

# SCOR's loss development triangles and reserves as of December 2015



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#### 1. Purpose and scope

The uncertainty associated with the estimation of the adequate loss reserves amount is one of the most important risks surrounding the balance sheet of property and casualty insurance or reinsurance companies. For this reason SCOR believes that its role is to provide its stakeholders with an appropriate level of information related to this specific topic. We are publishing for the sixth time, alongside our triangles disclosure, a report with detailed information on the reserving classes and underlying data, as well as thorough explanations on how we manage the risks reflected in the disclosed triangles. We believe that this paper will give the readers additional insight into the loss development characteristics of our business as presented in our eight reserving classes.

As for previous years, the data format has not changed: we present gross loss triangles as at December 31, 2015, on an underwriting year reporting basis. Our reserving classes' definition is the same as last year. In order to give a deeper insight into the claims development of motor non-proportional and casualty classes we have disclosed, as last year, for these specific classes, 15 years historical experience. All data has been converted to euros using 2015 year end closing exchange rates. In addition to triangles, we present premium, reserves and ultimate loss ratios as at December 31, 2015, corresponding to each class. To ease the comparison between last year and this year ultimate estimations, we also present the 2014 ultimate loss ratios recalculated on the 2015 reserving classes' perimeter and exchange rates. The total reserves are split between case reserves (including Additional Case Reserves - ACR) and reserves for incurred but not reported losses (IBNR reserves).

Although this report will give the reader a better understanding of what lies behind the raw triangle data, it should be recognised that an actuarial analysis cannot be based only upon the information disclosed. The disclosed triangles represent a high level aggregation of the data we use at SCOR for our internal reserves assessments. For example, SCOR internal reserve modelling performed at a more granular level includes additional factors such as pricing and market conditions, changes in risk profiles, inflation projections and anticipations on legislation trends. We also use specific loss developments for particular treaties or events. In the next paragraphs of this report, we provide a detailed description of our reserving processes and methodologies.

#### 2. RESERVING PROCESS AND METHODOLOGY

#### 2.1. SCOR reserving philosophy

SCOR is required to hold reserves to cover its estimated ultimate liability for losses and loss adjustment expenses with respect to reported and unreported claims, incurred at the end of each accounting period. SCOR's reserves are established both on the basis of information provided by its cedant insurance companies, particularly their own reserving levels, as well as on the basis of its knowledge of the risks, the studies it conducts including economic and legal trends projections.

As part of the reserving process, SCOR reviews in particular available triangles data and estimates the impact of various factors such as change in laws and regulations, judicial decisions that may affect potential loss amounts, changes in social and political attitudes that may increase exposure to losses and trends in claims development, or evolutions in general economic conditions.

SCOR overall reserving philosophy can be summarized as follows:

- Instant reactivity to indications of potential negative developments
- Conservative opening ultimate loss ratios applied on more recent underwriting years where statistical data is scarce
- Hypothesis used in pricing systematically challenged and stress tests impact on pricing expected loss ratios taken into account
- Extra time allowed to recognise positive run-offs, especially for mid and long tail classes of business

#### 2.2. Reserving process and controls at SCOR

#### Strong governance insuring independency of actuarial opinion

SCOR has put in place around its P&C reserving risk a strict and robust corporate governance with transparent decision processes and four levels of controls (Division actuarial reviews, Group Actuarial review, External consultants analysis on some entities when required and on demand External Actuarial Audit on specific segments).

Centrally defined and tightly controlled reserving process, strong portfolio diversification, prudent reserving policy, sound reserving tools and, state of the art actuarial methods used by highly skilled professionals together with a high level of transparency, both internally and externally, minimise the risk of inadequate reserves.

The actuarial best estimate is based on the valuation performed annually on the 3<sup>rd</sup> quarter data and rolled forward with 4<sup>th</sup> quarter data by Division actuaries and Group Actuarial department.

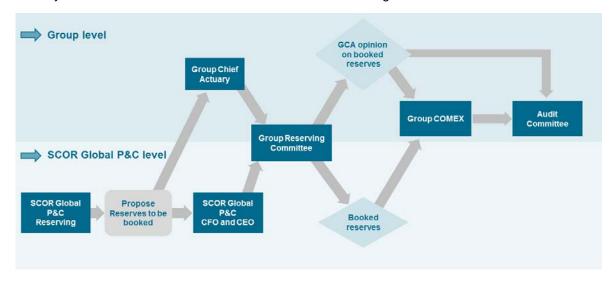
#### Independency of actuarial opinion

As presented in the following chart, an initial booked reserves position is proposed by the division based on Division Chief Reserving Actuary and Division actuaries' opinions and a first opinion on IFRS Best estimate position is formed by the Group Chief Actuary based on Division and Group Actuarial analyses.

Both are compared during the Group P&C Reserving Committee (Group Chief Actuary, Group Chief Risk Officer, SCOR P&C Chief Executive Officer, SCOR P&C Chief Financial Officer, SCOR P&C Chief Reserving Actuary and Head of Group P&C Reserving). The different views on claims and the main assumptions and approaches are discussed and can result in a review of the different positions.

The final Group Chief Actuary actuarial best estimate position is then presented to the Group Executive Committee who validates the booked reserves.

Actuarial IFRS Best Estimate position and reserving adequacy is then shared by the Group Chief Actuary with Board Audit Committee as detailed in the following chart:



#### Internal Control System:

SCOR reserving governance framework is articulated around processes which meet SCOR Internal Control Standards, among which:

- Manage quarterly P&C reserves
- · Produce P&C reserving adequacy report

These processes are completed by reserving internal control procedures implemented since the last nine years. The main procedures address the relevance of the actuarial ultimate loss estimation, the validation of new reserving methods and their implementation as well as the actuarial segmentation homogeneity.

#### Reserving Guidelines:

The purpose is to ensure a consistent approach to our best estimate liability assessment, patterns and portfolio volatility. The framework and scope define responsibilities and owners (local versus group, scope of perimeter) and the escalation process to seek approval when deviating in material aspects (tools, methodologies, standards). The reserving rules apply for all liabilities of SCOR Global P&C and focus on the external assumed business. Overall our approach is to provide a global framework while still allowing for local specificities. The idea is to support quality and minimize systematic risk while not hinder from operational work.

#### Peer Reviews:

As explained above, the overall process is based on bottom-up approach and the 4 eyes principle. Actuarial best estimates are controlled via reviews/peer-reviews done by the Group Actuarial Department. This can be supplemented by periodic reviews of IFRS or statutory reserves by external Actuarial Consultants:

- Annual peer review of IFRS reserves done by SCOR's statutory Auditors
- Regular external review done on the overall P&C IFRS reserves performed
- Lloyd's: each Lloyd's Syndicate has to provide a SAO (Statement of Actuarial Opinion) signed by external actuaries to Lloyd's
- Hong-Kong: annual sign-off of the statutory motor and employers liability reserves by S. Yu and Partners Ltd
- Beijing: annual sign-off of the reserves by S. Yu and Partners Ltd
- · Australia: annual sign-off of the reserves by KPMG Actuaries Pty Ltd
- Canada: review of the reserves every three years by J.S. Cheng and Partners
- Argentina: review of the reserves by PWC on a quarterly basis
- South Africa: review by Deloitte of the methodologies used to compute IBNR in 2013, 2014 and 2015
- Brazil: monthly reporting to the regulator prepared by Towers Watson

Internal audits could also be performed (e.g. internal audit to review SCOR UK Reserving processes in 2015).

#### Commutations:

Started in 2003, the Group continues to pursue the active commutation policy of its portfolios, the main goals being to reduce the volatility of claims reserves, to reduce the administrative costs and to allow for capital optimization. This policy will be continued by focusing efforts on the U.S. run-off activities, business exposed to Asbestos and Pollution risks, and some treaties written by the former Converium company acquired by SCOR.

#### 2.3. Methodologies

When a claim is reported to the ceding company, its claims department establishes a reserve corresponding to the estimated amount of the ultimate settlement for the claim. The estimate is based on the cedant's own evaluation. The ceding company reports the claim and its assessed reserve amount to SCOR. SCOR records the ceding company's reserve and is free to book larger or smaller reserves (ACR) based on the review and analysis performed by SCOR's claims division and internal actuaries. Such larger or smaller potential reserves are based upon the consideration of many factors, including SCOR's own assessment of the ceding company's claims' management. Our policy regarding the ceding company's suggested reserves is to be very proactive. As a consequence, SCOR's claims department regularly performs many in-depth claims audits, which could lead to the constitution of ACR. Some claims audits can also be performed, on behalf of SCOR, by external claims experts.

Conforming to applicable regulatory requirements and in accordance with industry practices, SCOR maintains in addition to case reserves and ACR, IBNR Reserves (Incurred But Not Reported). These reserves are meant to cover two types of claims: IBNYR, claims Incurred But Not Yet Reported to

the ceding company or to SCOR, and IBNER, claims Incurred But Not Enough Reserved (as assessed by SCOR).

To assess these IBNR reserves and the variability of the overall reserves, SCOR generally uses actuarial techniques which take into account quantitative loss experience data, together with qualitative factors, where appropriate. This exercise is performed on homogenous groups of contracts, called actuarial segments having similar development pattern and a required statistical mass. The reserves are also adjusted to reflect reinsurance treaty terms and conditions, and the variety of claims processing which may potentially affect SCOR's commitment over time.

#### SCOR uses among others:

- Deterministic methods (e.g. Chain Ladder, Bornhuetter-Ferguson, Average cost per claim or Loss ratio methods) for Best Estimate assessment as well as stochastic approaches (e.g. Mack model, Bootstrap) for reserves' volatility estimates.
- Experts judgments (e.g. exogenous a priori loss ratios based on P&C pricing or underwriters' departments, market benchmark).
- Tailor made solutions like annuity projection by victim for non-standard segments (e.g. Motor and Medical Malpractice segments).

Deterministic Methods	Description
Development Factor Method	Variations on "Chain-ladder" or "Link Ratio" methods, extended by curve fitting (to predict tail development and for smoothing of development ratios), including extensive graphical visualization and powerful diagnostics. Use of market benchmark can complement the SCOR data, if not sufficient.
Bornhuetter Ferguson	A simple method for blending exposure-based estimates (usually from SCOR pricing database) with experience-based estimates (usually Chain Ladder estimates). This technique is used mainly on the most recent underwriting years when the development factors based methods are not relevant.
Generalised Cape Cod	An extension of the Bornhuetter Ferguson Method, with initial expected loss ratios derived from smoothed development factor based ultimate.
Benktander	A method based on credibility approach between Chain Ladder and Bornhuetter-Ferguson methods, i.e. based on the credibility given to the historical data used for the analysis.
Loss Ratio	The loss ratio method is used on the most recent underwriting year when data is scarce and therefore the Chain Ladder and Bornhuetter Ferguson methods are too volatile or when there are no claims data and the methods based on development factors fail. The used loss ratios are based on expert judgements backed by pricing or market information.
Average cost per claim	A method to estimate separately the probability of the claims occurrence and the average cost per claim. This is frequently used for large losses as there is not enough data to have consistent results with a method per triangulation.
Berquist and Sherman Adjustments	The Settlement Rate Adjustment adjusts a triangle of paid claims in reference to settlement rates. The Case Reserve Adequacy Adjustment adjusts a triangle of case reserves (and hence incurred claims), by modelling the adequacy of case reserves.
Result Selection	A method for comparing results from alternative reserving approaches and selecting a weighted average as a final result, incorporating graphics and diagnostics supporting the selection process.
Cashflow Projection	Estimates the future cash flows (or movements in incurred) in respect of reserve estimates. Allows for explicit claim inflation and discounting.

Stochastic Methods	Description
IMack Method	Estimate of the standard deviation in a closed formula with assumption in line with the Chain Ladder method.
Bootstrap Method	A resampling method of estimating variability based on stochastic techniques applied to development factor models. This method produces full probability distributions of reserve estimates.
Hybrid Chain Ladder	Estimate of the standard deviation with a weighted combination between the Chain-Ladder and the Bornhuetter-Ferguson method.

Specific Methods	Description
Mothods	The evaluation of reserves for latent claims is usually done using the Survival Ratio method or frequency / severity methods such as the Manville method (for Asbestos claims only), the S-Curves method depending on the information available or the IBNR/OSL ratio method.
	Depending on data availability and portfolio complexity, SCOR develops tailor made solutions. Some parameters used in these models can be subject to dedicated studies. These parameters include but are not limited to interest rates, legal changes or inflation.

The validation of the methods is assessed using residual and stability analysis techniques. The deterministic and stochastic methods are documented in SCOR Reserving Best Practice Manual. This document has been developed with contributions from many actuarial sources, and is a living document on SCOR intranet as SCOR regularly reviews and updates its methods for determining IBNR Reserves. The related developed guidelines are in accordance with the ERM framework. Only methods approved by the DCRA and/or by GCA (in accordance with a well-defined escalation process) can be used.

In addition to pure stochastic methods, reserves' variability is also tested through deterministic methods: stress tests on key risk drivers alongside shock *scenarii* enabling to assess the risks surrounding the reserves. These techniques allow building what we call a "reserving heat map" ranking majors portfolios in terms of risks with their potential impact on the bottom line.

#### 3. DATA DESCRIPTION

SCOR has an unique technical datacenter "Omega" (the Company's technical and accounting IT system since 1998) and all the actuarial data comes from this data source. The same data is used for the technical closings and for SCOR financial accounts. The data entries process is not only audited internally but also by SCOR statutory auditors around the world. This ensures a global quality and consistency thanks to an unique system and global processes.

The data in the triangles represents gross losses reported or paid as at December 31, 2015. All data has been converted to euros using 2015 year end closing exchange rates. The rates applied are the same for every accounting year. As a consequence, historical fluctuations of exchange rates do not distort triangles claims developments.

Triangulation statistics by class of business are directly created from the technical accounting entries in Omega. Triangles are built up by cumulating accounting data from each accounting year for every underwriting year, each diagonal representing an accounting year. It is worth mentioning that, by "accounting year", we mean SCOR accounting year and not the accounting year of the ceding companies. For example, if a claim is recorded by the ceding company in year 2014 and is reported to SCOR only in year 2015, then this claim will appear in accounting year 2015 in SCOR triangles. Therefore, diagonals do not change from one disclosure year to another (only exchange rates change and closed contracts can explain the variations – see part 5). The only exception to this rule is our UK medical malpractice portfolio where the last diagonal represents the last accounting year as of end of the third quarter only, and is therefore updated with the 4<sup>th</sup> quarter in the following year (this business is part of the worldwide casualty proportional class).

The underwriting years reporting basis used in this disclosure is also used for SCOR internal analyses. This is the case for most reinsurance companies, whereas, for insurance companies, the reporting basis is almost always the accident year. This is due to the fact that reinsurers do not have access to the accident year information. This is particularly the case for proportional contracts where the reinsurer is advised of losses on an aggregate basis (no detail on individual losses is provided) regarding a specific underwriting year without details on the accident year.

Payments and reserves of closed or commuted contracts are not included in the statistics. These contracts are excluded in our analysis in order not to bias the loss development factors selection, as they would tend to skew the curves. SCOR has put in place dedicated procedures to close contracts, based on objective criteria. These criteria depend on the nature, the line of business of the contract and accounting position of claims reserves. Under this process, very few contracts need to be reopened (due to claims movements) after they have been closed.

Incurred (or reported) claims include paid claims, case reserves as reported by the ceding company but, also, ACR that SCOR's claim management team can set up when they consider it necessary, on a claim by claim basis.

#### Segmentation:

The actuarial reporting axis is the actuarial segment (also referred to as actuarial class) which groups together homogeneous contracts based on a variety of criteria (proportional basis or not, underlying risks typology, geography...). At group level, there are almost 400 active reserving segments (still carrying reserves) at 2015 year end.

The actuarial segmentation is the first step of the reserving exercise. Each actuarial segment must bring together data with similar development pattern. Furthermore, statistical mass is required in order to apply actuarial methods. There are strict Group's rules to create actuarial segments. The segmentation is fixed for each calendar year. Each Division Actuary has a defined user profile with pre-defined rights allowing to modify segmentation. The rights to modify segmentation are defined by the P&C Division Chief Reserving Actuary and provided to IT department for acting. When a subsidiary wants to adapt its segmentation due, for example, to a change of underwriting policy, the new segmentation and its consequences in terms of level of IBNR are proposed during the 1<sup>st</sup> quarter to the P&C Division Chief Reserving Actuary, who validates it and decides or not its implementation. Referral to the Group Chief Actuary has been set-up for material segmentation changes. The segmentation is then frozen for a given calendar year. Exceptions can occur during the year if a large new contract is signed / commuted / transferred / novated.

The eight reserving classes disclosed are aggregations of these actuarial segments.

Lloyd's portfolio data is not disclosed as the RITC scheme (Reinsurance To Close – Lloyd's accounting scheme) does not allow displaying entire triangles<sup>1</sup>. Run-off portfolios are not disclosed either as their claims development profile does not match the actual development of the ongoing portfolio. Direct business segments have also been excluded from triangles as this is pure primary insurance, not reinsurance as well as proportional business in South America due to incomplete diagonals for older years and significant quota-shares in China because of their specificities.

These triangles and reserves disclosure addresses 84% of gross IFRS booked reserves.

#### Reconciliation:

SCOR puts a great emphasis in the reconciliation process to ensure full consistency of the actuarial triangles and the financial accounts. SCOR has put in place since 2005 a specific reconciliation procedure between the triangles and the technical accounting system. The reconciliation is done at group level as well as in the Division reserving annual reports. This ensures a consistency between the published claims reserves and the actuarial data used to derive our estimates.

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<sup>&</sup>lt;sup>1</sup> Three years after the beginning of an underwriting year, a RITC (Reinsurance To Close) is purchased to bring finality to the result for that closing underwriting year, allowing a profit calculation and a distribution to take place. The RITC is a payment to transfer liabilities from one syndicate year of account to another. It can be thought of as a 100% quota share reinsurance of year of account, where the n-2 open year of account "reinsures" the previous years of account which are closed.

#### 4. TRIANGLES' CLASS DETAILS

#### 4.1. Preliminary comments on types of reinsurance

In **facultative reinsurance**, the ceding company cedes and the reinsurer assumes all or part of the risks covered by a single specific insurance policy. Facultative reinsurance is negotiated separately for each insurance contract that is reinsured. Facultative reinsurance normally is purchased by ceding companies for individual risks not covered by their reinsurance treaties, for amounts in excess of the monetary limits of their reinsurance treaties or for unusual risks.

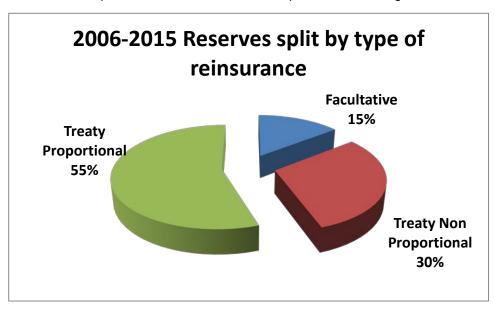
In **treaty reinsurance**, the ceding company has a contractual obligation to cede and the reinsurer to accept a specified portion of a type or category of risks insured by the ceding company. Reinsurers issuing the treaties, as done by SCOR, do not separately evaluate each of the individual risks assumed under the treaty. As a result, after reviewing the ceding company's underwriting practices, SCOR's treaties depend on the coverage decisions made originally by the policy writers of the ceding company.

Both treaty and facultative reinsurance can be underwritten on a proportional (or quota share) basis, or non-proportional (excess of loss or stop loss) basis.

With respect to **proportional** or quota share reinsurance, the reinsurer, in return for a predetermined share of the insurance premium charged by the ceding company, indemnifies the ceding company against the same predetermined share of the losses of the ceding company under the covered insurance contracts.

In case of reinsurance written on a **non-proportional**, or excess of loss or stop loss basis, the reinsurer indemnifies the ceding company against all or a specified portion of losses, on a claim by claim basis or with respect to a specific event or a line of business, in excess of a specified amount, known as the ceding company's retention or reinsurer's attachment point, and up to a negotiated reinsurance treaty limit.

Presented below is the split of SCOR's reserves with respect to these categories:



As the losses under a quota share reinsurance treaty are greater in number than under an excess of loss contract, it is generally easier to predict these losses on a quota share basis and the terms and conditions of the contract can be drafted to limit the total coverage offered under the contract. A quota share reinsurance treaty therefore does not necessarily require that a reinsurance company assumes greater risk exposure than on an excess of loss contract. In addition, the predictability of the loss experience may better enable underwriters and actuaries to price such business accurately in light of the risk assumed, therefore reducing the volatility of results.

Excess of loss reinsurance are often written in layers. One or a group of reinsurers accepts the risk just above the ceding company's retention up to a specified amount, at which point another reinsurer or a group of reinsurers accepts the excess liability up to a higher specified amount or such liability reverts to the ceding company. The reinsurer taking on the risk just above the ceding company's retention layer is said to write working layer or low layer excess of loss reinsurance. A loss that reaches just beyond the ceding company's retention will typically create a loss for the lower layer reinsurer, but not for the reinsurers on the higher layers. Loss activity in lower layer reinsurance tends to be more predictable than that in higher layers due to a greater historical frequency, and therefore, like quota share reinsurance, enables underwriters and actuaries to more accurately price the underlying risks.

#### 4.2. Overall description of classes

For the period from 2006 to 2015, the major class of business in terms of premium and reserves (case and IBNR reserves) is the property fire class. The casualty proportional, casualty non-proportional and facultative and motor non-proportional and facultative classes have also an important weight in terms of reserves.

In €M, as of 2015 year end

Reserving class	2015 ultimate premiums	2006-2015 reserves (on an ultimate premium basis)
Worldwide casualty non proportional and facultative - including PA, WC, IDI and Medical Malpractice	217	1 259
Worldwide casualty proportional - including PA, WC, IDI and Medical Malpractice	276	1 166
Worldwide credit & surety all natures	293	498
Worldwide engineering all natures	276	886
Worldwide marine, transport, aviation all natures	442	1 095
Worldwide motor non proportional and facultative	155	1 088
Worldwide motor proportional	282	529
Worldwide property fire all natures including Nat Cat	2 524	2 854
Total	4 466	9 375

#### 4.3. Worldwide engineering all natures

Engineering insurance provides coverage for the risks inherent in the construction projects (from inception to completion). It covers all types of civil construction risks, plant and machinery breakdown risks as well as delay in start up coverage. The risks covered are both short and long term risks. As a result, the development length is medium tail (5-7 years).

A large part of the risk portfolio is located in South Europe (including France) and Middle East. It is worth mentioning that Asia represents around 24% of the premium and 22% of the reserves.

The contracts are mostly proportional contracts (69% on premium basis) the remainder being contracts written on a facultative basis.

#### 4.4. Property fire all natures including Nat Cat

The property insurance is a short-term business with a 2 to 3 years claims development. The risks covered are classically fire, agriculture, machinery breakdown, and theft for private individuals, commercial or industrial risks (fire being the major part of the premium (over 90%)).

This class also includes CAT risks which have a very short term development pattern.

Around 45% the premium and reserves are related to proportional business, around 33% are related to non-proportional business and 22% to facultative business. Around 20% of premium and 14% of reserves are related to risks underwritten in the Americas (Canada, US and Latin America).

#### 4.5. Worldwide casualty proportional - including PA, WC, IDI and Medical Malpractice

This class gathers all the treaty proportional business of third party liability (except motor liability). The premium and reserves of this class are predominantly derived from our UK medical malpractice portfolio (long-term risks) whereby the premium of this portfolio represents 35% of the total of the class and the reserves represent around 46%. This UK medical malpractice portfolio is in run-off since 2012.

A significant part of this class is IDI business (Inherent Defect Insurance) in France and Spain (16% of premium and 15% of reserves). IDI provides coverage for inherent defects that are detected during a period starting at the completion of a construction/installation and expiring up to 10 years after completion of the works.

This class also includes professional and personal liabilities but also D&O (Directors and Officers, in run-off) and WC (Workers Compensation mainly in the US).

# 4.6. Worldwide casualty non-proportional and facultative - including PA, WC, IDI and Medical Malpractice

This class contains the same underlying liabilities as the proportional class but on a non-proportional and facultative basis. The split is however different: IDI represents around 20% of premium and 21% reserves of the class (France and Spain mainly) while medical malpractice (mainly France) represents around 3% of premium and 9% of reserves.

The other major risks in this class are professional and manufacturing liabilities (heavy industry, food producers). Workers compensation business is also included (mainly in the US).

Please note that some financial institutions and pharmaceutical risks have been underwritten in the past but are now in run-off.

#### 4.7. Worldwide marine, transport, aviation all natures

This class is dominated by the aviation risks with 51% of the premiums and 46% of the reserves, of which around 30% of premium and 16% of reserves for one aviation risks pool. Almost 27% of this pool incurred claim is product liability, which is a long-term risk. Aviation risks also include hull and liabilities for airlines, general aviation and satellite risks, these latter being shorter term risks.

Marine and transport are basically insurance of hull and liabilities for merchant ships. This business represents approximately 27% of premium and 29% of reserves. Finally the class also comprises offshore insurance (e.g. offshore oil rigs).

#### 4.8. Worldwide credit & surety all natures

This class mainly contains proportional business (92% of premium and reserves). The surety business (around 37% of premium and 44% of reserves) is mainly performance bonds. The rest of the portfolio is credit insurance. Both are mid-term business (in case of litigation, the indemnification occurs only when the litigation is over). For credit insurance, the underlying risks are companies only, for which the insurance contract is meant to secure the payment of their invoices. It is worth mentioning that the insurer can unilaterally terminate the contract whenever he wants. Europe accounts for 66% of premium and 62% of the reserves.

#### 4.9. Worldwide motor non-proportional and facultative

The main risk covered is auto liability. Bodily injuries represent the largest part of both premium and reserves of this class.

It is worth mentioning that the underlying risks are long term business. From a reinsurance point of view, this class is expected to have a longer development length than the motor proportional class, as only claims that overcome the threshold (as defined in the reinsurance contract) are concerned. This can create a significant lag between the time when the loss occurs and the time when its cost reaches the threshold. As these claims are the most expensive, they are also more complex and the medical and legal procedure that leads to the final cost is longer and more uncertain than for smaller claims. There are also sometimes payments in annuities (against lump sums) that can increase the duration. In case of inflation, part of the additional cost would be shared between the cedents and SCOR, thanks to the contractual indexation clauses.

An important part of this class is motor third party liability on French market: around 37% premium and 47% of reserves. The second largest part is motor third party liability on UK market: 20% premium and 21% reserves. There is almost no Facultative business in this class.

#### 4.10. Worldwide motor proportional

Property damages represent around 13% of premium and 8% of reserves, the other part being bodily injuries. Compared to the motor non-proportional class, this motor proportional class has a shorter development length. This is explained by the more important weight of damages to property (short term risks) and the nature itself of this class (the claims reporting to the reinsurer is faster for proportional businesses). Some treaties are also covered by ROJA contracts (Reinsurance On Joint Account protection) capping the claims development.

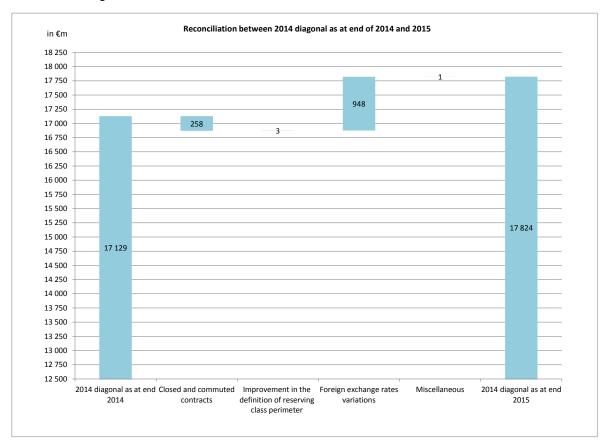
Europe (excluding UK) represents almost 56% of premium and 65% of reserves.

#### 5. RECONCILIATION

#### 5.1. Reconciliation to prior triangles

The following graph provides reconciliation between the amount of incurred claims disclosed at year-end 2014 and year-end 2015 taking into account all available information at reserving class level.

The main changes come from the effect of exchange rates and from the closed and commuted contracts during 2015.



#### 5.2. Findings of the statutory auditors

On our request, procedures have been performed in 2016 by the auditors which has led to a "Report of the findings of the statutory auditors of SCOR SE resulting from the agreed-upon procedures relating to the Loss Development Triangles for the year ended 2015". The objective was to provide SCOR with their findings regarding the quality and the completeness of the loss development triangles disclosed. These procedures as defined by us covered quality and completeness of data disclosed, correct consolidation of the triangles and controls of process leading to the production of the Ultimate Loss Ratios as well as the "As-if" figures.

As part of the procedure, the auditors have found that the disclosed triangles reconcile with the underlying data; the triangles have been consolidated with no exception found, the process leading to the production of the Ultimate Loss Ratios as well as the "As-if" figures did not raise any exception and the note accompanying the triangles is a fair reflection of the way in which the triangles are actually built.

#### 6. <u>Large Losses</u>

Depending upon which actuarial reserving method is used, the presence or absence of large natural catastrophe and man-made losses and how they are treated may have a significant impact on the estimated ultimate loss amount.

These figures, gross of retrocession, are based on the disclosed perimeter only; in particular closed contracts are not included. Only loss amounts exceeding €40m by underwriting year for Property and €15m for the other classes of business (on the disclosed perimeter) are taken into account. Therefore, a claim impacting several classes or underwriting years, which amounts relating to each class/underwriting year are below the mentioned thresholds, will not be displayed in this table. As such these figures could be different from SCOR previously published estimations and have to be only used for data reprocessing when performing the reserving analysis.

Reserves for these losses are not based on aggregate development statistics, but rather on groundup exposure-based assessments reflecting information provided by cedants on a contract-by contract basis. These figures do not include any SCOR IBNR.

In € 000's as of 2015 year end – FX as of 2015 year end

In € 000's as of 2015 year end – FX as of 2015 year end				
Underwriting year	Paid claims	Incurred claims	Main events by UWY	
Worldwide Property fire all natures including Nat Cat				
2007	73 666	73 717	Windstorm Kyrill	
2008	124 647	129 857	Hurricane Ike	
2009	138 027	138 668	2010 Chile earthquake, Windstorm Klaus	
2010	328 387	379 358	New Zealand earthquake, Great East Japan earthquake	
2011	335 411	343 799	Thailand floods, New Zealand Earthquake, Heavy rainfall in Denmark	
2012	109 234	120 111	Hurricane Sandy	
2013	275 601	320 135	Central European Flood, Hailstorm Andreas, Saint-Jude Storm, Fire in a China Semiconductor Company, Japan Snowstorm	
2014	69 824	91 681	European hail (Ela)	
Worldwide marin	ne, transport , aviatior	n all natures		
2007	17 404	17 404	Satellite loss	
2013	70	31 521	Disappearance of Malaysian Airline, Mexican Petrol Company Surface Blowout	
2014	136	57 084	Mexican Petrol Company - Platform Fire	
Worldwide Casu	alty non proportional	and facultative - includin	g PA, WC, IDI and Medical Malpractice	
2001	74 043	74 267	Rail derailment North Dakota, Pharmaceutical loss, AZF explosion	
2002	30 394	30 394	Pharmaceutical loss	
2003	339	25 145	Pharmaceutical loss	
2005	17 522	17 522	US Homebuilders loss	
2010	16 479	16 479	Pharmaceutical company (Herbicide)	

## 7. <u>LIST OF ABBREVIATIONS</u>

ACR Additional Case Reserves

D&O Directors and Officers professional liability insurance

GAUM General Aviation Underwriting Managers

IBNR Incurred But Not Reported = IBNYR + IBNER

IBNER Incurred But Not Enough Reserved

IBNYR Incurred But Not Yet Reported

IDI Inherent Defect Insurance

PA Personal accident

PSNEM Provisions pour Sinistres Non Encore Manifestés

RAA Reinsurance Association of America

RITC Reinsurance To Close

ROJA Reinsurance On Joint Account

WC Workers Compensation

### 8. TRIANGLES

As for previous years, the data format has not changed: we present gross loss triangles as at December 31, 2015, on an underwriting year reporting basis.

To help the reader better understand and analyse our reserves, we also disclosed:

- · paid loss development triangles for each reserving class,
- 15 years loss triangles for the motor non proportional and casualty classes,
- An "Ultimate Loss Ratio 2014 as if 2015" which is last year's ultimate loss ratio recomputed with 2015 exchange rates and including the effects described in the reconciliation (closed or commuted contracts).