Report of the Reinsurance Committee - Branch Office of Foreign Reinsurers and Insurers/Reinsurers Offices in IFSC

September 10, 2015.

September 10, 2015

Madam

On behalf of the Insurance Committee-Reinsurance vide IRDA's order ref: IRDA/ACTL/REINS/ORDER/132/07/2015 dated 22nd July 2015, I have great pleasure in placing before you the report of the Committee.

The Committee unanimously agreed that Risk Based Capital Approach is the preferred way to assess the Solvency Capital of a reinsurance company. However, the Committee also recognises that the introduction of Risk based Capital regime would need a significant time and hence as an interim measure, the Committee recommends that the current solvency regulations with certain modifications may be applied to the entities involved in reinsurance business in India.

The Committee examined the role of Actuaries in Reinsurance Business and recommends a new cadre of Certifying Actuary to be introduced for Reinsurance Branches. We recommend that a Certifying Actuary shall be appointed for Life and Non-Life Insurance operations separately.

The Committee studied the published IFSC Guidelines and application form for registration of Reinsurers Offices and has provided comments on various provisions in the application form.

I am thankful to the members of the committee, who despite their onerous responsibilities, put in valuable time and energy in crystallising the recommendations and in the making of this report. I thank Chairman, IRDAI for giving us the opportunity to take up this project to make recommendations on the various aspects of Branches of foreign reinsurers.

With Regards

Yours sincerely

Thomas Mathew T

Chairman- Insurance Committee-Reinsurance

Ms. Pournima Gupte

Member (Actuary)

IRDAI

Hyderabad

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Disclaimer

The views expressed are those of the members in their individual and collective capacity as members of the committee and do not necessarily reflect that of the organization or institution they represent.

IRDA Order

भारतीय बीमा विनियामक और विकास प्राधिकरण
INSURANCE REGULATORY AND DEVELOPMENT AUTHORITY OF INDIA

Ref No. IRDA/ACTL/REINS/ORDER/132/07/2015 **Date:** 22/07/2015

ORDER

Re: Foreign offices of Reinsurer

Pursuant to the amendments carried out in the Insurance Act, 1938 vide THE INSURANCE LAWS (AMENDMENT) ACT, 2015, it has become necessary to examine the issues related to opening of foreign branches by the reinsurers.

In view of the above, the Authority hereby constitutes a Committee consisting of subject matter expert from the industry and the Authority. The Committee shall comprise of the following members:

Sl No.	Name of the Member	Portfolio
1	Mr.Thomas Mathew	Chairman
2	Ms. Alice Vaidyan G	Member
3	Mr. Hiten Kothari	Member
4	Ms. Kalpana Sampat	Member
5	Mr. Rajiv Kumarswamy	Member
6	Mr. Srinivasa Rao	Member
7.	Mr. CS Kumar	Member-Convenor

Terms of Reference of the Committee shall be as follows:

1. Registration of Branches of Foreign companies engaged in reinsurance Business-Minimum capital solvency Requirements
2. Registration of insurers/ Reinsurers offices in IFSC(International Financial Service Centre)
3. Applicability of Regulations on Actuaries working with the above entities, if any in addition to extant AA regulations
4. Any other related matter that the Committee feels necessary to address.

The Committee is authorized to invite any expert on the subject for interaction during the assigned exercise. The workgroup may meet as many times as may be required either in Hyderabad or any other place depending on the requirement. The Committee shall submit its report within one month to the Member (Actuary) from the date of publication of this order.

Member (Actuary)

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Acknowledgments

The Committee sincerely thank Mr. N.M. Govardhan, Actuary and former Chairman, LIC of India for his guidance and inputs.

The Committee also would like to thank Mr. Sanjeev Pujari, Actuary& Executive Director - Actuarial, SBI Life Insurance Company and Chairman of the Insurance Committee-Life, and Mr. Mehul Shah, Appointed Actuary - Kotak General Insurance Company and Chairman of the Insurance Committee-Non-Life, for sharing their views on solvency framework.

The Committee would also like to thank Mr. Rajesh Dalmia, President - Institute of Actuaries of India for his valuable inputson Appointed Actuary Regulations in India.

Executive Summary

The recent amendments to Insurance Act, 1938 enabled the foreign reinsurance companies to open their Branch offices in India and operate in Indian market. The committee while preparing the report had the objective of bringing uniformity in regulations across all reinsurance companies writing business in India.

Considering this background and the terms of reference set-out by The IRDAI the report covers;

1. Solvency Requirements of Branches of Foreign Reinsurers
2. Applicability of Appointed Actuary regulations
3. Registration of Insurers / Reinsurers in IFSC
4. Other matters pertaining to Branches of Foreign Reinsurers - Repatriation of surplus

Solvency Regulations - Review

The Committee unanimously agreed that Risk Based Capital (RBC) Approach is the preferred way to assess the Solvency Capital of the Branch of a foreign reinsurance company. However, the Committee also recognises that the introduction of Risk based Capital regime by the authority would involve a consultation process with the industry and hence some amount of time would be required. Hence in the interim, the Committee recommends using the current solvency regulations with following modifications:

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‣ Existing Required Solvency Margin (RSM) factors i.e., Factor-1 and Factor-2 can be continued. ‣ In case of Non-proportional treaties (CAT and Stop-Loss) the RSM calculation should be similar to current Non-Life calculations ‣ All Business to be considered as non-linked term assurance for reportingpurpose	‣ 2 additional Classes of Business to be added for RSM calculation namely Agriculture and Credit. ‣ Agriculture to be treated same as Property (Factor of 0.5 in-line with earlier Solvency norms) and Credit to be treated same as Liability (Factor of 0.75) ‣ Separate RSM calculations for Proportional and Non-Proportional covers ‣ For Non-Proportional and Alternate Risk Transfer reinsurance covers the RSM1 factor to be increased to 30% from existing 20% ‣ Total RSM for Non-Life reinsurance risks is sum of proportional and non-proportional covers ‣ RSM 2 formula to amended to allow for actual extent of reinsurance ‣ Classes of business for Financial Condition Reports tobe amended to cater for reinsurance business
Reporting Formats : ‣ The current regulatory forms needs to be suitably amended for reinsurance operations.	

Actuarial Regulations - Review

The Committee examined the role of Actuaries involved in reinsurance business and reviewed actuarial regulation in other jurisdictions. The committee recommends a new cadre of "Certifying Actuary" to be introduced for branch reinsurance branches. The committee also recommends that separate "Certifying Actuary" shall be appointed for Life and Non-Life reinsurance operations.

The committee took into account the limited availability of qualified actuaries within the Indian markets especially those working in general insurance area and actuaries with requisite knowledge of reinsurance business.To overcome this the committee is of the opinion that Foreign Branch operations of reinsurers and insurers/reinsurers operating out of IFSC should be allowed to use the services of their Group / Regional Actuary or Actuarial function headas "Certifying Actuary"until such time that the local talent can be developed. Further, the existing regulatory requirement of an Appointed Actuary to be Ordinarily resident of India and have specialization in relevant subject needs to be relaxed for the "Certifying Actuary" role.

IFSC Regulations

The committee was of the opinion that additional clarity needs to be provided in respect of insurance/reinsurance operations of companies registered in the IFSC. The committee therefore restricted itself to review the completeness of registration application forms and made suitable recommendations.

Other Matters

The repatriation of surplus from a Branch of Foreign Reinsurer may be allowed by IRDAI if the Available Solvency margin is above 175% of Required Solvency Margin.The committee believes regulations in the current form may not be applicable to the reinsurance branches and IRDAI needs to provide further clarifications/ more amendments on the above regulations so as to enable stakeholders to provide relevant feedback.

Introduction

The amendment to the Insurance Act, 1938 in the year 2014 enabled the entry of Foreign reinsurers to establish branch operation in the Indian market. Following the passage of Insurance Bill, The IRDAI has published draft regulations on Registration and Operations of Branch Offices of Foreign Reinsurers (Other than Lloyds') and IRDAI (International Financial Service Centre) Guidelines. 2015.

The changes to the Actare expected to positively impact the ongoing growth and development of the Indian insurance industry not only providing additional capital sources, but also delivering access for Indian Insurers to foreign reinsurers onshore, in India. This will promote competition and innovation within the Indian insurance market as well as knowledge-sharing between the Indian market and international reinsurers as India seeks to boost its insurance penetration rates.

Diversification of risk is the fundamental function through which reinsurers create value, ultimately providing efficient and effective insurer's protection. Several reinsurers have already expressed their interest to establish their branch operations in India. With the increased role and participation of reinsurers, the financial stability of the reinsurer has become a focal point for the stability of the overall Indian Insurance market.

The regulator can achieve the goal of financial stability of reinsurer through adequate capital requirements. The adequacy of capital can be determined by appropriate valuation of assets and liabilities and thus the role of Actuary assumes significance.

Considering this background and the terms of reference set-out by The IRDAI the report covers;

1. Solvency Requirements of Branches of Foreign Reinsurers
2. Applicability of Appointed Actuary regulations
3. Registration of Insurers / Reinsurers in IFSC
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Solvency Regulations - Review

Assets, Liabilities and Solvency Margin (ALSM) of Insurers Regulations 2000 prescribes the rules for Valuation of Assets, Valuation of Liabilities and Calculation of Solvency margin for insurers. These regulations specifically prescribes the rules for valuation of assets and liabilities separately for life insurance companies and non-life insurance companies. There are no specific provisions for reinsurers carrying on composite business in these regulations except provision 6 under Schedule IIA of these regulations.

In the absence of any specific regulations, the Indian Reinsurance company GIC Re is currently following the principles prescribed for life insurance companies for its life business and following the principles prescribed for non-life insurance companies for its non-life business.

The committee has reviewed the suitability of the existing regulations, solvency regulations in other jurisdictions and suggest changes which should be made applicable to the reinsurance branches so as to ensure that there is adequate governance and oversight by regulators.

Valuation of Liabilities

- **Life Insurance**

The Schedule II-A of ALSM regulations prescribes the rules for valuation of liabilities for a life insurance company. The important provisions are:

1. Mathematical Reserves shall be determined separately for each contract by a prospective method of valuation.
2. The valuation method shall take into account all prospective contingencies under which any premiums or benefits may be payable under the policy as determined by the policy conditions.
3. Much of the capital requirement is built into the policy reserves through margins for adverse deviation (‘MAD’).
4. The negative reserves shall be made zero for the purpose of solvency calculation.

The Actuarial Report and Abstract Regulations 2000 prescribes the solvency factors to be used and the method of calculation of Required Solvency margin. It further provides the reporting formats for required solvency margin and available solvency margin.

The solvency factors were modified by the Authority through various circulars in 2008 and 2009.

- **Non - Life Insurance**

The Schedule II-B of the ALSM regulations prescribes the solvency calculation based on premium and incurred claims. Separate factors were provided for different lines of business. It also provides various forms for reporting of solvency margin of non-life insurance companies. It further prescribes the solvency factors to be used for Required Solvency Margin calculation.

Apart from the calculation of Solvency margin calculations, the Authority issued rules regarding preparationof Financial Condition Report (FCR) including the format for reporting in the year 2014. The Authority has also issued draft guidelines on IBNR calculation.

Valuation of Assets

Schedule-I of ALSM regulations deals with valuation of assets. Itlists out the inadmissible assets or restricted credit asset value for the purpose of demonstration of solvency. Further, it also provides a form (Form AA) to report the value of assets for insurance companies which needs to be signed by Appointed Actuary in case of a life insurance company and by an Auditor in case of a non-life insurance company.

Assets are largely valued as a mixture of book value and market value. Unrealized gains/ losses arising due to changes in the fair value of equities shall be taken to equity under the heading “Fair Value Change Account”. Fair value changes in the case of equities and Revaluation reserves in the case of properties as directed by the regulators can be used to top-up surplus for bonus declaration. It is also clarified that no other amount shall be distributed to shareholders out of Fair value change/Revaluation reserves.

Required Solvency Margin (RSM)

The regulator prescribes a standard formula approach for the capital requirement that is very similar to erstwhile EU requirement under Solvency I regime.

For Life insurance companies, a x% reserves and y% of sum at risk is prescribed as capital requirement, where Sum at Risk is Sum Assured less Statutory Reserves. The reinsurance credit is limited up to 15% of Reserves (50% for reinsurers) and 50% of Sum at Risk.

In case of Non-Life insurance companies, separate solvency margin values are calculated based on Premiums and Claims. The reinsurance credit allowed varies based on the different classes of business (currently it ranges from 25% to 50%). The required solvency margin is the higher of Solvency margin calculated based on premiums and Solvency margin calculated based on incurred claims.

In practice, companies are required to hold 150% of the formula result as their minimum capital. On top of this, there is an absolute minimum capital requirement of Rs 500 million (50 crore).

Advantages of the existing framework:

- The method is simple and easy to calculate. A uniform method is applicable across all insurance companies and thus easy to administer.
- Given that the method is based on Premiums and size of reserves, it takes into consideration the size of the company
- In case of Life insurance companies, Factors of Reserves combined with a recommended minimum valuation basis e.g. mortality table ensures that the link to reserves is controlled. Similarly, the method also takes in account products with low reserves like term assurance still have a capital requirements factor is applied to Sum at Risk.
- The regulations only allow placement of reinsurance with reinsurers with a minimum credit rating (S&P BBB or equivalent) and limits the reinsurance credit one can allow in terms of solvency capital calculation. This minimizes the risk of third party default (credit risk).
- A requirement of 150% ensures that opportunity exists for corrective action before an insurance company breaches the minimum Required Solvency Margin of 100%. Economic Capital is determined by insurance companies and submitted to regulator on an annual basis which provides additional information on capital adequacy. Quarterly monitoring and public disclosures are additional safeguards
- The requirement of 150% implicitly allows for other non-quantified risks namely Operational risks, Third Party Credit risks etc.

- It works!!! The existing solvency framework through the use of RSM factors and a combination of prudent valuation of assets and liabilities together with active regulatory supervision has ensured that there was no case of insolvency reported in the Life Insurance sector since the industry was opened up for private sector in the year 2000.
- IRDAI has reviewed the appropriate factors from time to time so as to be relevant based on changing market dynamics.

Limitationsofcurrentframework

- Formula approach for solvency does not vary to capture the various risks specific to each company. For instance, in case of a life insurance company, the current regulations doesn't differentiate between long-term guarantees and short-term guarantees.
- Asset Liability mismatch risk, Market risks is difficult to factor through a common factor applicable to all the insurers.
- The current approach doesn't allow to factor aggregation or diversification of portfolio of business through allowance for correlations and diversification.
- The benefit out of reinsurance is restricted through defined factors and benefit of actual reinsurance is not factored
- The current method is based on a portfolio of a business as on a particular date and doesn't capture future movement of business
- The current approach doesn't cater well for non-proportional reinsurance business.
- Different solvency requirements for Health business (including personal accident) based on the source of business i.e., through life insurer or non-life insurer
- Not in line with global trends on solvency capital requirements

New Developments in Risk assessment and solvency capital assessment

Given the limitations and challenges encountered under the factor based solvency regime, most regulators have moved towards Risk based capital (RBC) framework.

RBC is a methodology that identifies the amount of capital required to remain solvent. It also identifies when a company has adequate capital.

To help an insurance company identify and manage the risks that it is exposed to it is first helpful to classify risks into groups. A potential set of risk classifications could be:

- Investment risk – covers the better understood risks involved in holding assets for a purpose. This area is sufficiently developed that it suits us to further break this down into sub-classes
    - Market risk – adverse movements in asset values and incomes due to market forces.
    - Credit risk – complete loss of capital on investments due to the default of counter-parties.
    - Mismatch risk – divergence in the value of asset proceeds and the purpose for which they are held.
    - Liquidity risk – inability to convert the investment held to a form (usually cash) suitable for its ultimate purpose without destroying value (anything can be sold, but at what price).
    - Currency risk – a special case of mismatch risk in which divergence of value is due to currency exchange rates

Given that most life reinsurance contracts are for long term with guaranteed rates it is important to recognize that investment risks could be a major area of consideration. This will become even more important when regulator allows for Original Terms reinsurance.

Beyond the class of investment risks come classifications that are in some cases less well understood or defined:

- Operational risk – examples would include IT risk, (e.g. back up procedures, risks of viruses etc) and fraud. The fraud on mortality business is extremely high and the levels at which the frauds are taking place is only increasing every year. It is important to note that the first year mortality experience which typically is expected to be lighter due to temporary initial selection is not observed in India instead encounters a very high mortality in the first year which suggests a steep anti selective spike.

- Expense risk – the risk that expenses get out of control e.g. the set up costs are far too high when compared with the business prospects
- New business risk – this can operate in two directions. The risk of too little new business is more obvious, with implications for expense levels and expense overruns, however excessive new business acts as a strain on solvency if valuation bases are more prudent than pricing bases (often the case). The other area would be portfolio mix. If the actual mix is different to the assumed mix
- Insurance risk – the core experience risks taken on by insurers. The risk of too heavy mortality or too light mortality falls into this group alongside morbidity and lapse experience. Lapse experience can also cut both ways and business supported by punitive surrender values are exposed to the risk of greater than anticipated persistency.
- Group risk – despite the careful management of own company's risks, the activities of other related companies may introduce the chance of strains on solvency coming from the cash flow struggles of a parent (particularly when the capital of multiple financial institutions is managed collectively at a group level as is the case for many banking organizations). This is important in the context of a branch of reinsurer since the regulator also draws comfort from the balance sheet strength of the parent
- Credit risk – beyond the risk of borrowers defaulting on issued debt, or the complete loss of value of an equity holding, any organization which may have a liability to the reinsurer should be assessed for credit risk. The most likely example here is that of reinsurer / retrocessionaire default.
- Regulatory risk – while non-compliance with regulations often carries financial penalties, the second order impact of negative press also warrants considering. With these things in mind the role of compliance officers and proper staff training
- Other risks – this should cover every exposure that doesn't fit snugly in one of the above categories. Meteor strikes may be far afield but an earthquake is not. Are electronic records backed up sufficiently far away that in the event of a nuclear strike business can continue uninterrupted. The Business Continuity

Planning assumes significance. Legal risks could also be included here particularly how the arbitration aspects in the treaty are defined.

Having identified and quantified all possible areas of sensitivity, it is then appropriate to consider if there is correlation between risk groups. In this information age, a failure in one area, even if already anticipated, may affect confidence in other areas. An easy example in an insurance company is the relationship between falling asset markets and surrender rates. It is very difficult to identify the correlation between risks and even harder to quantify the effect of correlations.

Some more specific examples of insurance risks are as follows.

- Internal risks are those that an insurer controls itself.
- External risks are risks that are less easy to control and are often forced upon companies by external forces.

To protect the public, regulations are imposed, which of course, carry the risk of sanctions if they are not adhered to. In fact retrospective assessments of improper action (which may have been legal at the time) may carry penalties. While profits are desirable, there is the risk that they may be pursued at too great an expense to others.

Identifying exposure to rules that are not yet in place may seem a bit hopeful, but if actions are assessed with a sufficient degree of independence and objectivity, their implications beyond today's bottom line is more easily assessed. Needs assessment tools to determine whether a product proposition is right for the policyholders of the cedant company and not just the reinsurer or the distributor are a subtle example of risk management.

Besides governments and their agents, there are competitors and partners. In each case their actions will affect the companies.

Thus we know that insurance companies are exposed to numerous risks but it is important that models be developed to quantify the major risks and in particular the effect of actions by others and attach probabilities to these actions.

Most advanced markets have adopted Risk based capital framework as it takes the specific characteristics of the company into account while determining the capital adequacy. The exact nature of the solvency framework adopted by any given territory is dependent on the exact circumstances of the country and the practical difficulties likely to be encountered in its implementation.

Solvency regulations in other jurisdictions:

- EU/US/Canada/Australia – Solvency 2 or equivalent. UK already has Individual Capital Assessment Standards since 2006.
- Singapore – Risk Based Capital (RBC) Framework since 2004 and moving to RBC 2 from 2017
- China – Moving to RBC China –Risk Oriented Solvency System (C-ROSS) regime
- Malaysia and Korea (2009), Thailand (2011), Indonesia (2013) – RBC framework
- Hong Kong, Sri Lanka – Moving to RBC Framework from 2016

The IMF / World Bank study on the Indian Regulations has also pointed out that there is a need to implement Risk Based framework. The relevant portion of the ICP 23 which deals with the Solvency and Capital Adequacy is given below:

"The Solvency II Quantitative Impact Studies have demonstrated that Solvency I levels of capital are inadequate. IRDA has recognized this with a non intervention 150 percent solvency ratio requirement. However, this has not been translated into a mandatory corrective action process and has been weakened already for the nonlife sector. The rating largely reflects the informal solvency testing system that is in process of being adopted, the nature of the ownership of Indian insurers, the need for insurers to examine their asset-liability matching, and the ongoing oversight role of the actuarial profession. In addition ICP 20 has identified prudential shortcomings in the nonlife sector. It is desirable that the economic capital calculation is formalized, possibly as an adjunct to the corrective action regime that is being examined in parallel."

The IRDAI in its response provided the following inputs:

"The authority has taken note of the recommendations on strengthening the capital adequacy and solvency regime. In this regard, attention is drawn to the fact that while the Insurance Act requires the insurance companies to maintain the solvency of 100 percent, the authority as part of the registration requirements stipulated that all insurance companies must maintain a solvency of 150 percent at all times. In addition, IRDA has laid down stipulations on computation

of economic capital by lifeand nonlife insurance companies. Further, the Institute of Actuaries of India has released guidance on embedded value calculations for life insurance companies. IRDA is also examining the merits of moving toward a standardized risk-based solvency model. It is envisaged that with the stabilization of these initiatives, the capital adequacy and solvency regime would become risk based."

While considering the Implementation of RBC it is possible that some of the following issues could be encountered

- Big workload on the Regulator and Industry
- Technology preparedness
- Phasing in to existing levels of capital
- Lack of expertise
- Impact on Business like some lines of business may require higher capital

Using Singapore and other countries in Asia as an example, regulators have needed at least 2 years to move to a RBC type framework.

We have highlighted below the phases that are typically needed to achieve the transition:

1. Investigation of key countries' RBC framework and draft paper of propose framework, first principles and initial calibration factors for each risk category (including operational, credit, market, investment and insurance etc.). We would recommend that the framework drafted by the International Association of Insurance Supervisors ("IAIS") is used for the design of the framework, including elements such as horizon (1 year vs. ultimate view), return period, etc.

   Depending on the availability of data (whether it is already available from historical returns and electronically stored in a database), the regulator might have to request a one off data collection from key insurance companies to formulate the first calibration of the new framework.

2. First Consultation Paper for RBC1 released to all companies
3. Quantitative Impact Study (QIS) #1 – This survey is conducted on key companies first.
4. Quantitative Impact Study #2 – This survey is then extended to all companies.
5. Quantitative Impact Study #3 – Final run for companies

6. Final Implementation – Usually there is a one-year transition period whereby the old Solvency 1 framework is run parallel to RBC1 for testing. This gives companies adequate time to carry out the necessary actions (e.g. capital injection, revise investment strategy, redesign products, retrocession etc.) to meet the new capital requirements.

The steps 1-5 usually take around 2 years; with another year needed for the final implementation when dual reporting is required for transition.

Ideally the QIS are carried out during the mid-year period rather than during year-end reporting periods to avoid excessive strain on resources on both the companies and regulators.

We would also recommend that for each risk category, the regulator creates working groups involving consultants, academics, direct/reinsurance companies and actuarial association members, to collect and study the data, and produce the right factors and technical calibration.

We note that in Europe to move to Solvency 2, the regulator had to issue 5 QIS to get the right calibration. The committee believes that notwithstanding some of the challenges in introducing the RBC framework, the eventual framework for India including the operations of the Branches of Foreign Reinsurers should be Risk Based Capital framework akin to Solvency II model prevalent in the EU.

However the methodology for India needs to be developed taking inputs from all stakeholders and also provide the industry the time to prepare and implement such a Risk Based framework. Thus it is important to have an interim mechanism till the RBC framework is implemented. The committee deliberated and believes that the existing structure can be used in its current form for the Branches of Foreign Reinsurers.

Having said the above, the committee believes that despite moving to risk based capital there might be some residual limitations which cannot be addressed.

Solvency Regulations - Recommendations

Life Insurance

- The committee reviewed whether the existing aspects around valuation of liabilities, the inadmissibility of certain assets and the factors for Required Solvency Margin (RSM)are appropriate for the purpose of reinsurance business. As part of the review, the committee reviewed the factors that were prevalent in certain geographies before the introduction of the

RBC framework. In this connection, the committee looked into the factors of Singapore, China, Hong Kong, Malaysia etc.

Valuation of Liability:

- Committee believes that the valuation of liabilities on Gross Premium Valuation (GPV) could become onerous since the seriatim data is not available on a timely basis for the reinsurers. Further the data is submitted by the cedants with delays and hence only the summary information can be used for the purpose. Since most of the contracts are concluded on an attained age Yearly renewable term basis, it was agreed that the Unearned Premium Reserve (UPR) will be a good / prudent basis for valuation. However it was also agreed that the UPR may be understating the liabilities if the treaty is loss making. Thus the GPV could be taken as an underpin for loss making treaties.
- The committee also recommends introduction of IBNR (Incurred But Not Reported) provisions while determining the liability and hence for solvency calculations. The methodology used to calculate UPR and IBNR reserves can be ascertained by the actuary of the reinsurer. The actuary while determining the UPR and IBNR shall consider the international best practices and extant domestic regulations if any.

Valuation of Assets:

- In terms of the admissibility of assets, it was agreed that this will be an area that should be aligned with the direct insurance companies. However certain aspects like policyholder balances and agent balances may not be relevant in the context of life reinsurance. Thus it was agreed that these should be modified to reflect the characteristics of the reinsurance business while retaining the philosophy behind it.
- In Valuation of assets (Schedule II) the following items can be deleted as they are not applicable relevant from a reinsurance perspective:

"(1) (a) Agents balances and outstanding premiums in India ____

(b) Agents balances and outstanding premiums outside India ____"

The Agents balances can be amended and new clauses incorporating reinsurance broker balances and composite broker balances would need to be incorporated as under:

(1) (a) Balance due from insurers/reinsurers in India and Intermediaries within India beyond 60 days of the payment due date, to the extent they are not realized.

(b)Balance due from insurers/reinsurers in India and Intermediaries outside India beyond 60 days of the payment due date, to the extent they are not realized.

- All other aspects of asset valuation shall be as per the relevant IRDAI regulations/guidelines.

Review of Solvency Factors:

- The Committee recommends that the existing RSM factors applicable for non-linked individual business shall be applied for calculation of RSM for risk premium reinsurance business under individual business and long term group credit life and RSM factors applicable for non-linked Group business shall be applied for calculation of RSM for risk premium reinsurance business under group business.
- The comparison of the RSM factors in other countries revealed that the existing factors are comparable with the Asian Market and thus no material change is required. The solvency factors available in other markets before moving to Risk Based Solvency calculation framework are provided in the following table:

Country	Factor applicable on Mathematical Reserve (MR)	Factor applicable on Sum At Risk (SAR)	Statutory Solvency requirement (Available Solvency Margin/Required Solvency Margin)
China	4%	0.15%	150%
Malaysia	4%	0.1% for less than 2yrs term 0.2% for longer term	130%
Hong Kong	4%	For direct insurers: 0.1% where the term	150%

		is <= 3years 0.15% for term greater than 3yrs and less than or equal to 5years 0.3% for term above 5years. 0.1% for pure reinsurers	
Singapore	4%	0.1% for less than 2yrs term 0.2% for longer term	130%

- The committee believes that there are opportunities to improve some of the existing factors.

The areas of improvement include the following:

- The factors of riders- Currently, the factor applicable on SAR is zero for Accident, Critical Illness and Permanent Disability riders. This issue is same for Health insurance business also. We recommend that this factor shall be reviewed and be aligned with Direct Insurance Companies.
- Short term contracts like Group Insurance contracts, the existing factor applicable on SAR is one rupee per thousand sum at risk. In many occasions the premium itself may be less than one rupee per thousand sum assured. Thus the solvency requirement is more than the premium collected especially for a group with relatively young aged persons, which may create significant strain on capital for the companies. Therefore, the Committee believes that the factor applicable on SAR for short-term business need to be reduced.
- Possible anomalies between Life and Non Life in the above areas for short term contracts

Since the existing framework is only an interim measure the committee thought it appropriate to retain the existing factors without any modifications.

Non - Life Insurance

The committee reviewed whether the existing aspects around valuation of liabilities, the inadmissibility of certain assets and the factors for Required Solvency Margin (RSM)are appropriate for the purpose of reinsurance business.

Valuation of Liability:

- The committee reviewed the IRDA (ALSM) 2000 regulations and subsequent clarifications pertaining to reserve for unexpired risks calculations. It was agreed that the reinsurers portfolio would generally comprise of combination of proportional and non-proportional risks/contracts and would be subject to much wider variation as compared to direct insurance companies. Further, the contracts could be on Risk Attaching basis or losses occurring basis which is not typically witnessed by direct insurance companies. This is specifically true for reinsurer writing catastrophic reinsurance business. The factors prescribed by the authority under the current regulations for the different class of business might change significantly year-on-year based on the performance of the underlying reinsurance portfolio. Thus the committee believes that the determination of reserve for unexpired risk estimations should be left to the actuary of the reinsurer.The actuary while determining the UPR and IBNR shall consider the international best practices and extant domestic regulations if any. However, in cases where the Unearned Premium reserve (UPR) is inadequate in the opinion of the actuary to cover the future risks then Premium Deficiency Reserve (PDR) needs to be established by the actuary.

Valuation of Assets:

- In terms of the admissibility of assets, it was agreed that this will be an area that should be aligned with the direct insurance companies. However certain aspects like policyholder balances and agent balances may not be relevant in the context of life reinsurance. Thus it was agreed that these should be modified to reflect the characteristics of the reinsurance business while retaining the philosophy behind it.

- In Valuation of assets (Schedule II) the following items can be deleted as they are not applicable relevant from a reinsurance perspective:

  "(1)(a) Agents balances and outstanding premiums in India ____
  (b) Agents balances and outstanding premiums outside India ____"

  The Agents balances can be amended and new clauses incorporating reinsurance broker balances and composite broker balances would need to be incorporated as under:

  (1) (a) Balance due from insurers/reinsurers in India and Intermediaries within India beyond 60 days of the payment due date, to the extent they are not realized.
  (b) Balance due from insurers/reinsurers in India and Intermediaries outside India beyond 60 days of the payment due date, to the extent they are not realized.

- All other aspects of asset valuation shall be as per the relevant IRDAI regulations/guidelines.

Review of Solvency Factors

Traditional reinsurance coverswithin the non-life business can be primarily classified into proportional reinsurance and non-proportional reinsurance. The committee reviewed the applicability of existing RSM calculation methodology to each of the types of reinsurance covers.

Proportional Covers

- It was unanimously agreed that for proportional reinsurance cover the existing methodology can be used as it is.

- The existing IRDAI (Assets, Liabilities And Solvency Margin of Insurers) Regulations, 2000classifies general insurance business into 9(nine) different classes of business for determining Required Solvency Margin (RSM) as defined below:

Item No.	Description (Class of business)	Premium Factor (A)	Claims Factor (B)
1	Fire	0.5	0.5
2	Marine Cargo	0.6	0.6
3	Marine Hull	0.5	0.5
4	Motor	0.75	0.75
5	Engineering	0.5	0.5
6	Aviation	0.5	0.5
7	Liability	0.75	0.75
8	Others	0.7	0.7
9	Health	0.75	0.75

- The committee also took cognizance of the fact that initially separate solvency factors were identified for rural business (A = 0.5 and B = 0.5).

- The Committee recommends that the level of classification currently prescribed under IRDAI ALSM regulations can be used with the addition of two lines of business, namely Rural /

Agriculture and Credit which are currently included under Others, to assess the required solvency margin for proportional covers. The Agriculture and Credit classes of business constitute a significant proportion of business ceded in the Indian insurance market and hence it seems appropriate to have separate solvency factors defined for these classes of business.

- The committee believed that the underlying characteristics of rural / agriculture class of business resembled more closely with Property class and hence solvency factors those applicable to Property could be used for RSM calculation. Similarly, Credit insurance resembles closely with liability insurance and hence solvency factors applicable to liability could be used for RSM calculation. The solvency factors applicable for the two new classes of business are defined below:

Description (Class of business)	Premium Factor (A)	Claims Factor (B)
Rural / Agriculture	0.5	0.5
Credit	0.75	0.75

Non-Proportional Covers

- The current RSM calculation methodology may notbe appropriate to determine RSM in case of non-proportional and Alternate Risk Transfer (ART) covers. This is because the current methodology uses Premium and / or Claims as a proxy to determine RSM whereas in case of non-proportional or ART covers premiums are only a partial reflection of the risk andcould be only of a small fraction of the total capacity offered by the reinsurer. For such covers, the RSM should be measured against the exposure or capacity provided by the reinsurer.

- The Non-Proportional covers also tend to cover multiple classes of business under the same contract. For example:

    - Non-Marine non-proportional cover usually provides coverage for Fire, Engineering and Miscellaneous (related to property risks) classes of business under the same contract.
    - Whole Account non-proportional cover usually provides coverage for Fire, Engineering, Miscellaneous (related to property risks), Marine, Personal Accident and Motor class of business under the same contract.

- In absence of risk based capital methodology, the committee recommends that in the interim the RSM1 factor in case of non-proportional covers could be increased to 30% from the existing 20%as prudence to increase the overall RSM for non-proportional covers.

- For claims, since the actual experience would get factored in, no change is proposed vis-à-vis the existing 30%.

- For non-proportional and alternate risk transfer reinsurance covers, the committee recommends the below classification based on classes of business covered by the contract should be used for determining the RSM calculations:

Item No.	Description (Cover Type)	Premium Factor (A)	Claims Factor (B)	Remarks
1	Non - Marine	0.5	0.5	Same as Fire and Engineering as they are the dominant exposures
2	Marine	0.6	0.6	Higher of Cargo and Hull class of business
3	Motor OD / TP	0.75	0.75	No Change
4	Aviation	0.5	0.5	No Change
5	Liability	0.75	0.75	No Change
6	Health and PA	0.75	0.75	No Change
7	Rural / Agriculture	0.5	0.5	Same as proportional covers
8	Credit	0.75	0.75	Same as proportional covers
9	Whole Account	0.75	0.75	Highest factor determined based on existing class of business
10	Other	0.7	0.7	No Change
11	Alternate Risk Transfer	0.75	0.75	Highest factor determined based on existing class of business

- The total RSM for reinsurance companies writing non-life risks would be sum of the RSM determined for proportional and non-proportional covers.

- In addition to the above, the committee also recommends that a higher threshold of 175% of solvency should be maintained by the branch operation of foreign reinsurers before any consideration on repatriation of surplus.

- The committee also considered the Claims Factor currently used under RSM calculations. Given that authority had limited regulatory oversight on foreign reinsurers currently involved in reinsurance operations, the reinsurance credit given to companies while calculating RSM was limited for each class of business. With reinsurers looking to establish their branch operations in the country and IRDAI having complete regulatory oversight on their operations, the committee recommends that full extent of retrocession should be allowed for while determining RSM for branch operations of the reinsurer. This is particularly relevant in case of catastrophic or individual large risk losses that are largely reinsured and recoveries have been effected. Not allowing for the full extent of retrocession would put undue strain on the capital of the branch despite the claims being fully paid by the reinsurer. The committee recommends that net claims incurred should be used for the purpose of determining RSM2 instead of current calculation which involves higher of gross and net incurred claims.

- The requirement of higher of net claims of the current year or previous three years should continue.

Financial Condition Report

- The Financial Condition report on the other hand requires insurers to report on the performance of 27 (twenty seven) classes of business as defined below:

Line of Business
Fire
Personal Accident - Individual& Group
Health Insurance - Individual, Group - Government, Group - Employer/Employee Schemes and Group - Other Schemes
Overseas medical Insurance
Marine - Cargo & Others and Hull
Liability - Product, Workmen Compensation / Employer's Liability and Other Liability
Aviation
Engineering
Crop and Weather Insurance
Weather Insurance
Credit Insurance
Other Miscellaneous
Motor OD - Private Car, Two Wheeler, Commercial Vehicle
Motor TP - Private Car, Two Wheeler, Commercial Vehicle (Declined Pool), Commercial Vehicle (TP Pool) and Commercial Vehicle (Other than Pool)

- The committee believes that this level of classification, as currently used for direct insurance companies, wouldn't be necessary for companies involved in reinsurance operations. This is mainly because the reinsurance products or contracts do not necessarily classify these classes of business separately in terms of coverage. E.g. Motor Own Damage (OD) and Third Party (TP) could be covered under the same treaty and would be difficult to identify premiums for each type of cover.

- In addition, the materiality in terms of reinsurance business volume for each of these classes of business might not be too relevant to warrant such level of classification.

- The committee recommends that for Financial Condition Report to be submitted by the actuary of branch operations of reinsurers the following classes of business to be used separately for proportional and non-proportional reinsurance cover:

Item No.	Classes of Business Covered
1	Non - Marine
2	Marine
3	Motor
4	Rural / Agriculture
5	Credit
6	Liability
7	Other

Reporting Formats:

The existing reporting formats under Life Business and Non-Life business are mainly focussed towards direct insurance companies. These reporting formats need to be modified for reinsurance business with the regulatory objectives. Thus the forms DD, DDD, NLB-1, NLB-2, Form-H and Form-KT1 under life insurance business and IBNR and FCR forms under non-life insurance business need to be modified.

Actuarial Regulations - Review

- The Appointed Actuaries (AA) working with life (re)insurance, general (re)insurance and health (re)insurance companies are governed by theIRDA (Appointed Actuary) Regulations 2000 and IRDA (Appointed Actuary) (First Amendment) Regulations 2013.

- The current regulations apply to reinsurers and hence requiresreinsurers with composite license to have separate AA for each of their life and general insurance business. Further, the AA needs to be a full time employee and ordinarily resident in India.

- The committee would like to highlight that the reinsurance business is a business between two knowledgeable parties and does not involve dealing with policyholders directly. As such the committee reviewed the role of Appointed Actuary in this context.

- The committee also took cognizance of the fact that there is limited availability of qualified actuaries within the Indianmarkets especially those working in general insurance area. The availability of actuaries with requisite knowledge for reinsurance business would be even more remote.

- The committee has also reviewed Actuarial regulations prevalent in other jurisdictions for branch operations of reinsurers before making its recommendations. The Actuarial regulations in different jurisdictions is summarized below:

Country	AA or certifying Actuary	Separate or same
Australia	Appointed Actuary – responsibilities same as for direct insurers	Separate for Life/ Non-Life
Japan	Appointed Actuary	Can be the same. Reinsurers in Japan are classified as Non-Life even they carry out Life business only
HK	Appointed Actuary	Separate for Life/ Non-Life
Singapore	Certifying Actuary – range of responsibilities limited compared to AAs of direct insurers	Separate for Life/ Non-Life
Korea	Appointed Actuary	Can be same
China	Appointed Actuary	Same for all lines of business
South Africa	Statutory Actuary	Can be same

Recommendations

- The committee having examined the reduced role of Appointed Actuary in a Branch office of Foreign Reinsurers, the Committee proposes a new cadre of actuaries called "Certifying Actuary".

- The Branch of a Foreign Reinsurer shall have separate "Certifying Actuary" for their Life Business and Non-Life business. Health business written within life/non-life can be certified by the respective Certifying Actuary.

- A"Certifying Actuary" would satisfy all the criteria specified in the Appointed Actuary regulations except the following provisions:

  - 3(2)(i) - Ordinarily resident of India
  - 3(2)(ii) as per First Amendment to AA's regulation - Specialization in relevant subject
  - 8(e)(ii) - policyholders' interests
  - 8(g)(iii), 8(g)(iv),8(g)(vi) and 8(g)(viii) - Management expenses, interim bonus, premium rates are fair and policyholder reasonable expectations
  - 8(h)(i) -rates are fair
  - 8(i) - Information to the Authority

- The following provisions of AA regulations shall be modified:

  - 7(b)(iii)- To be modified in the context of new/innovative products only
  - 8(a) - Reference to investments can be deleted, Reinsurance word can be replaced by retrocession.
  - 8(g)(viii) - To be modified for "any relevant guidance notes/practice standards issued by IAI".

- The committee is of the opinion that Foreign Branch operations of reinsurers and insurers/reinsurers operating out of IFSC should be allowed to use the services of their Group / Regional Actuary or Actuarial function head until such time that the local talent can be developed. The Group / Regional Actuary or Actuarial function head can act as a "Certifying Actuary" for their Indian branch operations.

- The "Certifying Actuary" would undertake all the work as currently laid down by the authority for Appointed Actuary E.g. Liability valuation of reinsurers, Financial Condition Report etc.

IFSC Regulations

- The committee was of the opinion that additional clarify needs to be provided in respect of insurance/reinsurance operations of companies registered in the IFSC. The committee believed clarity needs to be provided by appropriate authorities in respect of Taxation and conduct of insurance and reinsurance business for companies established in IFSC.

- Further, clarifications would also be required on applicability of IRDAI regulations relating to Solvency, Investments, Accounting etc. for companies registered in IFSC.

- The committee therefore restricted itself to review the completeness of registration application forms and suggest the following changes needed to be made to the registration forms:

    - **Point 6 :**In addition to Authorised Capital, details pertaining to Subscribed Capital and Issued Capital needs to be requested.

    - **Point 9 :** As per minutes of Board meeting of the Authority, three year credit rating history would be examined. The form seeks details for five years.

    - **Point 11 :**Applicability of approvals desired at the time of application needs to be assessed. E.g. How can a company acquire a PAN number without being registered for operations in India.

    - **Point 14 :**The representative address or Company's address should be allowed.

    - **Point 18 :**The shareholding pattern of the company accepting risk (or stamp being used) should also be sought in addition to the group / parent company details.

    - No reference to DTA arrangement. E.g. Information pertaining to the stamp they planning to use for writing business.

Other Matters

- The committee deliberated on existing regulations pertaining to Audit, Investments and Reinsurance as issued by IRDAI and its applicability to branch operations of foreign reinsurers.

- The current regulations in respect of Auditors appointed by the insurance companies require the following:

    - Requirement to have two auditors for finalizations of accounts

    - Restriction on audit firms to be involved in not more than 2 (two) insurance companies

- The committee was of the view that this current stipulation would be onerous for the branches of reinsurers and suitable modifications may be considered by the Regulators office.

- The current Reinsurance regulationrestricts the cession that can be made to a single reinsurer based on its credit rating. This would also be applicable to branch operations of foreign reinsurers.
- Since the retrocession would be made to its parent/ group entity with a view to optimize the global retro-cession at the entity level, the committee was of the view that such cession limits should not be made applicable to the branch operations of foreign reinsurers. Similarly cessions to the parent/ group/ subsidiaries should be permitted subject to the retro-cession limits proposed in the draft regulations governing the operations of branches. Accordingly suitable modifications would be required in the Reinsurance Regulations and an opportunity provided to the stakeholders to give their views.

- As per the Insurance Act Sec 27(7), insurers registered in India would need to have Trust registered with regards to life business. The committee was of the view that this requirement would be onerous and not particularly relevant for reinsurance branches.

- Accordingly, the committee believes all the above regulations need not necessarily be applicable to branch operations of foreign reinsurers.

- Hence, the committee believes that IRDAI needs to provide further clarifications on the above regulations so as to enable relevant stakeholders to provide relevant feedback.