# Endurance Specialty Holdings Ltd.

2013 Loss Development Triangles

**2013 Loss Development Triangle Cautionary Language**

This report is for informational purposes only and is current as of December 31, 2013. We are under no obligation and do not expect to update or revise this report, whether as a result of new information, future events or otherwise, even when such new data has been reflected in the filings of Endurance Specialty Holdings Ltd. ("Endurance" or the "Company") with the U.S. Securities and Exchange Commission (the "SEC") or otherwise. Although the loss development patterns disclosed in this report are an important factor in the process used to estimate loss reserve requirements, they are not the only factors considered in establishing reserves. The process for establishing reserves is subject to considerable variability and requires the use of informed estimates and judgments. Important details, such as specific loss development expectations for particular contracts, years or events, cannot be developed solely by analyzing the information provided in this report. In addition to analyzing loss development information, management incorporates additional information into the reserving process, such as pricing for insurance and reinsurance products as well as current market conditions. Readers must keep these and other qualifications more fully described in this report in mind when reviewing this information. This report should be read in conjunction with other documents filed by the Company with the SEC, including the most recent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q.

**Safe Harbor for Forward-Looking Statements**

Some of the statements in this report may include forward-looking statements which reflect management's current views with respect to future events and financial performance. Such statements may include forward-looking statements with respect to the Company in general and the insurance and reinsurance business segments specifically, both as to underwriting and investment matters. Statements which include the words "should," "expect," "intend," "plan," "believe," "project," "anticipate," "seek," "will," and similar statements of a future or forward-looking nature identify forward-looking statements in this report for purposes of the U.S. federal securities laws or otherwise. The Company intends these forward-looking statements to be covered by the safe harbor provisions for forward-looking statements in the Private Securities Litigation Reform Act of 1995.

All forward-looking statements address matters that involve risks and uncertainties. Accordingly, there are or may be important factors that could cause actual results to differ from those indicated in the forward-looking statements in this report. These factors include, but are not limited to: (i) changes in the size of the claims payable by Endurance relating to natural catastrophes, (ii) greater frequency or severity of claims and loss activity than Endurance's underwriting, reserving or investment practices anticipate based upon historical experience or industry data, (iii) trends in rates for property and casualty insurance and reinsurance, (iv) changes in the judicial, legislative or regulatory environments in which Endurance operates, (v) changes in general economic conditions, including foreign currency exchange rates, inflation and other factors and (vi) the other factors described in the Company's most recent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q.

Forward-looking statements speak only as of the date on which they are made, and the Company undertakes no obligation publicly to update or revise any forward-looking statement, whether as a result of new information, future developments or otherwise.

**ENDURANCE SPECIALTY HOLDINGS LTD.**

**2013 GLOBAL LOSS TRIANGLES**

# Table of Contents

## I. INTRODUCTION

This report provides information on the loss development characteristics of Endurance Specialty Holdings Ltd. and its consolidated subsidiaries ("Endurance" or the "Company") as of December 31, 2013. This report provides detail on Endurance's reserves by showing global loss triangles for gross paid and reported loss and allocated loss adjustment expenses ("ALAE") by accident year at annual evaluation dates. The most recent evaluation is as of December 31, 2013. In addition, accident year summary exhibits are provided which highlight the gross, ceded, and net results by business segment and triangle classes as of December 31, 2013. These summaries include: earned premiums, paid loss and ALAE, case outstanding losses, additional case reserves, incurred but not reported losses ("IBNR"), paid unallocated loss adjustment expense ("Paid ULAE"), unallocated loss adjustment expenses reserve ("ULAE Reserve"), and the ultimate loss & loss adjustment expenses ("LAE") ratios as of December 31, 2013 on an inception to date basis. Section II of this document offers general observations on the data presented in both the triangles and the summary exhibits, while Section III provides a discussion of the means used to compile the data, as well as definitions for many of the terms used in this report. A more detailed description of the business underlying the triangle information is found in Section IV of this report. Section V of this report contains a summary description of management's loss reserving methodology.

The inherent uncertainty associated with the estimation of loss and LAE reserves remains a significant balance sheet risk for all property-casualty specialty insurance and reinsurance companies, including Endurance. Management believes the triangles and corresponding accident year summary exhibits along with the narrative in this report provide additional insight into the loss development characteristics of Endurance's diversified businesses.

The process of establishing and periodically adjusting loss and LAE reserves is an inherently complex process containing numerous management judgments related to the segmentation of data, methodologies utilized and their associated parameters, along with the weights applied to the various techniques used in the reserving process. Actuarial determinations of unpaid future losses and LAE are subject to potential errors of estimation, which could be significant, due to the fact that the ultimate disposition of claims incurred prior to the date of such estimation, whether reported to Endurance or not, is subject to the outcome of events that have not yet occurred. Likewise, any estimate of future costs associated with claims settlement is subject to the inherent limitation on the ability to predict the course of future events. Consequently, it should be expected that the actual emergence of the ultimate loss and LAE will vary, perhaps considerably, from any prior estimate. Readers should also review additional reserve disclosures and company risk factors that are provided in the Company's most recent Annual Report on Form 10-K filed with the SEC.

Readers of this report are strongly advised against projecting ultimate losses and LAE for Endurance directly from the loss development triangles in this report, as these calculations rarely take into account fully the true underlying nature of the liabilities. The sixteen triangle classes we have selected are the compilation of over 200 discrete reserving groups within Endurance that represent different geographies, pricing environments, legislative climates and policy forms.

Also, depending upon which actuarial reserving method is utilized, the presence or absence of large catastrophe losses and how they are treated may have a significant impact on the estimated ultimate loss and LAE. In addition, changes to the premium volume, mix of business and the underlying exposures within a class may have significant effects on the resulting ultimate loss estimates and overall reserve levels. Without incorporating this critical information, the results derived from a direct extrapolation of the loss development triangles in this report have the potential of being materially misleading.

The triangles and summary exhibits are provided for both the Insurance and Reinsurance segments of the Company. In addition, while analysis, reviews and reporting of reserves focuses primarily on the loss reserve development classes within each business segment, the information provided in the triangles in this report has been expanded to capture some of the additional differences in reporting that naturally occur within these lines of business. The losses in these exhibits and triangles represent the Company's December 31, 2013 gross, ceded and net loss and LAE reserves in their entirety, although these amounts have been adjusted for changes in foreign currency. A reconciliation to select data from the Company's financial statements prepared in accordance with generally accepted accounting principles in the United States ("GAAP") is included in Section VI of this document.

As discussed more fully in Section III, the accident year losses in these exhibits and triangles are adjusted for changes in calendar year earned premium adjustments and foreign exchange movements. Because of these adjustments, which we would expect to continue, future versions of this information will not tie directly to the data included in this report.

## II. COMMENTS AND OBSERVATIONS ON DATA PRESENTED

Two triangle groupings have changed since last year. Grouping changes are as follows:

- Last year, Pollution Liability Insurance written in our United States offices had been grouped with insurance casualty & other specialty. In order to be consistent with the business groupings in our 10K, this business is now being allocated to Insurance Professional Lines.
- Reinsurance Professional Liability had been included within Reinsurance Casualty. It is now split out as a separate disclosure line.

Based on the data as of December 31, 2013 presented in this report, we believe the following general observations are noteworthy:

- On an inception to date basis, 55% and 45% of gross earned premium arises from the Reinsurance and Insurance segments, respectively. Correspondingly, on a gross basis 46% and 54% of loss and LAE reserves arise from the Reinsurance and Insurance segments, respectively. On a net basis, 54% and 46% of the loss and LAE reserves arise from the Reinsurance and Insurance segments, respectively.

- Additional Case Reserves ("ACRs") amount to 11.7% of reported net case reserves. Within Endurance's Reinsurance Segment, this amount is 19.7% of the net reported case reserves.

- The Reinsurance and Insurance segments have contributed approximately 51% and 49% to the total inception to date prior year favorable gross reserve development, respectively.

- Endurance's overall inception to date net ultimate loss and LAE ratio of 65% is comprised of a 74% net loss ratio for the Insurance segment and a 59% net loss ratio for the Reinsurance segment.

## III. DATA COMPILATION AND DEFINITIONS

The Global Loss Triangles and summary exhibits are presented on an accident year (or report year where applicable) basis. While underwriting or policy year statistics may also provide useful information for analysis purposes, management believes the accident/report year presentation better highlights the true loss activity that occurs at Endurance within a given calendar year. We note that the accident year presentation of triangles requires the utilization of assumptions and allocation procedures with respect to certain lines of business underwritten by Endurance (bordereaux allocation). This is primarily a result of not receiving sufficient information from ceding companies in certain lines of business, which prevents the allocation of claims to specific accident years with certainty. Although we attempt to keep the allocations as reasonable and as accurate as possible, to the extent our assumptions and allocation procedures vary from actual historical loss development patterns, the actual loss development may differ materially from the loss development included in this report.

### Data Presented

The data presented in the accident year triangle and summary exhibits is as follows:

- Global Loss Triangles
    - Paid loss and ALAE
    - Case incurred loss & ALAE (including ACRs)
    - Ultimate loss and ALAE
    - Earned Premium
    - Ultimate loss and ALAE ratio
    - Ultimate loss and ALAE emergence
- Summary Exhibits
    - Gross earned premium, paid losses, reserves (case outstanding, ACRs, IBNR, and ULAE)
    - Ceded earned premium, paid losses, reserves (case outstanding, ACRs, IBNR, and ULAE)
    - Net earned premium, paid losses, reserves (case outstanding, ACRs, IBNR, and ULAE)

### Basis of Presentation

Information presented herein may differ materially from that reported in Endurance's financial statements prepared in accordance with GAAP due to differences in foreign currency exchange rates, the impact of premium adjustments and other data adjustments.

All amounts are presented in thousands of U.S. dollars and reflect the conversion from the original currency of the underlying business if not denominated in U.S. dollars ("USD"). Foreign currency denominated losses and premiums are converted based on exchange rates at the dates of the transactions to the currency of the legal underwriting entity, which are either USD or British Pounds ("GBP"). Endurance's reporting currency is USD. Fluctuations in currency exchange rates can cause material shifts in loss development. To eliminate distortions caused by such fluctuations, data in the triangles have been restated using the year end 2013 rate of exchange of 1.65625 USD to GBP.

Some (re)insurance contracts and policies contain provisions resulting in a variation of the premium or acquisition expenses as a result of loss experience under the contract or policy. Within the analysis, estimated reinstatement premiums are included in the premium totals.

Intercompany reinsurance transactions have not been reflected in the triangles.

The loss development triangles are presented on the basis of applying reinsurance accounting to all Endurance's business and do not reflect any adjustments that may be required for financial reporting purposes to comply with Accounting Standards Certification Topic 340 Subtopic 30 *"Other Assets and Deferred Cost Insurance Contracts that do not Transfer Risk"* as highlighted in the reconciliation to GAAP reserves in Section VI of this document.

**Earned Premium**

The earned premium triangle includes the calendar year changes in accident year earned premium due to premium adjustments. For financial reporting purposes, the premium adjustments are recognized in the calendar year they were determined. For actuarial reserving purposes, these premium adjustments are allocated to the accident year or years based on the initial policy or treaty to which the adjustment belongs. For example, if a premium adjustment is recognized in calendar year 2013 from a policy written and exposures earned in 2005, the additional premium is recognized in the 2013 calendar year for financial reporting purposes. However, for reserving purposes, the premium is allocated to the years in which the premium for the 2005 treaty was originally earned. As a result, the information provided herein may differ materially from that presented in Endurance's financial statements.

**Ultimate Loss and ALAE Ratio**

The ultimate loss and ALAE ratio triangle shows the year to year changes in the ratio of all expected settlement amounts, whether paid or reserved, together with any associated settlement expenses to earned premium. The ultimate loss and ALAE ratio is presented to show the relationship between management's best estimate of expected ultimate losses and ALAE and the associated premiums that were received by Endurance to assume the risks related to those losses. Ultimate losses and ALAE within an accident year are subject to many factors that impact the recorded value of such losses (such as favorable/adverse claims emergence, frequency/severity trends, inflation, methodology changes, foreign exchange fluctuations, and premium adjustments from prior accident periods). Since Endurance distributes earned premium from premium adjustments to the appropriate accident year in its reserving process, one will see changes in booked ultimate losses solely due to these premium changes. Because of this phenomenon, the triangle of ultimate loss & ALAE ratios can be very useful as it essentially removes the effect of changes in premium from the loss estimates. At any point (maturity) in the triangle, management's best estimate of booked ultimate loss and ALAE estimate is the product of the corresponding accident year earned premium and ultimate loss and ALAE ratio.

**Ultimate Loss and ALAE**

The triangle of ultimate loss and ALAE is derived by multiplying the most recent accident year earned premium (the last Diagonal of the earned premium triangle) by the historical accident year ultimate loss and ALAE ratio as presented in their respective triangles. This presentation removes the effect of premium adjustments from the development of ultimate losses, and provides a better picture of the changes occurring to the true accident year ultimate loss and ALAE. Reconciliation to Endurance's GAAP financial statements is included in Section VI of this report.

**Ultimate Loss Emergence**

The triangle of ultimate loss emergence is calculated by taking the difference of corresponding cells in the ultimate loss and ALAE triangle. For example, using the consolidated triangles, the change in ultimate loss from 12-24 month maturity for the 2006 accident year is derived by subtracting the ultimate loss & ALAE at the 12 month maturity for the 2006 accident year from the ultimate loss & ALAE at the 24 month maturity for the same accident year. The full calendar year emergence is represented by the total of any given diagonal (excluding the loss emergence within the first 12 months of an accident year), and is also shown as an additional row at the bottom of the triangle.

**Global Loss Triangle Classes**

Triangles are provided in 16 classes: 7 for the Insurance segment and 9 for the Reinsurance segment. The classes are based on the loss development characteristics for the lines of business represented by the exposures in a given triangle class (motor, workers' compensation, property, etc.), as well as differences in the underlying business, as evidenced by the separate insurance casualty classes. It is important to note that for the Reinsurance classes, there is no differentiation between proportional and non-proportional business that could have different loss emergence patterns. The 16 triangle classes included in this report are listed below:

**Insurance Segment Loss Triangle Classes**

- Agriculture (Insurance Agriculture)
- High Attaching Excess of Loss Casualty (Insurance Casualty and Other Specialty)
- United States Sourced Casualty (Insurance Casualty and Other Specialty)
- Workers' Compensation (Insurance Casualty and Other Specialty)

- Professional Lines (Insurance Professional Lines)
- International Sourced Property (Insurance Property)
- United States Sourced Property (Insurance Property)

**Reinsurance Segment Loss Triangle Classes**

- Catastrophe (Reinsurance Catastrophe)
- Property (Reinsurance Property)
- Casualty Motor (Reinsurance Casualty)
- Casualty Other (Reinsurance Casualty)
- Workers' Compensation (Reinsurance Casualty)
- Professional Liability (Reinsurance Professional)
- Agriculture and Other Specialty (Reinsurance Other Specialty)
- Surety and Trade Credit (Reinsurance Other Specialty)
- Aerospace and Marine (Reinsurance Other Specialty)

Further detail of the types of business contained in each class is provided in Section IV of this document. In the upper left hand label of each triangle (excluding the one combined triangle class), a mapping of that triangle's classes to the reserve categories disclosed in the Company's Annual Report on Form 10-K is included.

**Accident Year Loss Allocation**

Many proportional reinsurance contracts are submitted using quarterly bordereau reporting by underwriting year with a supplemental listing of large losses. As a result, a two-step allocation process was utilized to allocate these losses to accident year. The first step is to identify large losses and place them in the corresponding accident year as reported on a large loss listing. The second step is to allocate the remaining losses to particular accident years based on selected payment and reporting patterns applied to the earning of the underlying exposures, which in many instances is premium. To the extent management's assumptions and allocation procedures differ from actual historical loss development patterns, the actual loss development may differ materially from the loss development included in this report.

**Large Losses and Other Adjustments**

The triangles are unadjusted with respect to large losses and catastrophic losses, including losses related to the 2004, 2005, 2008, 2011, and 2012 catastrophes. The loss amounts are gross of any retrocession recoveries. The premium data is gross of any retrocession recoveries and includes any reinstatement premiums associated with the loss events.

**Business Not Included**

No business has been excluded from the analysis.

**Discounting**

The losses and IBNR stated in the triangles do not include a provision to reflect the time value of money.

**Maturity of Triangle Periods**

Since Endurance was formed in late 2001, underwriting data is available only for periods beginning 2001 or subsequent. For many lines of business, even less data is available as those lines were added more recently. For the business lines with sparse or limited data presented, there is an additional amount of uncertainty in the estimated ultimate loss and LAE and actual loss experience could differ materially from the estimated ultimate loss amount.

**Definitions**

To assist the reader, several key definitions are highlighted below.

**Accident Year** means the year in which the event occurred that triggered a claim to Endurance. All years referred to are years ending December 31st.

**Additional Case Reserves** or **ACRs** are amounts that are held in addition to Case Reserves that result from Endurance's claims professionals determining that the established Case Reserves (which are often established by ceding companies or third parties) are expected to be insufficient to meet the expected future settlement amounts.

**Additional Event Reserves** are amounts that are held in respect of known events that are expected to give rise to future settlements but at the time of being established, not enough is known to allocate them to specific (re)-insureds.

**Allocated Loss Adjustment Expense or ALAE** is an estimate of the associated external expenses to be incurred in settling a claim. ALAE includes the costs of third party loss assessors or legal experts.

**Case Incurred Loss and ALAE** is the sum of Paid Losses and ALAE, plus Case Reserves and any Additional Case Reserves.

**Case Reserves** are amounts set aside in relation to claims that have been made but not yet been paid and represent an assessment of the remaining amount to be paid in respect of each notified claim.

**Ceded Claims** are those amounts Endurance received or expects to receive from third party reinsurers to whom Endurance ceded premiums.

**Ceded Premiums** are those premiums paid by Endurance to third party reinsurers.

**Diagonals** in the triangle from bottom left to top right represent evaluation dates. For example, the last diagonal in our published triangles shows the position of each Accident Year as at December 31, 2013.

**Earned Premium** is the amount of policy premiums allocated between Accident Years in accordance with the assumed incidence of risk.

**FCIC** is the U.S. Federal Crop Insurance Corporation, the government reinsurer of multi-peril crop insurance underwritten by Endurance's agriculture insurance subsidiary.

**Gross Premiums and Gross Losses** are shown before the impact of any third party outwards reinsurance that Endurance purchases including catastrophe bonds.

**IBNR** means incurred but not reported reserve. IBNR reserves represent a provision for claims that have been incurred but not yet reported to the Company, as well as future loss development on losses already reported in excess of the Case Reserves and Additional Case Reserves. In this presentation, Additional Event Reserves are included within IBNR. Endurance's process for establishing IBNR is discussed further in Section V of this document.

**Loss Adjustment Expense or LAE** is expense incurred in settling the claim. LAE includes the costs of third party loss assessors or legal experts and the cost of internal time necessary to settle a claim. LAE is the sum of ALAE and ULAE.

**Maturity** is measured in months from the start of the Accident Year.

**Net** means the retained portion of premiums written or losses paid and incurred. Net Premium equals Gross Premium less Ceded Premium and Net Losses equals Gross Losses less Ceded Losses.

**Paid Losses** are claim amounts paid to insureds or ceding companies.

**Report Year / Claims Made Year** refers to the year in which a claim is reported to Endurance. All years referred to are years ending December 31$^{st}$.

**Triangle** is a cross tabulation of data usually showing financial quantities in respect of periods of exposure (e.g. Accident Years), each evaluated at regular intervals (maturities).

**Unallocated Loss Adjustment Expense or ULAE** is an assessment of the internal expenses required to settle the current claims.

**Ultimate Loss and LAE** are the total of all expected settlement amounts, whether paid or reserved together with any associated settlement expenses and is the estimated total amount of loss at the measurement date. For the purposes of this report, Ultimate Loss & LAE is calculated by adding: Paid Loss & ALAE, Case Reserves, Additional Case Reserves, IBNR (inclusive of Additional Event Reserves), Paid ULAE, and ULAE Reserves.

**Ultimate Loss and LAE Ratio** is the ratio of Ultimate Loss and LAE amounts to Earned Premium, which shows the relationship between expected losses and the associated premiums that are received related to those losses.

## IV. TRIANGLE CLASS DETAILS

### a) Insurance Agriculture – Agriculture

The agriculture insurance triangle class is comprised of multi-peril crop insurance (a business that interacts heavily with the U.S. federal government's crop reinsurance program), crop hail, livestock risk protection and other agriculture risk management products. The protections offered provide coverage for yield and revenue losses resulting from weather related perils, such as drought and hail, as well as losses stemming from commodity price movements. The majority of this triangle class is multi-peril crop insurance.

### b) Insurance Casualty and Other Specialty - High Attaching Excess of Loss Casualty

The high attaching excess of loss casualty insurance triangle class represents two of the three commercial casualty insurance businesses underwritten by Endurance's Bermuda operating subsidiary. The businesses are as follows:

*Healthcare Liability Insurance* – Third party excess liability coverage for hospitals in the United States written on both a direct insurance basis and as reinsurance to captive insurance companies. Clients are predominantly multi-hospital systems, academic medical centers and specialty hospitals such as pediatric hospitals.

*Excess Casualty Insurance* – Third-party excess liability coverage for a wide range of industry groups. Clients are typically Fortune 1000 companies in a variety of industries, including but not limited to chemical manufacturers; medical products; pharmaceuticals; construction, including home builders and owner controlled insurance programs; transportation, including commuter and freight rail, and trucking; premises exposures; and manufacturing. Approximately 57% of the inception to date earned premium for this business was written on claims made or occurrence reported forms. Business written on these forms typically have faster development than similar business written on the more standard occurrence forms, which are used for most excess casualty insurance written in the United States. Section V provides more detail concerning this matter.

### c) Insurance Casualty and Other Specialty – United States Sourced Casualty

The United States sourced casualty insurance triangle class comprises U.S. commercial liability insurance underwritten by certain of Endurance's U.S. insurance operating subsidiaries. The largest product in this triangle class based upon gross earned premium is excess casualty, with the remainder comprising primary casualty, contract binding operations, and healthcare liability.

*Excess Casualty Insurance* – Endurance's United States sourced excess casualty product targets clients, typically below the Fortune 500 level, that include contractors, manufacturers, real estate, financial institutions, transportation, and public entities. Participations are generally on the second or third excess of loss layers. In 2013, Endurance also started a new E&S operation, which provides excess liability coverage through a network of appointed wholesale brokers across a broad spectrum of industries, from construction to manufacturing and retail.

*Primary Casualty Insurance* – This unit typically provides general liability coverage for middle market commercial exposures.

*Contract Binding Operations* – This business provides property and general liability coverages for small to medium-sized risks through a binding authority surplus lines agency network across the United States. Only the casualty exposures are included in this triangle class.

*Healthcare Liability Insurance* – The healthcare liability business provides a range of specialized excess professional liability products to community based hospitals as well as large physicians' groups.

**d) Insurance Casualty and Other Specialty – Workers' Compensation**

The workers' compensation insurance triangle class was primarily ground up workers' compensation insurance in niche markets in the United States. Target clients were small and medium sized businesses that were written through local production sources utilizing web-based systems. The exposures in this triangle class primarily arose from California.

The Company exited the California workers' compensation insurance business during the first quarter of 2009.

**e) Insurance Professional Lines – Professional Lines**

The professional liability insurance triangle class includes directors & officers liability, errors & omissions, employment practice liability, fiduciary liability, fidelity, and pollution liability business underwritten by our Bermuda and United States subsidiaries. This class is comprised of four business units:

*Commercial Management Liability* - This business provides a full complement of management and professional liability products, including director & officers liability and employment practices liability coverage, for large to mid-sized companies, professional firms and healthcare systems.

*Financial Institutions* – This unit writes a wide range of specialized insurance solutions for banks, insurance companies, hedge funds, private equity funds, investment advisors, mutual funds, and financial services companies.
*Endurance Pro* – This business insures a wide range of professional lines exposures throughout the U.S. with a focus on law firms, insurance organizations, technology services, architect and engineering firms, securities broker/dealers and miscellaneous classes.

*Pollution Liability Insurance* – The pollution liability business provides general liability, contractor's pollution liability, and professional liability coverage for environmental engineers and contractors throughout the United States. A smaller portion of this book provides site pollution coverage. This business had been written through an agency relationship, which was terminated in the second quarter of 2012.

**f) Insurance Property – International Sourced Property**

The international sourced property insurance triangle class includes the commercial property insurance and facultative reinsurance business underwritten by Endurance's Bermuda and U.K. operating subsidiaries. This triangle class was initially composed of business written by Endurance's Bermuda subsidiary, which focused on underwriting U.S. clients that required multiple insurers and reinsurers to accommodate their insurance needs. More recently it included business written by Endurance's U.K. subsidiary.

The Company ceased underwriting property insurance in its Bermuda subsidiary in 2006 and has not written U.K. property insurance since 2009.

**g) Insurance Property – United States Sourced Property**

The United States sourced property insurance triangle class includes commercial property insurance and short-tail specialty business underwritten by Endurance's U.S. insurance operating subsidiaries.

The products offered in this triangle class are named peril catastrophe protection and difference in conditions coverage for earthquake and flood for commercial occupancies throughout the United States. Typical risks that are written have multiple layers of coverage provided by multiple insurance carriers.

This triangle class also contains a comparatively small component of commercial property all-risk coverage that includes wind exposed risks. The triangle class also includes habitational property risks across the U.S. with a focus in the Northeast, and it contains a small amount of supporting property business written by other areas of our US Insurance operation, most notably from our Contract Binding Operation. In addition, Endurance added a contract surety underwriting operation in 2012; in accident year 2013 it comprised approximately 15% of the gross earned premium for this triangle class. Finally, Endurance started Inland Marine and Ocean Marine underwriting units in 2013. These two new operations comprise approximately 6% of the 2013 gross earned premium for this triangle class.

**h) Reinsurance Catastrophe – Catastrophe**

The catastrophe reinsurance triangle class includes property and workers' compensation catastrophe reinsurance, which are described in more detail below:

Endurance's property catastrophe business reinsures ceding company clients' exposures to catastrophic events such as tropical cyclones including hurricanes and typhoons, earthquakes and tsunamis, floods, thunderstorms including tornados and hailstorms, fire, as well as terror attacks on a treaty basis. Coverage typically applies only when a catastrophic event impacts more than one risk or insured. Endurance has established a worldwide portfolio of reinsurance contracts, including coverage in the Americas, Europe, Africa, Asia, and Oceania. Endurance reinsures predominantly on an indemnity excess of loss basis, although Endurance also provides pro rata coverage for certain types of events primarily related to catastrophes. In addition, coverage can be based on either an industry loss or physical trigger basis. This business is underwritten in our Bermuda subsidiary and Zurich and Singapore branches.

Endurance's workers' compensation catastrophe reinsurance consists of the reinsurance of U.S. workers' compensation writers against multi-life events. The major exposures are earthquake, transport, and terrorism related losses. This business was originally underwritten in our Bermuda operating subsidiary and is now underwritten in the U.S.

**i) Reinsurance Property – Property**

The property reinsurance triangle class contains international and U.S. per risk excess of loss and proportional treaty business underwritten in Endurance's U.S. and U.K. subsidiaries and its Singapore and Zurich branches.

Endurance's property per risk treaty reinsurance covers portfolios of individual property risks such as buildings, contents, equipment and business interruption that are protected by primary insurers. These risks are assumed on a treaty basis. Endurance underwrites personal, commercial and industrial lines, but the years shown in this report are predominantly commercial and industrial exposures. Endurance underwrites pro rata of primary, pro rata of excess and traditional excess of loss business. All excess of loss agreements have risk limits in place and, with a limited number of exceptions; all treaties either have occurrence limits or limited reinstatement rights.

**j) Reinsurance Casualty – Casualty Motor**

The casualty motor reinsurance triangle class comprises treaty reinsurance of U.S. and international ceding companies underwriting motor business. Since accident year 2009, the international business is comprised largely of excess of loss protections. The U.S. business is a mix of proportional and excess of loss coverages. For both the international and U.S. books, the exposure is largely third party liability.

**k) Reinsurance Casualty – Casualty Other**

The casualty other reinsurance triangle class includes third party liability exposures from ceding companies on a treaty basis and comprises most casualty exposures including, general liability, public liability, products liability, umbrella and clash, warranty, miscellaneous errors and omissions, excess casualty and political risk. This triangle class includes both frequency and severity-exposed contracts covering risk underwritten on both an occurrence and claims made basis. This business is underwritten by the Company's Bermuda, U.K., and U.S. subsidiaries and its Singapore and Zurich branches.

**l) Reinsurance Casualty – Workers' Compensation**

The workers' compensation reinsurance triangle class was primarily workers' compensation reinsurance in niche markets in the United States. Endurance writes traditional working layer workers' compensation reinsurance on either an excess of loss or a proportional basis. Coverage is typically provided on a per person/per occurrence basis. Over 90% of the gross premium for this class was earned prior to 2008 and that business was largely comprised of ground up exposures reinsured on a pro-rata basis.

**m) Reinsurance Casualty – Professional Liability**

The professional liability reinsurance triangle class contains the reinsurance treaties covering the following classes of business: directors & officers liability, errors & omissions, employment practices liability, fidelity, medical malpractice, and fiduciary liability for commercial and financial institutions. The underlying business is written almost exclusively on a claims made basis. Business in this triangle class is written on either an excess of loss or a proportional basis. The vast majority of this business was underwritten in our U.S. subsidiary, but a portion of this business was written in our Bermuda and U.K. subsidiaries as well as by our Zurich branch.

**n) Reinsurance Other Specialty – Agriculture & Other Specialty**

For accident years 2005 and later, the agriculture & other specialty reinsurance triangle class predominantly consists of U.S. and international agricultural reinsurance, but also includes personal accident reinsurance underwritten by the Company's Bermuda, U.K., and U.S. subsidiaries and its Singapore and Zurich branches. For accident years 2004 and prior, this class is comprised of a variety specialty business underwritten by our Bermuda and US subsidiaries. Consequently, the loss development patterns indicated for accident years 2004 and prior are not appropriate for estimating ultimate losses for accident years 2005 and later.

Endurance's agriculture reinsurance products specialize in risks associated with the production of food and fiber on a global basis underwritten through traditional treaty reinsurance, proportional and aggregate stop loss, as well as custom risk transfer mechanisms. The protections offered provide coverage for yield and revenue losses resulting from weather related perils such as drought and hail as well as losses stemming from commodity price movements.

Endurance's other specialty lines include personal accident products such as accidental death, medical and disability coverages underwritten on a treaty and facultative reinsurance basis. Endurance's personal accident products provide per person and catastrophe protection, for life insurance companies and other specialty risk underwriters. Accident years 2005 and prior contain a wide variety of specialty business including accident and health, general liability, terrorism, fidelity, surety, umbrella, marine, energy, errors and omissions, and workers' compensation.

**o) Reinsurance Other Specialty – Surety and Trade Credit**

The surety and trade credit reinsurance triangle class is largely comprised of U.S. programs established on either a direct or brokered basis. Reinsured products include contract surety, commercial surety, and fidelity. Endurance's business partners in connection with these products include national account writers, regional companies and specialty operations. Endurance underwrites surety reinsurance on both a proportional and excess of loss basis. Endurance's surety reinsurance business is underwritten in our U.S. reinsurance subsidiary.

In November of 2012, Endurance launched a new trade credit and surety business, which is underwritten in its Zurich branch. The trade credit and surety reinsurance business from this new operation is also included in this triangle class.

**p) Reinsurance Other Specialty – Aerospace & Marine**

Endurance's aerospace & marine reinsurance triangle class includes proportional and non-proportional treaty reinsurance for airline hull and liability, aircraft manufacturers' products liability and general aviation risks. Endurance also includes in this triangle class proportional treaty reinsurance for satellite launch and in-orbit coverage.

The marine products in the aerospace and marine reinsurance triangle class contain a wide range of marine and energy business underwritten on both a proportional and non-proportional basis by the Company's Bermuda, U.K., and U.S. subsidiaries and its Singapore and Zurich branches. Initially the underwritings were dominated by onshore energy business underwritten from Bermuda. The development of the marine and energy team in the U.K. and U.S. led to an expansion into offshore energy business. In 2006, Endurance exited the offshore energy business and significantly curtailed its underwriting of onshore energy risks. Since 2007, a modest amount of onshore energy risks have been underwritten within the property portfolio and the book has decreased significantly in size with more of a focus on hull and cargo risks.

## V. OVERVIEW OF RESERVING METHODOLOGY

In order to estimate Endurance's reserve for losses and loss expenses, management uses information either (i) developed from internal or independent external sources, or (ii) pricing information created by Endurance or provided to Endurance by insureds, reinsureds, and brokers at the time individual contracts and policies are bound. In addition, management uses commercially available risk analysis models, contract by contract review by our underwriting teams and to a limited extent, overall market share assumptions to estimate our loss and loss expense reserves related to specific loss events. When the applicable information has been obtained, Endurance uses a variety of actuarial methods to estimate the ultimate losses and loss expenses incurred by Endurance in connection with business it has underwritten and thus, the applicable reserve for losses and loss expenses.

While management does not at this time include an explicit or implicit provision for uncertainty in its reserve for losses and loss expenses, certain of Endurance's business lines are by their nature subject to additional uncertainties, including Endurance's casualty, professional, property, catastrophe, and other specialty lines in the Reinsurance business segment and Endurance's casualty and professional lines in the Insurance business segment, which are discussed in detail above. In addition, Endurance's Reinsurance business segment is subject to additional factors which add to the uncertainty of estimating loss and loss expense reserves. Time lags in the reporting of losses can also introduce further ambiguity to the process of estimating loss and loss expense reserves.

Certain aspects of Endurance's casualty and professional lines in the Reinsurance business segment and the casualty and professional lines in the Insurance business segment complicate the process of estimating loss reserves. These include the lack of long-term historical data for losses of the same type intended to be covered by the policies and contracts written by Endurance, and the expectation that a portion of losses in excess of Endurance's attachment levels in many of its contracts will be low in frequency and high in severity, limiting the usefulness of claims experience of other insurers and reinsurers for similar claims. In addition, a portion of Endurance's casualty line in its Insurance business segment that is underwritten in Bermuda includes policy forms that vary from more traditional policy forms. The primary difference in the casualty policy form used by Endurance's Bermuda subsidiary from more traditional policy forms relates to the coverage being provided on an occurrence reported basis instead of the typical occurrence or claims-made basis used in traditional policy forms. The occurrence reported policy forms typically cover occurrences causing unexpected and unintended personal injury or property damage to third parties arising from events or conditions that commence at or subsequent to an inception date and prior to the expiration of the policy, provided that proper notice is given during the term of the policy or the discovery period.

The inherent uncertainty of estimating Endurance's loss and loss expense reserves for its Reinsurance business segment can be greater principally due to the following:

(i) the lag between the time claims are reported to the ceding company and the time they are reported through one or more reinsurance broker intermediaries to Endurance;

(ii) the differing reserving practices among ceding companies;

(iii) the diversity of loss development patterns among different types of reinsurance treaties or contracts; and

(iv) Endurance's need to rely on its ceding companies for loss information.

In addition to the factors creating uncertainty in Endurance's estimate of loss and loss expense reserves, Endurance's estimated reserve for losses and loss expenses can change over time because of unexpected changes in the external environment. Potential changing external factors include:

- changes in the inflation rate for goods and services related to the covered damages;
- changes in the general economic environment that could cause unanticipated changes in claim frequency or severity;
- changes in the litigation environment regarding the representation of plaintiffs and potential plaintiffs;
- changes in the judicial and/or arbitration environment regarding the interpretation of policy and contract provisions relating to the determination of coverage and/or the amount of damages awarded for certain types of claims;
- changes in the social environment regarding the general attitude of juries in the determination of liability and damages;
- changes in the legislative environment regarding the definition of damages;
- new types of injuries caused by new types of injurious activities or exposures; and
- in the case of assumed reinsurance, changes in ceding company case reserving and reporting patterns.

Endurance's estimates of reserves for losses and loss expenses can also change over time because of changes in internal company operations. Potential changing internal factors include:

- alterations in claims handling procedures;

- growth in new lines of business where exposure and loss development patterns are not well established; or
- changes in the quality of risk selection or pricing in the underwriting process.

Due to the inherent complexity of the assumptions used in establishing Endurance's loss and loss expense reserve estimates, final claim settlements made by Endurance may vary significantly from the present estimates, particularly when those settlements may not occur until well into the future.

For a more detailed discussion of the Company's reserving methodology and an analysis of the potential variability in reserves for losses and loss expenses, please see the Company's most recent Annual Report on Form 10-K filed with the SEC.

## VI. RECONCILIATIONS

*Reconciliation of Gross Unpaid Loss and LAE*

The following table reconciles the reserves for losses and loss expenses as of December 31, 2013 as reported in Endurance's financial statements prepared in accordance with GAAP to the reserves for losses and loss expenses published in the triangles (all amounts in millions of U.S. dollars, on a gross basis):

| | |
|---|---|
| Consolidated triangles unpaid loss and LAE | $4,026.0 |
| Deposit accounting reserves | (19.4) |
| Impact of audit premium provision | (7.0) |
| Foreign exchange and other | 2.7 |
| Adjusted unpaid loss and LAE | $4,002.3 |
| Reserves for losses and loss expenses Per December 31, 2013 GAAP Financial Statements | $4,002.3 |

*Reconciliation of Calendar Year Loss Emergence*

The following table reconciles the calendar year 2013 development of losses and loss adjustment expenses as of December 31, 2013 as reported in Endurance's financial statements prepared in accordance with GAAP to the development of losses and loss adjustment expenses published in the triangles (all amounts in millions).

| | |
|---|---|
| Calendar year gross loss & ALAE emergence per triangles | ($235.2) |
| Plus calendar year emergence on ULAE | 0.0 |
| Plus emergence on contracts subject to deposit accounting | 0.2 |
| Plus misc. emergence due to foreign exchange & other* | 15.7 |
| Plus favorable emergence on ceded loss & LAE | (3.1) |
| Adjusted Calendar Year Emergence | ($222.4) |
| Calendar Year Emergence per December 31, 2013 GAAP Financial Statements | ($222.4) |

Please note that the negative amount above indicates favorable development on prior year losses.

*A majority of the miscellaneous effect is due to the impact of premium adjustments and the level of aggregation used to compute the prior year development within the global loss triangles.