



SCOR's loss development triangles and reserves as of December 2012

Content

- 1. PURPOSE AND SCOPE 4**
- 2. RESERVING PROCESS AND METHODOLOGY 5**
 - 2.1. SCOR RESERVING PHILOSOPHY..... 5
 - 2.2. RESERVING PROCESS AND CONTROLS AT SCOR..... 5
 - 2.3. METHODOLOGIES 7
- 3. DATA DESCRIPTION..... 9**
- 4. TRIANGLES’ CLASS DETAILS 11**
 - 4.1. PRELIMINARY COMMENTS ON TYPES OF REINSURANCE..... 11
 - 4.2. OVERALL DESCRIPTION OF CLASSES 12
 - 4.3. WORLDWIDE ENGINEERING ALL NATURES 12
 - 4.4. PROPERTY FIRE ALL NATURES INCLUDING NAT CAT..... 13
 - 4.5. WORLDWIDE CASUALTY PROPORTIONAL - INCLUDING PA, WC, IDI AND MEDICAL MALPRACTICE 13
 - 4.6. WORLDWIDE CASUALTY NON PROPORTIONAL AND FACULTATIVE - INCLUDING PA, WC, IDI AND MEDICAL MALPRACTICE 13
 - 4.7. WORLDWIDE MARINE, TRANSPORT, AVIATION ALL NATURES 14
 - 4.8. WORLDWIDE CREDIT & SURETY ALL NATURES 14
 - 4.9. WORLDWIDE MOTOR NON PROPORTIONAL AND FACULTATIVE 14
 - 4.10. WORLDWIDE MOTOR PROPORTIONAL..... 14
- 5. RECONCILIATION TO PRIOR TRIANGLES 16**
- 6. LARGE LOSSES 17**
- 7. LIST OF ABBREVIATIONS 18**
- 8. TRIANGLES 19**
- 9. APPENDICES 20**

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 second time, along with our traditional 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, 2012, on an underwriting year reporting basis. Our reserving classes' definition is the same as last year. In order to give a deeper insight of 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 2012 year end closing exchange rates. In addition to triangles we present premiums, reserves and ultimate loss ratios as at December 31, 2012, corresponding to each class. To ease the comparison between last year and this year ultimate estimations, we also present the 2011 ultimate loss ratios recalculated on the 2012 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 a relevant actuarial analysis cannot be performed using this level of information only. The disclosed triangles represent a high level aggregation of the data we use at SCOR for our internal reserves assessments. Specific loss developments of particular contracts or events can not be correctly projected at this level of information. In addition, projecting ultimate losses directly from the SCOR disclosed triangles could be misleading as these calculations do not take into account critical qualitative information surrounding the reserves. Our reserve modelling includes factors such as pricing and market conditions, changes in the risk profiles, inflation projections and anticipations on legislation trends. 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, net of estimated related recoveries. SCOR's reserves are established both on the basis of information the company receives from 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 and the trends it observes on a regular basis.

As part of the reserving process SCOR reviews, with the concerned insurers and co-insurers, available historical data and tries to anticipate the impact of various factors such as change in laws and regulations, judicial decisions that may tend to affect potential losses 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 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

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 (Local actuarial reviews, Group Actuarial review, External consultants Global analysis and on demand External Actuarial Audit on specific segments). The reviews carried out by local actuaries cover their entire portfolio. Group actuarial annual report, signed off by Group Chief Actuary, independently reviews about 97% of the Group claims reserves.

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 and 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 3rd quarter data and rolled forward with 4th quarter data by local actuaries and Group Actuarial department.

The actuarial best estimate position is quarterly shared by the Group Chief Actuary with the Reserving Committee (Group Chief Actuary, Group Chief Risk Officer, SCOR P&C Chief Executive Officer and SCOR P&C Chief Financial Officer) and then with Group Executive Committee which assesses management Best Estimates position.

Actuarial Best Estimate position and reserving adequacy is then shared by the Group Chief Actuary with Board Audit Committee.

Also, on a quarterly basis, the Board Risk Committee is informed of main reserving risks through the Group risk dashboard.

Internal Control System:

SCOR reserving governance framework is defined by three processes which meet SCOR Internal Control Standards, namely:

- P&C reserving adequacy report
- Quarterly management of P&C reserves
- Reserving data input to the internal model

These processes are validated and completed by reserving internal control procedures implemented since the last seven years. The main procedures address the relevance of the actuarial ultimate loss estimation, the validation of new reserving methods, the verification of their appropriate application and the actuarial segmentation homogeneity.

Reserving Guidelines:

The purpose is to ensure consistent approach to the estimation of our liability best estimate, patterns and portfolio volatility. The framework and scope define the responsibility of each person involved in the process (local versus group, scope) and the process to seek approval when deviating in material aspects (tools, standards). The reserving rules apply for all reserving liabilities of SCOR Global P&C. Our approach is to provide a global framework but 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, Actuarial best estimates are controlled via peer-reviews done by the Group Actuarial Department (40% of the total reserves fully independently reviewed, 98% at least peer reviewed), but also by periodic reviews of external Actuarial Consultants:

- Annual peer-review done by SCOR's approved Auditors
- Towers Watson annual review
- Each Lloyd's Syndicate has to provide a Statement of Actuarial Opinion signed by external actuaries to Lloyd's
- Milliman reviews annually GAUM reserves for its pool members
- S. Yu and Partners Ltd. sign off Hong Kong reserving adequacy
- KPMG Actuaries Pty Ltd sign off Australia reserving adequacy
- A peer-review of SCOR Canada reserves is done every three years by Eckler Ltd

Towers Watson 2012 annual review conclusions:

- Reserve Levels as at the end of 2012: for the fifth consecutive year, SGPC held reserves are greater than the SCOR internal best estimate which is confirmed as reasonable by Towers Watson's external review¹.
- In its previous review as at 31 December 2011, Towers Watson assessed SCOR's P&C reserving process at the Group level to be in the upper quartile of best practices as measured by a benchmarking exercise based on 14 companies including SCOR.

Commutations:

The Group continues to pursue the active commutations policy of its portfolios started in 2003, 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.

¹ See section 9 for more info

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 method. The ceding company reports the claim and its suggested reserve amount to SCOR. SCOR records the ceding company's suggested reserve and is free to establish greater or smaller reserves (ACR) based on the review and analysis performed by SCOR's claims division and internal actuaries. Such greater or smaller potential reserves, are based upon the consideration of many factors, including the level of the commitments, seriousness of the claims and the SCOR's 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, *i.e.* on which the estimated final cost reported to SCOR can vary.

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 (similar development pattern, 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 (e.g. Chain Ladder, Bornhuetter-Ferguson and 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 provided by P&C pricing or underwriters' departments, market benchmark such as RAA² patterns)
- Tailor made solutions for non-standard 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 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 appropriate.
Loss Ratio	The loss ratio method is used on most recent underwriting years when the information given by the data is not sufficient 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.
Berquist and Sherman Adjustments	The Settlement Rate Adjustment method adjusts a triangle of paid claims in reference to settlement rates. The Case Reserve Adequacy Adjustment method adjusts a triangle of case reserves (and hence incurred claims), by modelling the adequacy of case reserves. In each case, the aim is to end up with a triangle without inherent trends so that the Development Factor Method can be applied without bias.
Latent Claims Specific Methods	The evaluation of reserves for latent claims is usually done through the Survival Ratio method or frequency / severity methods using the Manville pattern (for Asbestos claims only) or the S-Curves method.

² Reinsurance Association of America

Stochastic Methods	Description
Mack Method	Estimate of the standard deviation in a closed formula with assumptions in line with the Chain Ladder method.
Bootstrap Method	A model free method of estimating variability based on stochastic techniques applied to development factor models. This method produces full probability distributions of reserve estimates.

Specific Methods	Description
French motor Non Proportional	Due to change in the underlying portfolio (damage awards in capital and not anymore in annuities), legislation changes (interest rates, mortality tables) and re-underwriting of the risks, it is not possible to use directly the standard methods on this portfolio. The model incorporates qualitative factors and exogenous expert judgments on a claim by claim basis in order to be more accurate.
French Medical Malpractice	Given changes in the underlying risk (notification attachment against occurrence since 1996) and the legislation changes (last one being "Rambur" ruling), the modeling needs to incorporate qualitative feedbacks and scenarios from claims experts. The modeling is also done from ground up to avoid any reporting delay issue.
UK Medical Malpractice	Contrary to most of SCOR portfolio, this is an insurance portfolio for which we have claim by claim detail. One key uncertainty is linked to whether or not a given doctor will be declared liable. This needs to be modelled separately.

The validation of the methods is assessed using residual and stability analysis techniques. All these 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 guidelines developed are in accordance with the ERM framework. Only methods approved by the Group Chief Actuary can be used.

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

3. DATA DESCRIPTION

SCOR has a 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 a unique system and global processes.

The data in the triangles represents gross losses reported or paid as at December 31, 2012. All data has been converted to euros using 2012 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 by cumulating accounting data from each accounting year for every underwriting year. Under this construction, each diagonal represents an accounting year. It is worth mentioning that by “accounting year” we mean SCOR accounting year, not the accounting year of the ceding companies. For example, if a claim is recorded by the ceding company in year 2011 and is reported to SCOR only in year 2012, then this claim will appear in accounting year 2012 in SCOR triangles. Under this presentation, diagonals do not change from one disclosure year to another (only exchange rates changes and closed claims can explain the variations – see the 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 4th 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 our 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: the issue is relevant mainly when the reinsurance contract is proportional, meaning that the reinsurer is advised of losses on an aggregate basis (no details on individual losses) 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. 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.

This triangles and reserves disclosure addresses 85% of gross carried property and casualty reserves. Lloyd’s portfolio data is not disclosed as the RITC scheme (Reinsurance To Close) does not allow to display entire triangles³. Run-off portfolios are not disclosed either as their claims development profile does not really 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.

³ 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.

Segmentation:

The actuarial reporting axis is the actuarial segment (sometimes also called 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 397 active reserving segments (still carrying reserves) at 2012 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 Local Actuary has a defined user profile with permission or not to modify segmentation. The rights to modify segmentation are defined by the Group Chief 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, a comprehensive memo (including impact on IBNR level) is provided to Group Actuarial Department, which validates it and decides or not its implementation.

The eight reserving classes that we disclose are aggregations of these actuarial segments.

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 local reserving annual report. This ensures a consistency between the published claims reserves and the actuarial data used to derive our estimates.

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 risk 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.

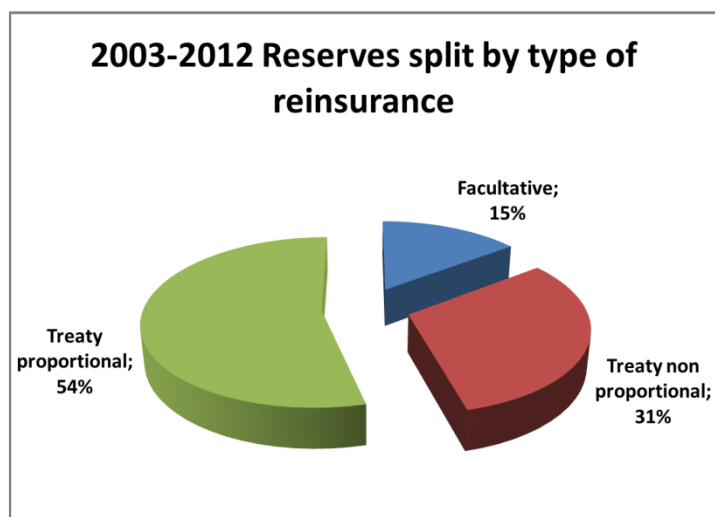
In **treaty reinsurance**, the ceding company has a contractual obligation to cede and the reinsurer to accept, a specified portion of a type or category of risks insured by the ceding company. Reinsurers issuing the treaties, as done by SCOR, do not separately evaluate each of the individual risks assumed 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 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:



Although 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 assume 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 more 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 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 2003 to 2012, the major class of business in terms of premiums and reserves (case and IBNR reserves) is the property fire class. The casualty proportional and motor non proportional and facultative classes have also an important weight in terms of reserves.

in €M, as of 2012 year end

Reserving class	2012 ultimate premiums	2003-2012 reserves (on an ultimate premium basis)
Worldwide casualty non proportional and facultative - including PA, WC, IDI and Medical Malpractice	179	1089
Worldwide casualty proportional - including PA, WC, IDI and Medical Malpractice	249	1,337
Worldwide credit & surety all natures	320	484
Worldwide engineering all natures	236	732
Worldwide marine, transport, aviation all natures	345	778
Worldwide motor non proportional and facultative	157	1,116
Worldwide motor proportional	299	566
Worldwide property fire all natures including Nat Cat	2,097	2,941
Total	3,881	9,044

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 portfolio risks is located in South Europe (including France) and Middle East. It is worth mentioning that Asia represents around 25% of the premiums and reserves.

The contracts are mostly proportional contracts (2 out of 3) 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 or 3 years of 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, but reserves are very low given the very short term development of this risk.

Almost half of the premiums and reserves are related to proportional business, around 30% are related to non-proportional business and 20% to facultative business. Around 15% of premiums and 10% 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 premiums and reserves of this class are predominantly derived from our UK medical malpractice portfolio (long-term risks). The premiums represent 40% of the total of the class while the reserves represent around 60%.

A significant part of this class is IDI business in France and Spain (15% of premiums and 15% of reserves). IDI (Inherent Defect Insurance) 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 workers compensation (mainly in the US, non material exposure).

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. However the split is different: IDI represents around 25% of premiums and reserves of the class (France and Spain mainly) while medical malpractice (mainly France) represents around 5% of premiums and 10% of reserves.

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

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 around 60% of premiums and 50% of reserves, of which around 40% of premiums and 30% of reserves for GAUM (Global Aerospace Underwriting Managers). GAUM is an aviation risks pool. Almost 30% of GAUM reserves 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 25% of premiums and 30% 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 (90% of premium and reserves). The surety business (around 40% of premiums and 45% 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 65% of the reserves and 65% of premiums.

4.9. Worldwide motor non proportional and facultative

The main risk covered is auto liability. Bodily injuries represent the largest part of both premiums 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 (and not 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 25% premiums and 45% of reserves. The second largest part is motor third party liability on UK market: 15% premiums and 15% reserves. There is almost no Facultative business in this class.

4.10. Worldwide motor proportional

Property damages represent around 15% of premiums and 5% 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 represents almost 70% of premiums and 70% of reserves.

5. RECONCILIATION TO PRIOR TRIANGLES

The following table provides a reconciliation between the amount of incurred claims disclosed last year and this year.

Figures in column (1) represent the 2011 diagonal published last year (excluding UWY 1997 for long tail segments and excluding UWY 2002 for short-medium tail segments), whereas figures in column (5) represent the 2011 diagonal published one year later i.e. in 2012.

in €M, as of 2012 year end

Reserving class	2011 diagonal as at end 2011	Closed and commuted contracts	Foreign exchange rates variations	Misc.	2011 diagonal as at end 2012
	(1)	(2)	(3)	(4)	(5)
Worldwide engineering all natures	549	-2	5	0	552
Worldwide property fire all natures including Nat Cat	6,133	-104	61	0	6,090
Worldwide casualty proportional - including PA, WC, IDI and Medical Malpractice	1,823	-25	44	0	1,842
Worldwide casualty non proportional and facultative - including PA, WC, IDI and Medical Malpractice	1148	-2	11	0	1,158
Worldwide marine, transport , aviation all natures	1,446	-4	1	0	1,444
Worldwide credit & surety all natures	508	-27	1	0	482
Worldwide motor proportional	1,454	-21	18	0	1,451
Worldwide motor non proportional and facultative	1,560	-0	16	0	1,575
TOTAL disclosed	14,622	-186	157	0	14,594

6. LARGE LOSSES

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 losses amounts exceeding €15m (on the disclosed perimeter) are taken into account. As such these figures could be different from SCOR previously published estimations.

Reserves for these losses are not based on aggregate development statistics, but rather on ground-up 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 2012 year end

Underwriting year	Paid claims	Incurred claims	Comments
Property fire all natures including Nat Cat			
2003	42,441	42,471	Typhoon Maemi, Property loss
2004	99,272	99,775	Typhoon Songda, Hurricane Ivan
2005	232,623	235,613	Hurricanes Wilma and Katrina
2007	97,949	100,726	Windstorm Kyrill, Australian floods
2008	130,466	136,877	Hurricane Ike
2009	173,917	188,951	2010 Chile earthquake, windstorm Klaus
2010	540,371	723,527	Great East Japan earthquake, New Zealand earthquake
2011	290,321	450,124	Thailand floods, New Zealand Earthquake
2012	42,328	200,470	Hurricane Sandy and Italy Earthquake
Worldwide marine, transport , aviation all natures			
2005	31,479	31,520	Hurricanes Rita and Katrina
2011	23,751	35,763	Energy and marine losses
Worldwide casualty non proportional and facultative - including PA, WC, IDI and Medical Malpractice			
1999	27,451	27,615	Roissy Charles de Gaulle airport: collapse of Terminal 2E (occurred in 2004)
2001	76,406	78,878	Rail derailment North Dakota, AZF explosion and Pharmaceutical loss (Lipobay)
2002	25,387	25,387	Pharmaceutical loss (Vioxx)
Worldwide motor non proportional and facultative			
1999	31,852	31,865	Windstorms Lothar and Martin

7. LIST OF ABBREVIATIONS

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
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, 2012, 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 2011 - as if 2012” which is last year’s ultimate loss ratio recomputed with 2012 exchange rates and including the effects described in the reconciliation (closed or commuted contracts).

9. APPENDICES

The scope of Towers Watson's work was to form an opinion on the gross of outwards reinsurance unpaid loss and loss adjustment expense reserve for the non-life ("P&C") business of SCOR Group as at 31 December 2012. The analysis was based on a combination of separate peer reviews of SCOR internal and external actuarial reports and independent reviews for specific business segments. Towers Watson concluded that SCOR Group's internal best estimate of the gross loss and loss adjustment expense reserve for P&C business is reasonable.

- Towers Watson's review covered more than 95% of the gross held P&C reserves of €10.857 billion, among which 22% were independently reviewed
- The scope of Towers Watson's review excludes SCOR Group's life and health business.
- Towers Watson's conclusions are based on a series of assumptions as to the future. It should be recognised that actual future claim experience is likely to deviate, perhaps materially, from Towers Watson's estimates. This is because the ultimate liability for claims will be affected by future external events; for example, the likelihood of claimants bringing suit, the size of judicial awards, changes in standards of liability, and the attitudes of claimants towards the settlement of their claims.
- Towers Watson has not anticipated any extraordinary changes to the legal, social, inflationary or economic environment, or to the interpretation of policy language, that might affect the cost, frequency, or future reporting of claims. In addition, Towers Watson's estimates make no provision for potential future claims arising from causes not substantially recognised in the historical data (such as new types of mass torts or latent injuries, terrorist acts), except in so far as claims of these types are included incidentally in the reported claims and are implicitly developed.
- Towers Watson's analysis was carried out based on data as at the valuation date of 31 December 2012. Towers Watson's analysis may not reflect development or information that became available after the valuation date and Towers Watson's results, opinions and conclusions presented herein may be rendered inaccurate by developments after the valuation date.
- SCOR Group has asbestos, pollution and other health hazard (APH) exposures which are subject to greater uncertainty than typical accident or event loss exposures. While these exposures account for a relatively small proportion of the claims reserves that we have peer reviewed and estimated, actual losses from this source could prove to be significantly different to the SCOR estimated loss amounts given the inherent uncertainty of such exposures.
- The estimates are in Euros based on exchange rates provided by SCOR Group as at 31 December 2012. A substantial proportion of the liabilities is denominated in foreign currencies. To the extent that the assets backing the reserves are not held in matching currencies, future changes in exchange rates may lead to significant exchange gains or losses.
- Towers Watson has not attempted to determine the quality of the current asset portfolio of SCOR Group, nor has Towers Watson reviewed the adequacy of the balance sheet provisions except as otherwise disclosed herein.

In its review, Towers Watson has relied on audited and unaudited financial information and data supplied to us by SCOR Group and its subsidiaries, including information given orally and on information from a range of other sources. Towers Watson relied on the accuracy and completeness of this information without independent verification.

Except for any agreed responsibilities Towers Watson may have to SCOR Group, Towers Watson does not assume any responsibility and will not accept any liability to any other party, whether in tort (including negligence) or otherwise for any damages suffered by such party arising out of this commentary or references to Towers Watson in this document.