of testing, quality assurance, and assessment (the third line of defense).

The controls operated in the Group combine preventative controls and detection controls, designed to ensure that the Group operates within its stated risk appetites and tolerances.

The Group's internal control framework is overseen by the Group's Audit Committee. Further details on the Audit Committee's oversight of the Group's internal controls can be found on *page* 7 of the Audit Committee charter which is published on our website under Investors, Corporate Governance.

Additionally, the Group evaluates the effectiveness of the Group's disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) as of the end of the period covered by this report. Based upon such evaluation, the Group's Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of such period, the Group's disclosure controls and procedures are effective in recording, processing, summarizing and reporting, on a timely basis, the information required to be disclosed by the Group in the reports that it files or submits under the Securities Exchange Act of 1934, as amended.



# Item 2.d.(ii) Compliance Function

The compliance function of the Group is overseen by a designated Compliance Officer. The Compliance Officer's role is to (a) act as an advisor to the Board of Directors, the Chief Executive Officer and the Risk Management Committee of senior management on matters relating to compliance and (b) monitor and report on the results of the compliance/ethics efforts of the Group to the Board of Directors, the Chief Executive Office and the Risk Management Committee.

The Compliance Function exists within the Group in order to secure, inter alia, the following objectives, as set out in the Compliance Policy and Procedures:

- To advise the Board on compliance with all relevant regulations and legislation;
- To assess the impact on the Group of material changes in the legal or regulatory environment;
- To facilitate the identification, assessment and mitigation of compliance and regulatory risk;
- To oversee and monitor compliance with regulatory requirements by the Group; and
- To produce and implement a plan to achieve the objectives with which the Compliance Function is charged.

In order to achieve the objectives set out above the Compliance Function operates (alongside the Risk Function) as part of the Group's second line of defense and reports at least quarterly to the Group's Board on its operations and activities. The activities of the Compliance Function are divided into the following strands of activity:

- Business advisory: ensuring that the Board, senior management, and staff of the Group are aware of the obligations and requirements imposed on them by the applicable regulatory regimes.
- Compliance monitoring: providing regular and prompt identification and assessment of compliance risk and the day-to-day operation of compliance tools, policies and procedures.
- Regulatory affairs: managing the relationship of the Group with its regulators.
- Complaints handling: administering and operating the complaints handling process for the Group on a day-to-day basis.
- Reporting on all of the above strands of activity to the Group's Board.

Supplementing the Compliance Officer's role are the Group's regulatory and operational compliance functions. The Regulatory Compliance function is charged with ensuring compliance within each of the jurisdictions the Group operates in. For each regulatory jurisdiction, the Chief Financial Officer, the General Counsel, or their respective delegates with responsibility for the pertinent geographic location, continually monitor the regulatory environment for requirements that may impact the Group. In the event of a new regulatory requirement being proposed, and depending upon the underlying nature of the regulatory requirement, all filings may be managed at the local level or, alternatively, the Chief Financial Officer and General Counsel may establish a dedicated project team at the corporate level to which the responsibility of creating and submitting the filing is delegated. The project team may include, but not be limited to specialists within the Finance, Legal, Internal Audit and Risk Management functions. As required, the Legal function drafts the necessary Group policies and procedures in accordance with the requirements of applicable laws and regulations. The Legal function is further charged with the responsibility to investigate and resolve all issues of noncompliance.

Operational Compliance is monitored and reported through the combined actions of the Internal Audit, Corporate Underwriting and Claims functions. The responsibilities of Internal Audit and its role in operational compliance are explained below in *Item* 2.e. - *Internal Audit*.

Corporate Underwriting is responsible for ensuring that all underwriting procedures/ guidelines related to the product line are followed, that business written is within an underwriter's authorized limits that a robust peer review process is followed and that pricing adequately compensates for the exposures detailed within the contract terms. Corporate Underwriting also performs operational and process audits on both the insurance and the reinsurance book of business. Underwriting audit reports provide an assessment of the overall effectiveness of the business unit being audited and recommends process improvements. The compliance component of the Claims function utilizes peer reviews to ensure the overall quality of the claims management process. Claims reviews include but are not limited to compliance with the claims operating guidelines, the decision making process, the adequacy of reserves, and the tracking and managing of recoveries.



### Item 2.e. Internal Audit

The Internal Audit's (IA) function purpose is to help the Board and Executive Management to protect the assets, reputation and sustainability of the Group by challenging the effectiveness of the framework of controls which enable risk to be assessed and managed. IA assists the Group in accomplishing its objectives by bringing a systematic and disciplined approach to evaluate and improve the effectiveness of the organization's governance, risk management and internal control. The internal audit activity's responsibilities are defined by the Audit Committee as part of their oversight role.

At least annually, the Chief Audit Executive will submit to Executive Management and the Audit Committee an internal audit plan for review and approval. The internal audit plan will consist of a schedule as well as budget and resource requirements for the next fiscal/calendar year. The internal audit plan will be developed based on a prioritization of the audit universe using a risk-based methodology, including input of senior management and the Audit Committee. The Chief Audit Executive will review and adjust the plan, as necessary, in response to changes in the organization's business, risks, operations, programs, systems, and controls. Any significant deviation from the approved internal audit plan will be communicated to senior management and the Audit Committee through periodic activity reports.

The Chief Audit Executive or designee following the conclusion of each internal audit engagement will produce a written report that is distributed as appropriate. Internal audit results will also be communicated to the Audit Committee.

The internal audit report will include management's response and corrective action taken or to be taken in regard to the specific findings and recommendations. Management's response will include a timetable for anticipated completion of action to be taken and an explanation for any corrective action that will not be implemented. The internal audit activity will be responsible for appropriate follow-up on engagement findings and recommendations. All findings will remain in an open issues file until cleared.

The Chief Audit Executive will periodically report to Executive management and the Audit Committee on the internal audit activity's purpose, authority, and responsibility, as well as performance relative to its plan.

The internal audit activity remains free from interference by any element in the organization, including matters of audit selection, scope, procedures, frequency, timing, or report content to permit maintenance of a necessary independent and objective mental attitude.

Internal auditors have no direct operational responsibility or authority over any of the activities audited. Accordingly, they do not implement internal controls, develop procedures, install systems, prepare records, or engage in any other activity that may impair an internal auditor's judgment. Internal auditors will make a balanced assessment of all the relevant circumstances and not be unduly influenced by their own interests or by others in forming judgments. Internal auditors will exhibit the highest level of professional objectivity in gathering, evaluating and communicating information about the activity or processes being examined.

The Chief Audit Executive will confirm to the board, at least annually, the organizational independence of the internal audit activity.

### Item 2.f. Actuarial Function

The Actuarial Functions at Endurance operate in various segments of the organization. The Group Chief Risk Officer and Group Actuary are responsible for the oversight of these functions with the support of the Chief Reserving Actuary, Chief Pricing Actuaries for the two major business segments, and the Ceded Reinsurance Officer. Actuarial Functions are provided with the necessary authority to carry out their roles by the Board of the Group and are operationally independent of the Group's other Key Functions.

The Reserving actuaries review the Group's loss and loss expense reserves on a quarterly basis for both current and prior accident years using the most current claims data. The Group uses multiple methods, supplemented with its own actuarial and professional judgment, to establish its best estimate of loss and loss expense reserves. The estimate of the reserve for losses and loss expenses is reviewed each quarter by the Group's Loss Reserve Committee, consisting of the Group's Chief Executive Officer, Chief Financial Officer, Chief Risk Officer and Group Actuary, Chief Reserving Actuary, General Counsel and representatives of various disciplines from within the Group, such as Underwriting, Claims, Actuarial Pricing and Legal.

The Reserving analysis for the Group's business units uses data from the claims and underwriting data systems. Data entry into the claims and underwriting applications is subject to peer review and quality checks. Upon receipt of the data, Actuarial will



perform reasonability checks. The Actuarial reserving function performs the quarterly reserving analysis, using approved reserving techniques, by reserving segment. This is then consolidated within the quarterly Loss Reserve Study. Each quarter a reserving memo documents the underlying assumptions, the quantitative analysis performed, and conclusions.

Reserve estimates are adjusted for any ceded reserves, which generally are estimated based on the underlying characteristics of the ceded treaty terms.

Each quarter an internal peer review is performed of the loss reserve estimates to determine whether they reasonably represent the contractual liabilities to which the Group is exposed. The nature and findings of the peer review are documented within a memo. To confirm that the approved reserves have been booked correctly to the general ledger, the loss reserve study is reconciled back to the general ledger.

All reserve estimates are presented to the Board for review and approval on a quarterly basis.

Pricing analysis at the business unit level is overseen by the respective CEOs of Global Insurance and Reinsurance who are ultimately responsible for ensuring that only business that is attractively priced relative to the risks for which the Group is contractually liable for, are pursued and ultimately bound.

To achieve this, in-house actuarial pricing models have been developed, by line of business, to provide a standardized means by which submissions can be consistently and objectively rated. All models require peer review and user testing as part of the standard pricing model development process. Prior to deployment within the business, all models require sign-off by the relevant lead actuary. Guidelines have been developed and disseminated identifying the triggering premium thresholds (by line of business) at which peer reviews are required. Authority limits by individual peer reviewer are also specified in the guidelines.

As part of the monthly and quarterly management reporting processes, rate changes and profitability by line of business is monitored to determine the adequacy of the pricing for those risks for which the Group is contractually liable. On a quarterly basis, the rate monitoring, pricing rollups are presented to the both the Management and Board Risk Committees.

The purchase of ceded reinsurance is coordinated by the Ceded Reinsurance Officer who works with the business and various functional areas to determine coverage needs. An appropriate reinsurance structure is developed and the submission is built to present to market. The Ceded Reinsurance Officer ensures that the data contained within the submission is both accurate and that the narrative outlining the business' strategy is relevant. All draft contracts undergo a Legal review. The reinsurance also undergoes a risk transfer analysis based on final terms and conditions. All purchases are made through a pre-approved counterparty panel with the constituents selected on the basis of their financial strength rating and other background criteria. In the event of credit downgrades, approved counterparties are removed from the panel. Ceded Reinsurance formally advises the Claims and Finance functions of all in force ceded reinsurance treaties to ensure that appropriate recoveries are obtained and reinsurance cessions properly recorded.

### Item 2.g. Outsourcing

# Item 2.g.(i) Outsourcing Policy

The Group has established standards, processes, roles and responsibilities for our arrangements of services to be provided by unaffiliated third parties ("outsourcers"). Outsourcing arrangements are supported by individual contracts and/or service level agreements ("SLA's"). Before an outsourcing arrangement is entered into, the Group assesses the impact of the proposed arrangement, including reviewing the qualifications of the service provider. For all material outsourcing arrangements based on the size and criticality of service, the Group applies the following due diligence and selection criteria.

The Group's outsourcing due diligence includes three main components:

- Formal reviews of the proposed outsourcing arrangements by the appropriate internal departments, including Legal and Procurement.
- Request For Proposal ("RFP") requirements provided that single source procurement may be permitted with the approval of Legal and Procurement.
- Reviews by requester and the key management personnel to ensure that no conflicts of interest exist in engaging the outsourcer.



The selection criteria process should be agreed in advance by the requester and other reviewing parties (Legal, Procurement, IT) and should consider the following factors, among others:

- demonstrated quality (financial and technical abilities);
- specialized knowledge and resources;
- control framework;
- conflicts of interest;
- value-add services as differentiators;
- long-term viability and pricing;
- availability of an adequate Business Continuity Plan;
- risks from outsourcing and mitigation.

Outsourcing arrangements that have cleared due diligence and met the appropriate selection criteria are reviewed to determine if an RFP is applicable. Where an RFP process is deemed appropriate, a reasonable number of competitive bids should be obtained to ensure quality services are being received at an appropriate price.

For any proposed outsourcing arrangement not subject to an RFP process, the requester must provide formal justification for single source procurement and obtain approval from Legal and Procurement.

In all outsourcing situations where outsourcers will access the Group's non-public information and/or systems, outsourcers will be required to sign a non-disclosure agreement.

The Group has defined key management personnel within its members that are authorized to approve an outsourcing arrangement should the arrangement satisfy the due diligence and selection criteria. The key management personnel are prescribed in the Group's "Authorized Approvers" policy document and include the requirements for adequate specifications for the services to be entered into and a general ledger account and activity code where appropriate.

The major service arrangements the Group has under its outsourcing policy are with BlackRock Inc., Clearwater Analytics and Computer Sciences Corporation. Blackrock, Inc. provides the Group with various investment management and risk analysis services, while Clearwater Analytics provides investment accounting services. Computer Sciences Corporation provides various information technology support services.

### Item 2.g.(ii) Intra-group outsourcing

The Group has various intra-group reinsurance, loans, and other arrangements amongst its members. These arrangements are overseen by the Group's Intercompany Contract Governance Committee ("ICGC"). The ICGC establishes, maintains, and authorizes intercompany agreements and includes members from the Finance, Legal, Tax and Underwriting departments. It meets at least twice a year and more often as necessary to review specific transactions.

The ICGC has established the following key controls:

- All agreements and material modifications are reviewed and agreed by the ICGC. Approval is then obtained from the Chief Financial Officer and General Counsel.
- Communication of agreements and material changes is made to the CEO and the Executive Team.

All intra-group outsourcing functions are also reviewed by the Audit Committee of the Board of Directors. Additionally the Group has an intra-group administrative services agreement amongst its entities. The primary services agreements are a consolidated tax sharing agreement amongst its US Holding company and its various US entities; and an administrative services agreement which allows for the provision of certain administrative services between and among the wholly-owned entities of the Group, including, but not limited to: general management; finance-related services; information technology; and facilities and equipment.



### Part 3. Risk Profile

The Group views the components of its risk profile of the Group as a whole rather than an aggregate of the risks of each member of the Group. As a result the Group has developed and established a profile which is reflective of the essence of the Group. The risk profile categories have been designed based upon the commonality of those used by the various regulatory and rating agencies. There are five primary categories within which Endurance has grouped their risk exposures.

### Item 3.a. Material Risk Exposures

The six primary risk profile exposure categories developed by the Group are:

• Underwriting Risk: Underwriting Risk encompasses exposures derived from underwriting new or renewal (re)insurance business including the management of the concentration (aggregation) of these exposures within and across business units. The primary risks underlying Premium Risk include loss volatility, exposure volatility, rate level volatility, expense volatility, parameter uncertainty, risks of inflation and changes in foreign exchange on the underwriting portfolio and the correlation of the business lines. Premium Risk broadly encompasses the risks of estimation error and estimation bias throughout our pricing and reserving activities. Pricing-related risks include misestimation arising from incorrect, inadequate or inappropriate data; incorrect or inappropriate application or operation of models; incorrect expert actuarial judgment; incorrect parameterisation of models; and incorrect reporting or interpretation of results.

The Risk Management Committee is responsible for overseeing the design and implementation of an underwriting control environment to ensure the integrity of the underwriting process and risk assessment and assumption framework is maintained. Risk tolerances are set, aligning underwriting and business strategy with appropriate levels of risk assumption. These risk tolerances are promulgated down to the individual business units and ultimately individual underwriters through their delegated authority. The compliance to these risk tolerances are tracked through various reporting, including projections of expected premiums and claims, rate change reports, and renewal rate reports. Deviations of these projections against those expected are identified, and where required, corrective actions are set forth.

The Group utilizes the solvency capital requirement to assess the exposure to the risk, as the BSCR guides the quantification of underwriting risk.

- Reserving Risk: Reserving Risk includes those risks listed for Underwriting Risk but also includes misestimation arising from latent sources of risk and delays in the emergence of loss information. For the purposes of this categorisation, both model related sources of risk and information emergence related sources of risk are conflated into the Reserving elements of Actuarial Risk. Reserving Risk therefore encompasses all aspects of the loss reserve estimation process in terms of the potential for an adverse change in the valuation of our (re)insurance liabilities including the impact of adverse events and exogenous developments, inflation, foreign exchange and their correlating effects across accident and calendar years.
- Catastrophe ("Cat") Risk: Cat Risks are split between natural catastrophes and manmade events, e.g., industrial accident, marine, aviation, terrorism, casualty, economic/financial events. The Group's major natural Cat exposures are US hurricane, California earthquake, Pacific Northwest earthquake, US tornado/hail, European wind, UK flood, Japan wind, Japan earthquake and Australian earthquake. Modelled Cat risks take into account extreme events and the concentration/aggregation of risks. We also consider model inadequacy and error for modelled risks as well as unmodelled regions and perils. Catastrophe risk also includes the premiums and expenses associated with the writing of the business.
- Investment Risk: Investment Risk includes all facets of risk related to the assets we hold. These are traditionally split into Market Risks (interest rate movements, bond spread volatility, equity and alternative investments price volatility), Credit Risks (bond default, i.e., other than third party reinsurance), Liquidity Risk, Foreign Exchange Risk and Concentration Risk

The Group monitors and manages its market risks by adhering to its Investment Policy. Limits on asset types, economic sector exposure, industry exposure and individual security exposure are placed on the Group's investment portfolio and monitored on an ongoing basis.



The Group assesses liquidity needs, allowing for encumbered assets and the restricted fungibility of assets. The Group's ERM perspective is to provide sufficient liquidity to satisfy the needs of business partners and clients. Limited liquidity analyses are performed regularly with a full analysis performed annually to assess whether the Group is in danger of failing its objectives. In this analysis, the Group analyses cash outflow scenarios of varying degrees of severity relative to available cash and cash equivalents and other forms of liquidity. Any event which might change the outcome of these analyses (such as a large catastrophic loss or significant asset encumbrance) would cause the analysis to be re-run.

• *Credit (Counterparty) Risk*: Credit Risk arises from exposure to default by a third party to whom the Group has exposure. Primarily these parties would comprise reinsurers to whom the Group has ceded or retroceded business, parties holding premiums due to the Group, banks providing letters of credit to the Group's benefit and derivative counterparties.

The Ceded Reinsurance function performs the monitoring of the ceded reinsurance portfolio. This includes the tracking and identification of triggering events, the monitoring of results, and ensuring that all counterparty accounts remain within the concentration tolerances of the ceded portfolio. These findings are reported via a series of reports updated or verified on a quarterly basis. The treaty structure once entered into the underlying underwriting system is reviewed by the Ceded Reinsurance Officer.

• Operational Risk: Operational Risk represents the risk of loss as a result of inadequate or failed internal processes, system failures, human error or external events. Operational risk includes, for example, employee or third party fraud, business interruptions, inaccurate processing of transactions, system failures, the loss of key employees without appropriate successor and non-compliance with reporting obligations. A typical list of these risks includes risks inherent in the operation of the Group, e.g., outsourcing risk, legal/litigation risk, and group/ intercompany credit risk, as well as less tangible risks such as strategic, reputational and unmodelled risks.

If not properly managed, operational risk can cause significant losses for the Group. It is virtually impossible to eliminate these risks entirely; therefore, the Group aims to limit its operational risk losses to an acceptable tolerance, recognizing the trade-off between the benefits and costs of risk mitigation.

The Group generally aims to minimize both the frequency and severity of operational risk losses to the extent practical. Critical to this approach is the Group's three lines of defense model, in particular the notion that all individuals at the Group are responsible for risk management activities.

These same risk exposure categories form the basis of the risk exposures utilized in our economic capital model risk profiles.

### Item 3.b. Risk Mitigation and Monitoring

Although in certain instances the Group may seek other methods to offset underwriting risks (e.g., crop price hedging), the Group's primary method of risk mitigation is the purchase of third party reinsurance or retrocession. We seek third party reinsurance, among other circumstances, to ensure our risk profile stays within our established risk tolerances, whether at an individual risk or aggregated risk level.

In addition to the Group's primary risk mitigation method as noted above, the Group has developed and implemented various risk policies and may also in certain instances perform additional reviews and analysis to quantify its risk exposures. The key risk policies of the Group are:

- Actuarial Risk Policy
- Ceded Reinsurance Risk Policy
- Enterprise Risk Policy
- Human Resources Risk Policy
- Information Technology Risk Policy
- Investment Risk Policy
- Legal Risk Policy
- Operational Risk Policy
- Outsourcing Risk Policy
- Underwriting Risk Policy



The Risk Committee of the Group's Board of Directors is charged with the responsibility of monitoring the Group's major risk exposures and the steps taken by senior management to monitor and control those exposures. Supporting the Risk Committee is the Risk Management Committee ("RMC") of senior management. The purpose of the RMC is to review, evaluate and, on certain matters, approve those aspects of the Group's operations and activities which have the potential to have an impact on its risk position, including but not limited to Underwriting, Ceded Reinsurance, Actuarial, Investment, Legal and Operational risks. In addition to these risks, the Committee reviews any risks identified from time to time by the Board of Directors or any enterprise risk assessment of the Group conducted by or on behalf of the Committee, the Group's Internal Audit Department or any third party, e.g., a rating agency. The RMC reports on these activities on a quarterly basis to the Board Risk Committee.

The Chief Risk Officer and Group Actuary chairs this Committee and the Chief Executive Officer, Chief Financial Officer, CEOs of Global Insurance and Reinsurance, Chief Administrative Officer, Chief Audit Executive and General Counsel form the membership of the RMC.

Through other management committees - investment, loss reserving, ceded reinsurance intercompany governance and disclosure, the Group monitors the other risk exposures of underwriting/reserving, investments, credit/counterparty, and operational risk. While the membership of these committees is that of senior management, they are subject to oversight by the Group's board of directors.

On a regular basis, the committees monitor the following items in relation to their respective risk exposures:

- Our capital position relative to our internal requirements and the requirements of our regulators and rating agencies;
- The full distribution of results from our Economic Capital Model ("ECM") and component tools thereof for the various categories of risk identified above;
- Stress scenarios for our investment portfolios against a variety of macro-economic conditions;
- Underwriting conditions for signs of emerging risks, market shifts;
- · Paid, case and IBNR loss development for signs of deterioration or indications of emerging trends; and
- Our reinsurance arrangements and panel of reinsurers.

Through periodic (quarterly, monthly) monitoring, Endurance manages both our capital and business plans to changes (anticipated and/or unanticipated) in both the internal and external environment. Plan to actual is updated on a quarterly basis and discussed quarterly with the respective management committees. The above analyses are reviewed by the CRO and, at a minimum, are presented to both the RMC and the Board Risk Committee.

Reviews and analysis are also performed at the business unit level. Analyses of capital allocations through quarterly profitability studies which highlight risk-adjusted capital deployed to the businesses and the associated returns, expected premium and profit relative to plan, and catastrophe PML usages relative to pre-determined tolerances are examples of some of the additional business unit level analysis. These reports are typically produced on a quarterly basis by the Finance, Risk Management Group and distributed to the RMC and Risk Committee of the Board of Directors.

Specific risk mitigation strategies with regards to the risk profile are as below:

• *Underwriting/Catastrophe/Reserving Risk*: The Group's primary method of risk mitigation is the purchase of third party reinsurance or retrocession. Third party reinsurance, among other activities, is utilized to ensure its risk profile stays within established risk tolerances, whether at an individual risk or aggregated risk level. The full details of the Ceded Reinsurance program (contracts) are maintained in the Group's Ceded Re Vault.

Additionally, to mitigate the risk from new product lines, the Group maintains an 'on-boarding' process prior to business being written. This process ensures the control framework of the new venture is aligned with the overarching risk tolerances, that it operates within all applicable legal and regulatory stipulations and that the new business will not lead to breaches in the overall tolerance levels. The Group also ensures pricing targets for the line of business are adequate relative to the contractual exposure, that the underwriting process design is appropriate and supported by the underwriting applications, and that the underwriting application interfaces with the core accounting systems.

Compliance with tolerance limits and the underwriting process (as defined within various underwriting guidelines and/or underwriter authorities and the peer review framework) is maintained through an active internal underwriting audit



program and the monitoring of actual business unit accumulation and peak underwriting risks relative to the tolerance targets. Overall underwriting strategy is reviewed on an on-going basis and adjusted where appropriate.

• Investment Risk: The Group maintains strict controls with regards to market risk. The risk is controlled through maximum shareholders' equity percentage drawdown limitations under both a stressed scenario of potential credit impairments and an environmental scenario analysis as required by the Investment Policy. The environmental scenarios stress the yield curve, sector spreads, and equity and hedge fund returns. The anticipated portfolio return under the defined scenarios must be within the limits set within the Investment Policy. Market and Investment risk are also controlled within the Investment Policy through maximum duration variances from the target portfolio duration and limitations on net currency exposure. External investment management activities are regulated by the Externally Managed Portfolio Guidelines. These guidelines permit the various investment managers to enter into derivative transactions to hedge risks, and in some cases to hedge risks associated with the aggregate investment portfolio.

The above analysis is collated and regularly presented to the Board. This analysis includes performance updates, how performance deviates from target (together with the attribution for the deviation), market developments, stress and scenario testing and, if appropriate, proposed amendments in the investment strategy.

Asset Liability Management Policy outlines the risk control framework as applied to the Investment, Finance Actuarial Pricing, Claims, Underwriting and Group Risk activities performed so that liquidity risk is effectively managed through identification, management and mitigation and is aligned with the overall Group's strategy (including the appropriate investment strategy and risk tolerance levels). As such, cash flow generated by payment of principal and interest, plus sale of government and agency holdings, exceeds projected liability cash flows as calculated over a three-year period by a set percentage.

In addition to the procedures outlined above, the Investment function continuously evaluates expected risks in the market.

- Credit (Counterparty) Risk: To ensure proper controls are in place to minimize the risk, the purchase of ceded reinsurance is coordinated by the Ceded Reinsurance Officer who works with the business and various functional areas to determine coverage needs, develop an appropriate reinsurance structure and build the submission to present to market. The Ceded Reinsurance Officer ensures that the data contained within the submission is both accurate and that the narrative outlining the business strategy is relevant. All draft contracts undergo a Legal review. The reinsurance also undergoes a risk transfer analysis based on final terms and conditions. All purchases are made through a pre-approved counterparty panel with the constituents selected on the basis of their financial strength rating (minimum A- rating required) and other background criteria. In the event of credit downgrades, approved counterparties are removed from the panel. Ceded Reinsurance formally advises the Claims and Finance functions of all in force ceded reinsurance treaties to ensure that appropriate recoveries are obtained and reinsurance cessions properly recorded.
- Operational Risk: The Group utilizes the three lines of defense model to guard against operational risks. This framework
  consists of the following:
  - a. As the first line of defense, the underwriters and functional employees (the "risk owners") are responsible for ensuring that the risk and control environment is established as part of day to day operations. This entails the risk owners regularly identifying the risks related to their area and ensuring that they are appropriately recorded within the Group's risk registers, along with the risks' perceived frequencies and severities. The risk owners are also responsible for reviewing and rating the effectiveness of the mitigating controls, as well as assisting in their remediation when necessary.
  - b. As the second line of defense, the Risk function is responsible for oversight of the identification, evaluation, mitigation, and reporting of the Group's risk universe. More specifically, the Risk function will establish and update the operational risk policy, oversee the operational risk management framework, maintain the risk registers, build tools to help the Group identify, measure, monitor, manage and report on operational risks, model operational risk by way of the Group's internal capital model, the rating agency models, and the relevant regulatory standard formula models, study the potential interaction of various operational risks and of operational risks with other risk categories (e.g. market risk), and developing key risk indicators and keeping the Board and the Risk & Compliance Committee informed as to the performance of the risk management framework.
  - c. As the third line of defense, the Internal Audit function provides for independent and objective assurance as to the effectiveness of the internal risk control framework.



In addition to the three lines of defense, the Risk & Compliance Management Committee also provides regular oversight of the management of operational risks, supporting the Risk function.

### Item 3.c. Material Risk Concentrations

The primary material risk exposure for the Group is insurance/underwriting risk. Insurance/underwriting risk incorporates those risks associated with premium, reserve and catastrophe risks. Premium risk broadly encompasses the risks of estimation error and estimation bias throughout our pricing and reserving activities. Reserving risk includes the same risks as those of premium risks with the addition of misestimation arising from latent sources of risk and delays in the emergence of loss information. Catastrophe risk includes the premiums and expenses surrounding the writing of business for both natural catastrophes and manmade events. The Group conducts annual risk assessments which review the current strategies for identifying and managing these risks. An objective of the risk assessment process is to highlight any increases in risk exposures as well as any deficiencies in the Group's strategies to address these risks. The results of these assessments are reviewed by the Risk Management Group. As of year-end 2016, the largest concentration of the Group's underwriting exposure arises out of natural catastrophe events, and more specifically, Florida hurricane. To minimize the exposure to such a concentration risk, the Group monitors and controls its catastrophe risk exposure through aggregate and occurrence catastrophe tolerances.

The secondary risk exposures areas, other than underwriting and catastrophe risk, by which the Group might be subject to concentration of risk would be investments and credit or counterparty risks. In order to minimize its subjectivity to investment concentration risk, the Group has designed its investment portfolio to diversify risks, including interest rate, credit, structure and equity risks. To ensure diversification and to avoid excessive aggregation of risks, the Group has placed limits on asset types, economic sector exposure, industry exposure and individual security exposure, which are monitored on an ongoing basis. The Finance Committee of the Board of Directors is charged with the responsibility to monitor the Group's compliance with the policies, guidelines and risk limits governing its investment portfolios. The weighted average credit rating of the Group's investment portfolio is AA as of year-end 2016, and the exposures due to investment concentration are within internal tolerances.

Credit or counterparty risk exposures other than those associated with investments, as noted above arise from exposure to default by a third party. The Group is subject to credit risk with respect to our reinsurers because the transfer of risk to a reinsurer does not relieve us of our liability to our clients. If our reinsurers experience financial difficulties, they may be unable to pay us. In addition, reinsurers may be unwilling to pay us, even though they are able to do so. The failure of one or more of our reinsurers to honor their obligations to us in a timely fashion would impact our cash flow and reduce our net income and, depending upon the amount of reinsurance we have purchased, could cause us to incur a significant loss. When reinsurance or retrocessional reinsurance is purchased, the Group requires its reinsurers to have strong financial strength ratings. The Group evaluates the financial condition of its reinsurers and monitors its concentration of credit risk on an ongoing basis. The Group manages its credit risk in its reinsurance relationships by transacting with reinsurers that it considers financially sound and, if necessary, may hold collateral in the form of cash, trust accounts and/or irrevocable letters of credit. This collateral can be drawn on for amounts that remain unpaid beyond specified time periods on an individual reinsurer basis. As noted above in *Item 3. a. - Material Risks*, the Group has developed and implemented a Ceded Reinsurance Policy to minimize potential credit risks associated with third party reinsurance. Additionally, the Group's RMC regularly reviews and monitors potential impacts of credit or counterparty defaults. As of year-end 2016, the largest counterparty risk exposure comes in the form of ceded reinsurance, and exposure to each reinsurer is monitored and controlled to be within tolerances.

### Item 3.d. Asset Investing

The Group's investment strategy is described under *Part I, Item 1. Business Performance, Investments, page 13* of our 2016 Form 10-K. In managing the Group's invested and assets, the Group applies the Investment Philosophy and Principles within our investment policy. Our Investment Philosophy and Principles state that all investment decisions will be made within the context of their impact on shareholder value and in accordance with the Prudent Person Principle. The Finance Committee ("FC") of the Board of Directors is charged with the oversight and governance of the Group's investment strategies, policies and guidelines, and limits (see the Finance Committee Charter published in the Corporate Governance section of our website).

### Item 3.e. Stress Testing and Sensitivity

The Group performs various stress testing and sensitivity analysis on its risk exposures to fulfill various risk performance needs. The purpose for these vary from internal business segment performance and risks, to the two key external purposes of regulatory



reporting and rating agency capital management requirements. The Group's risk exposures (noted above in *item 3.a.*) are stressed and subjected to sensitivity analysis.

The Group uses a number of capital-at-risk models, which include volatility-scenario based measures, value-at-risk ("VaR") and credit impairment calculations to evaluate its Investment, Underwriting and Catastrophe portfolio risks. Detail of the Underwriting and Catastrophe portfolio VaR curves in terms of the distribution of losses for the Group are provided to the RMC and the Board of Directors on a quarterly basis. The same detail is provided of the Investment VaR to the Management Investment Committee and Finance Committee of the Board on a quarterly basis. As the Group is supervised by the Bermuda Monetary Authority ("BMA"), they are also required to meet stress testing and sensitivity minimums as prescribed by the BMA of a 1-in-250 year event occurrence at a 99.5% TVaR level.

The following lists some of the examples of stress and sensitivity that were conducted:

- Impact of various financial market scenarios
- Impact of variation of loss ratios
- Impact of adverse reserve development
- Impact of various catastrophe events at different occurrence return periods
- Impact of credit failures after a catastrophe event

The stress and sensitivity testing are developed using a wide range of assumptions about loss ratios, potential catastrophe events, economic environments, among other factors. As such, the scenarios presented do not represent a full range of possible outcomes, but this allows management to arrive at more comprehensive assessments of various risk exposures and overall strategy.

### Part 4. Solvency Valuation

The Group is supervised by the BMA (see *Item 1.b.* above) and is required to meet certain solvency requirements on a group basis. During 2016, the BMA achieved Solvency II regulatory equivalency with the European Union, and as such the BMA instituted a new solvency valuation basis or Economic Balance Sheet ("EBS") as a key component of its regulatory reporting requirements. Except where specifically noted by the BMA, assets and liabilities should be valued at fair value in line with generally accepted accounting principles ("GAAP") for EBS valuations. The BMA's EBS framework applies prudential filters to certain balance sheet classes and non-admits certain assets to form the basis for their solvency valuations.

### Item 4.a. Asset Valuations

For solvency valuation purposes, cash, cash equivalents, investments, and accrued income on investments are recorded on the same valuation basis as they are under GAAP in our financial statements reported in our 2016 Form 10-K. (*Notes to the Consolidated Financial Statements, Note 2 - Significant accounting policies, item d. - Investments, pages 121-122 and item e. - Cash and cash equivalents, page 123, and Note 4 - Investments, pages 130-137*).

Insurance premiums receivable (net of any allowance for bad debts) on a GAAP basis are analyzed to determine the amount of premiums actually due at the balance sheet date or currently due, versus those due in the future. The net amounts currently due are deemed to be received within one year and are recorded in the EBS at their GAAP values. The net amounts which have been deemed as not yet due are deducted from the premiums receivable asset and included in the valuation process noted below for determining the technical provisions.

Reinsurance balances recoverable represent monies due to the Group from third parties for insurance losses paid or unpaid by the Group on their behalf. Amounts recoverable from reinsurers are estimated in a manner consistent with the provisions of the reinsurance agreements and consistent with the establishment of the Group's reserve for losses and loss expenses. Reinsurance recoverables are segregated into those which are recoverable on paid losses and those which are based upon estimates or unpaid losses. Reinsurance recoverables on paid losses are deemed as more than likely to be received within the next fiscal year and are reported at their GAAP valuation in the EBS. Reinsurance recoverables on unpaid losses and estimates are included in the valuation process noted below for determining the technical provisions.



The insurance and reinsurance balances receivable on the GAAP balance sheet represent funds withheld by ceding reinsurers. The funds withheld relate to premiums, profit commissions, claims and/or funds advanced for claims. The receivables are analyzed to determine which amount if any are deemed as more than likely to be received in a period greater than one year. Amounts that are deemed as such are discounted using the BMA's prescribed discount rates for the reporting period. Differences between the original balance and the discounted values are deducted from insurance and reinsurance balances receivable and offset against the Group's statutory capital and surplus.

Prepaid reinsurance premiums and deferred acquisitions costs are considered as a component in determining the technical provisions in the EBS. Therefore these amounts in their entirety are deducted from the Group's total assets and included in the base amounts utilized to calculate the technical provisions as noted below in *Item 4.b.* 

The Group's remaining assets includes the value of its derivative instruments, balances due from investment sales, intangible assets, deferred tax assets, and other assets. Unless noted in other assets, fixed assets are not an admissible asset and are excluded from the EBS.

Derivative assets in the EBS are reported at the same valuation basis as they are under GAAP in the 2016 Form 10-K. (*Notes to the Consolidated Financial Statements, Note 2 - Significant accounting policies, item i. - Derivatives, page 123, and Note 9 - Derivatives, pages 160-162*).

Balances due from investment sales represent the net funds to be received from the sale of investments and are usually attributable to timing differences between sales dates and settlement dates which are typically 2-3 days. As such the reported value is the fair value measurement on a GAAP basis.

In general, goodwill and intangible assets are not considered admitted assets in the EBS. However, the BMA's EBS guidance does allow for intangible assets to be admitted as recognized if it is probable that the expected future economic benefits will flow to the insurer and that their value can be measured reliably. The assets must be separable, and there should be evidence of exchange transactions for the same or similar assets indicating they are saleable in the market place. If a fair value measurement of an intangible asset is not possible, then such an asset should be excluded. The Group has reviewed and analyzed the nature of the items included within its intangible asset balance and determined that the US state licenses at its US insurance entities and its Lloyds Syndicate capacity meet this criteria. The Group enlists the services of an independent third party to determine the economic values of these assets. The aggregate of the mid-point of the valuation ranges for each license is recognised and reported as an intangible asset in the EBS.

The Group's deferred tax assets ("DTAs") on a GAAP basis are reviewed and analysed within the following EBS criteria. DTAs are ascribed a positive value where it is probable that future taxable profit will be available against which the DTA can be utilised, taking into account any legal or regulatory requirements on the time limits relating to the carry-forward of unused tax losses or the carry-forward of unused tax credits. Should a DTA meet this criteria the actual value to be recognized is the aggregate of the deferred tax asset matched by future profits discounted to their net present value based upon the discount rates as published by the BMA.

Other assets include receivables and other recoverable balances from our weather risk management operations, rent deposits, current tax receivable, and other fixed assets. As with goodwill, prepayments or prepaid expenses are not admissible assets under the EBS basis and therefore are excluded. Weather assets, rent deposits and current tax receivables are deemed as readily realizable and therefore are valued and reported at their GAAP valuation basis with no applicable prudential filters for EBS reporting purposes. The Group's other fixed assets consist of a building, vehicles and a transportation lease which are wholly owned or leased by the Group and its subsidiaries. These assets are analyzed and valued to determine whether or not a readily realisable value exists.



### Item 4.b. Technical Provisions

General insurance business technical provisions are to reflect values based on best-estimate cash flows, adjusted to reflect the time value of money using a risk-free discount rate term structure. Under the BMA's EBS framework, general insurance business (non-life) technical provisions are comprised of three main components:

- Best estimate of premium provisions
- Best estimate of loss and loss expense provisions
- General Insurance business risk margin

Under the EBS regime, the best estimate of premium provisions reported is the EBS valuation of the gross and net unearned premium reserve ("UPR") on the GAAP balance sheet. The UPR is adjusted by the asset value (as noted above in *Item 4.a.*) of the prepaid reinsurance premiums and the deferred acquisition costs associated with those premiums. The deferred acquisition costs include the unearned ceding commissions from ceded reinsurance contracts. The UPR is additionally adjusted by premiums not yet due and the value of the premiums that are bound but not incepted ("BBNI"). BBNI premiums include advance premium payables associated with ceding arrangements. BBNI and premiums not yet due are discounted by the discount risk free rates as published by the BMA. The result is the best estimate of net premiums provisions which have been discounted at the BMA prescribed risk free rates.

The best estimate of the loss and loss expense provisions reported in the EBS reflect the probability-weighted average of future cash flows, discounted using the relevant risk-free interest rate term structure. The provisions consider the full potential range of possible outcomes, each weighted to reflect their respective probability of occurrence. The best estimate of recoverable amounts are calculated and shown separately.

The last component of the technical provision is the risk margin. The risk margin is intended to represent the uncertainty associated with the probability-weighted cash flows or the compensation the Group would require in order to bear the risk of holding additional funds to meet cash flows. The risk margin for the Group is calculated using the BMA's prescribed cost of capital approach. This approach calculates a cost of capital by applying a BMA prescribed factor against the enhanced capital requirement ("ECR") of the BSCR discounted over a 21 year period at the risk free discount rates as determined by the BMA.

The Group and ESIL's EBS technical provisions and risk margin as at December 31, 2016 were as follows:

		Group ESI		
		(U.S. dollars in thousands)		
Net Premium Provisions	\$	(353,442) \$	(361,904)	
Net Loss and Loss Expense Provisions		3,466,516	3,443,271	
Risk Margin		282,379	280,756	
Total General Business Insurance Technical Provisions	\$	3,395,453 \$	3,362,123	

# <u>Item 4.c. Reinsurance recoverables</u>

As noted above in *Item 3 b. Risk Mitigation and Monitoring*, the Group utilizes third party reinsurers as part of its underwriting risk management strategy, also discussed in our 2016 Form 10-K (*Underwriting Risk Management, pages 10-11*). Included as part of that strategy, the Group has established a Ceded Reinsurance Policy which provides governance over our ceded reinsurers and their selection.

The Group purchases quota share, facultative and excess of loss reinsurance across most Insurance lines of business. In the Reinsurance segment, the Group purchases proportional and excess of loss retrocessional coverage on the catastrophe line of business, and proportional coverage on the specialty line of business. The Group's U.S., U.K. and Bermuda insurance operating subsidiaries use proportional and excess reinsurance to protect larger limits on certain business written by the Insurance segment. Our agriculture Insurance line of business participates in a crop reinsurance program sponsored by the U.S. federal government



and utilizes third party reinsurance covers. Excess reinsurance coverage is often purchased in relation to the property Insurance line of business to protect against catastrophic events.

At December 31, 2016 and 2015, the Group had reinsurance recoverables of \$1,486.9 million and \$1,196.0 million, respectively, related to its ceded reinsurance agreements. The Group remains obligated for amounts ceded in the event that its reinsurers or retrocessionaires do not meet their obligations, except for amounts ceded to the U.S. federal government in the agriculture line of business. Accordingly, the Group has evaluated the reinsurers and retrocessionaires that are providing reinsurance and retrocessional protection and will continue to monitor the stability of its reinsurers and retrocessionaires. At December 31, 2016 and 2015, the Group held collateral of \$493.3 million and \$321.5 million, respectively, related to its ceded reinsurance agreements. The balance of losses recoverable at December 31, 2016 was distributed as follows based on the ratings of the reinsurers:

Rating	December 31, 2016		<b>December 31, 2015</b>	
		(U.S. dollars in thousands)		
U.S. Government sponsored program	\$	141,443	\$	234,596
A+ and above		889,814		458,255
A		397,691		476,184
A-		5,805		7,060
Not rated		52,165		19,875
Total	\$	1,486,918	\$	1,195,970

The balances reported in the table above are on a GAAP basis. The balances are discounted at the BMA prescribed risk free rates as noted above in *Item 4.b. Technical provisions* to determine their valuation on an EBS basis.

### Item 4.d. Other Liabilities Valuations

Insurance and Reinsurance balances payable and commissions, expenses, fees and taxes payable represent amounts due to insurers and reinsurers under current insurance contracts. The amounts payable include premiums, taxes, underwriting expenses, fees, taxes, and profit commissions. As noted in *Item 4.b.* above the amount of unearned ceding commission (or deferred ceding commission) plus advanced premiums payable are included in the calculation of the best estimate of premium provisions. The components of the Group's insurance and reinsurance payables are reviewed and analysed to determine which amounts if any are deemed as not readily realisable within the next fiscal year. Those amounts deemed as such are discounted at the risk free discounted rates as published by the BMA.

Loans and Notes Payable balances are comprised of Senior Notes that bear a rate of interest equal to 4.7% per annum. The 4.7% Senior Notes mature on October 15, 2022. Loans and Notes Payable balances are recorded at fair value in line with GAAP principles. In the EBS, the Group's 7% Senior Notes maturing in July 2034 are reported as eligible capital. See *Item 5.a.(ii) Eligible Capital by Tiers* below.

The Group's tax liabilities on a GAAP basis include current income tax and deferred tax liabilities. The values are reviewed and analyzed using the BMA's EBS guidance which states that current tax liabilities are measured at the amount expected to be paid to or recovered from the taxation authorities, using the tax rates that have been enacted or substantively enacted by the end of the reporting period and in conformity with our GAAP financial statements. Deferred tax liabilities are valued on the basis of the difference between the values ascribed to assets and liabilities recognised and valued in accordance with the EBS requirements and the values ascribed to assets and liabilities as recognized and valued for tax purposes.

Accounts Payable and Accrued Liabilities include accrued operating expenses, accrued interest expenses, accrued miscellaneous tax expenses, general accounts payable related to our weather risk management business, salary related payables and general other payables. The Group's payables are reviewed and analyzed to determine which amounts if any are deemed as not readily realizable within the next fiscal year. Those amounts deemed as such are discounted at the risk free discounted rates as published by the BMA. Those amounts deemed as a readily realizable within the next fiscal year are recorded at their GAAP value.

Sundry liabilities of the Group include derivative liabilities, investments pending settlement, and deposit liabilities for contracts which have assessed as not having risk transfer. Our derivative liabilities are valued in accordance with our GAAP financial



statements. See the 2016 Form 10-K, *Notes to the Consolidated Financial Statements, Note 2 - Significant accounting policies, item i. - Derivatives, page 123 and Note 9 - Derivatives, pages 159-162.* 

Investments pending settlement represent the net funds to be paid from the purchase of an investment and are usually attributable to timing differences between purchase and settlement dates which are typically 2-3 days. As such the reported value is the fair value measurement on a GAAP basis.

Our deposit liabilities are based upon insurance contracts which we have assessed as not transferring significant risk. Since these deposit liabilities are net reserves on these contracts, the reserves have been discounted using the risk free discount rates as provide by the BMA with their EBS valuation reflective of the discounted values.

# Part 5. Capital Management

ESHL itself is a holding company which relies primarily upon the dividends and other distributions from its various entities. As a result the Group proactively manages its capital base through the utilization of strong results, reinsurance and prudent risk management.

### Item 5.a. Eligible Capital

### Item 5.a.(i) Capital Management Policy

The Group's capital management policy is aimed at ensuring we maintain sufficient levels of risk based capital and financial flexibility as required by our clients, our various regulatory bodies, rating agencies, and our strategic business purposes. The Group assesses the various capital level requirements and internally establishes an appropriate minimum capital level that satisfies all. Incorporated within this assessment is the focus on retaining earnings to build capacity and reinvest in our business.

### Item 5.a.(ii) Eligible Capital by Tiers

The Group and ESIL's eligible capital as at December 31, 2016 is comprised of the following capital tiers as per the Bermuda Monetary Authority's classifications:

		Group	ESIL		
Tier	Description	Amount (in 000's)			
1 Basic	Total Tier 1	\$ 4,089,095 \$	3,893,754		
2 Basic		181,054	_		
2 Ancillary	7% Senior Notes (1)	326,532	<u> </u>		
	Total Tier 2	507,586			
	Total Eligible Capital	\$ 4,596,681 \$	3,893,754		

<sup>(1)</sup>The Group's 7.5% Senior notes were approved by the Bermuda Monetary Authority as Tier 2- Ancillary capital under the Insurance (Group Supervision) Rules 2011 for the transitional period ending January 1, 2024.

# Item 5.a.(iii) Eligible Capital by Tier for Regulatory Capital Levels

The Group's eligible capital composition by Tier available to meet its minimum solvency margin ("MSM") and ECR as at December 31, 2016 is as follows:

Tier	Amo	ount (in 000's)	Appli	cable to MSM	Ap	plicable to ECR
1	\$	4,089,095	\$	4,089,095	\$	4,089,095
2		507,586		507,586		507,586
	\$	4,596,681	\$	4,596,681	\$	4,596,681



ESIL's eligible capital composition by Tier available to meet its MSM and ECR as at December 31, 2016 is as follows:

Tier	Ar	mount (in 000's)	App	plicable to MSM	A	pplicable to ECR
1	\$	3,893,754	\$	3,893,754	\$	3,893,754
2		_		_		_
	\$	3,893,754	\$	3,893,754	\$	3,893,754

# Item 5.a.(iv) Eligible Capital Transition

The Group's 7% Senior notes were approved by the Bermuda Monetary Authority as Tier 2- Ancillary capital under the Insurance (Group Supervision) Rules 2011 for the transitional period ending January 1, 2024.

### Item 5.a.(v) Eligible Capital Encumbrances

The Group's Tier 1 Basic eligible capital is reduced by the amount of assets which are encumbered for other than securing policyholder obligations, such as funds held by regulatory bodies. The regulatory requirements also provide an adjustment between tiers in respect of assets encumbered where those assets held are in excess of the policyholder obligations. See *Item 5. a.(ii)*.

# Item 5.a.(vi) Ancillary Capital Instruments

See Item 5.a.(iv).

### Item 5.a.(vii) Adjustments to Statutory Capital and Surplus

The Group's shareholders' equity on a GAAP basis is adjusted by various prudential filters to arrive at the Group's statutory capital and surplus as per the Bermuda regulatory requirements. The Group currently applies eight types of primary adjustments to the Group's GAAP shareholders' equity to produce the Bermuda statutory capital and surplus on an EBS basis described as follows:

- Technical Provisions: adjustments for the impact of the revaluation of the GAAP premium receivables, UPR, loss and
  loss expense provisions and related items to reflect values based on best-estimate cash flows, adjusted to reflect the time
  value of money using a risk-free discount rate term structure.
- General Business Risk Margins: adjustments under the cost of capital approach for the impact of the uncertainty associated
  with the probability-weighted cash flows or the compensation the Group would require in order to bear the risk of holding
  additional funds to meet cash flows.
- Deferred Tax Assets: the aggregate of the deferred tax asset matched by future profits discounted to their net present value based upon the discount rates for EBS as published by the BMA.
- Intangible Assets: the aggregate fair value of intangible assets deemed as saleable in the market place, such as our insurance licenses.
- Fixed Assets: adjustments to eliminate those fixed assets which are deemed as not having a readily realizable value.
- Accounts Payable and Accrued liabilities: adjustments for the impact of payable amounts deemed as not readily realizable
  within the next fiscal year.
- Non-Admitted Assets: adjustments for the impact of goodwill and prepayments which are not permitted under the BMA's statutory regulations.
- Additional Approved Capital Instruments: as noted above in *Item 5 a. (vi)*, the Group has received approval from the BMA to include certain debt instruments as capital which are reflected as an addition to GAAP shareholders' equity.

# Item 5.b. Regulatory Capital Requirements

Under the group supervision rules promulgated by the Bermuda Monetary Authority, the Group is required to maintain available statutory capital adequacy and surplus at a level equal to or in excess of its ECR, which is established by reference to



either the BSCR or an approved internal capital model. In addition, under the group supervision rules the Group is required to maintain available statutory capital adequacy and surplus at a level equal to or in excess of the MSM.

# Item 5.b.(i) ECR and MSM for the reporting period

As of the year ended December 31, 2016, the Group's ECR was \$1,572.9 million and its MSM was \$1,424.0 million.

For the year ended December 31, 2016, ESIL's ECR was \$1,584.5 million and its MSM was \$670.9 million.

### Item 5.b.(ii), (iii) and (iv) Compliance

The Group and its designated insurer, ESIL has consistently remained in compliance with the ECR and MSM requirements.

### Item 5.c. Approved Capital Model

The Group utilizes the regulatory capital model as prescribed by the BMA (the BSCR) in determining its ECR. This same approach is utilized for regulatory reporting purposes for ESIL.

### Part 6. Subsequent Event

Merger with Sompo Holdings, Inc.

On October 5, 2016, the Group entered into an agreement and plan of merger (the "Merger" or "Merger Agreement") for the acquisition of 100% of the outstanding ordinary shares of the Group by Sompo Holdings, Inc. ("Sompo") for \$93.00 per share in cash. The Merger was approved by both companies' Boards of Directors and the shareholders of ESHL. The Merger was concluded and closed on March 28, 2017. Under the terms of the Merger Agreement, the aggregate consideration for the Merger was approximately \$6.3 billion in cash. The purchase was financed by Sompo with existing sources of liquidity and supplementary facilities without a financing contingency. Upon the closing of the Merger, all of the Group's senior executives remained in place and the governance structure and policies, risk management framework and internal control system were unchanged.

There are no other material events.

This document is dated May 26th, 2017.