Report of the Committee (Part 1)

Review of Regulations – General Insurance (Including Health)

September 2015

Insurance Regulatory and Development Authority of India (IRDAI)

This page has been left blank

Ms. Pournima Gupte,
Member (Actuary),
Insurance Regulatory and Development Authority of India,
Hyderabad.

7th September, 2015

Respected Madam,

Report of the Committee (Part 1) on
Review of Regulations – General Insurance (including Health)

It is with great pleasure that I submit before you the Report of the Committee (Part 1) constituted by the Authority on the above subject vide IRDAI order number IRDA/ACTL/GEN/ORDER/131/07/2015.

The Part 1 of the report covers the following terms of reference of the Committee:

1. Review of IBNR Guidelines
2. Appointed Actuary Regulations for General Insurance
3. Issues related to claims reserving and suggesting the possible approaches
4. Actuarial involvement in matters related to reinsurance
5. Asset, Liability and Solvency Margin regulations (under any other related matter)

The Committee chose Asset, Liability and Solvency Margin (ALSM) regulations under "Any other related matter" since the issues related to Technical Reserves are inseparably intertwined with this regulation. For life insurance companies, ALSM regulations stipulate the approach and methodology of creating reserves. The Committee felt that in case of general insurance companies an elaborate regulation on valuation of liabilities, on the similar lines as in life insurance companies, be created.

The Report and the Recommendations contained are an outcome of review of Insurance Act 1938, Insurance Amendment Act, 2015, existing regulations and guidelines, draft regulations and guidelines issued by Authority on related subjects and regulations or guidelines on related issues in selected foreign jurisdictions. This review was supplemented by elaborate internal discussions by the Committee members.

The core report structure is arranged in a manner such that each major area of work has been broken down into its components and for each component the report discusses the current approach, committee recommendations and rationale of the recommendation. The recommendations and their rationale endeavor to balance the interests of all stakeholders in the insurance business.

On behalf of the Members of the Committee, I sincerely thank you for entrusting this responsibility to us and for sparing time in reviewing the progress of the report and sharing the regulatory perspective on various issues involved. I also thank you for granting extension of time to the Committee to work on the areas that formed part of terms of reference and the opportunity to report thereon has been utilized to come up with a more comprehensive report.

Mehul Shah

Hyderabad
Date: 7th September 2015

Committee Members:

Mr. Mehul Shah	**Chairman**
Mr. Pankaj Kumar Tewari	**Member – Convenor**
Mr. Anurag Rastogi	**Member**
Mr. Arunachalam R	**Member**
Mr. Biresh Giri	**Member**
Ms. Tania Chakraborty	**Member**
Mr. Manalur Sandilya	**Member**
Mr. Sharad S Ramanarayan	**Member**

TABLE OF CONTENTS

The report and the recommendations reflect the collective views and opinions of the Committee as a whole. These views are a result of the analysis, synthesis and deliberations by the Committee members on the various legislations, regulations and guidelines of general insurance business (including health insurance). The individual views and opinions of the members of the Committee however may differ on some of the items. But the Committee felt that a collective expression would better serve the purpose as presented in this report.

This page has been left blank

Acknowledgements

The Indian General Insurance Industry has experienced many changes since opening up of the insurance sector and the regulations that govern this industry also need to evolve with the passage of time and changing socio-economic-political and macro environment. Many of the regulations and the guidelines that the Committee reviewed are fairly robust and have withstood the test of time. Notwithstanding, they needed a relook in the context of Insurance Amendment Act 2015, increasing complexity of insurance business and ever increasing need for better transparency and public disclosure. Hence, the Committee thanks the Chairman, IRDAI to have begun the process of review of regulations in a timely manner.

The Committee members wish to express their gratitude to Ms. Pournima Gupte, Member (Actuary), for having created this committee which fairly represented the general insurance industry and health insurance industry from both private sector and public sector. The members of the Committee are also thankful to her for the interaction with the Committee which helped it better understand regulatory perspective.

The Committee has copiously used the infrastructure and facilities of IRDAI office for its deliberations and wholeheartedly acknowledges the support provided by the Regulator.

Last but not the least, the Committee wishes to thank the respective employers of all the Committee members who have provided the members with time, resource and infrastructure to work on this report.

This page has been left blank

Executive Summary

The Committee started by considering the two primary stakeholders: viz. policyholders and shareholders. The interests of other important stakeholders involved in the industry viz. Agents, Brokers, Third Party Administrator, lawyers and loss assessors would in general be automatically protected if the interest of the policyholders and shareholders are protected. Hence, the Committee has tried to maintain balance, between the two primary stakeholders while structuring the recommendations.

The second point of deliberations pertains to a movement towards Solvency II regime resulting in Risk Based Capital assessment. There was unanimity amongst the members that IRDAI should actively start considering Solvency II based capital assessment. Owing to time constraint and extent of preparatory work that is required for movement towards Solvency II regime, the Committee deliberately chose not to make any specific recommendations on Solvency II, especially those pertaining to capital and solvency assessment.

Nevertheless, the movement towards Solvency II is a global phenomenon and a few of our recommendations may be considered as first small steps towards Solvency II regime. There are specific recommendations in the area of Pillar 2 and Pillar 3 viz. Supervisory Oversight and Public Disclosures which would bring an incremental change and are essential prerequisite for graduating towards a more risk responsive capital regime.

Lastly, the Committee has made recommendations in many specific areas. These recommendations have dependencies on and linkages with other recommendations. The Committee would like to stress that the implementation of these recommendations on a piecemeal basis may not give the desired results.

Key Recommendations

The Committee has recommended direct Board Oversight on the Technical Reserves through the constitution of a Board level Technical Reserve Committee (TRC) with clearly defined roles and responsibilities.

The Committee has further recommended that all general insurers will submit a Board Approved Technical Reserve Policy annually with the Authority.

The strength of technical reserves is a critical component in the overall financial stability and continued solvency of a general insurer. It is therefore necessary to give adequate importance and strength to the whole process and outcome of this technical reserving exercise.

The need for such a committee was further corroborated by existence of similar practices in other jurisdictions. This will help increase the robustness of the entire reserving process. It may however be noted that the Appointed Actuary will continue to be fully and wholly responsible for certifying the adequacy of technical reserves and the Committee will be an enabler and interface between Appointed Actuary, management and shareholders.

It is recommended that the Appointed Actuary (AA) of a general insurer independently certifies the adequacy of each component of the technical reserve (i.e. UPR, PDR, URR, Outstanding Claims Reserve and IBNR).

Further the Solvency Calculations and the related Asset Valuations will be jointly signed by the AA and the Statutory Auditor.

The Statutory Auditor and the Principal Officer will certify the correctness and completeness of Data and Outstanding Claim Reserves.

The Committee's suggestion on certification is to bring clarity on the roles and responsibilities amongst the key professionals involved in the management of the general insurer and also the Board of the general insurer and the Regulator. This recommendation is in line with commonly accepted actuarial practices across most of the jurisdiction.

The Committee was largely in agreement with the existing asset valuation norms and is advising only two minor changes viz. reviewing the list of unrealizable assets and joint certification by the AA and the Statutory Auditor.

The Committee also suggests to the Authority to ensure consistency between life insurance, general insurance, health insurance, reinsurance and other regulations in the matter of asset valuation.

Unearned Premium Reserve (UPR) is recommended to be recognized as per the spread of risk over the policy term. The standard $1/365^{th}$ method is recommended for uniform spread of risk. The AA has been provided the flexibility to estimate the UPR for uneven spread of risk with some conditions.

Premium Deficiency Reserve (PDR) is recommended to be estimated for all lines of business. Negative PDR is not allowed; however for Motor Package policy, offset is allowed between OD and TP. Further any product (other than Motor / Health / PA) that contributes more than 5% GWP requires separate estimation of PDR. The product level PDRs will be mapped into corresponding line of business.

Unexpired Risk Reserve (URR) is defined as the sum of UPR and PDR. It is further recommended at a minimum of 100% premiums for Marine Hull and 50% premiums for all other lines of business. The premiums for this purpose are net of reinsurance, received or receivable during the preceding twelve months.

<u>Outstanding Claims Reserve</u> is recommended to continue as per the current established practices. However Standard Reserves have been suggested for Short Tail; High Frequency; and Low Severity claims subject to certain conditions.

<u>Incurred But Not Reported (IBNR) Claims Reserves</u> to consider reopened claims, orphan claims and delayed coinsurance claims. The ULAE reserve also needs to be considered. Standard Methods are prescribed with flexibility for AA as detailed later.

The Committee's suggestions with respect to liability valuations are specific for each element / component of Technical liability.

The estimation of premium deficiency reserve is usually done at a product level. The common principle is that insurance contracts shall be grouped consistent with the enterprise's manner in acquiring, servicing and measuring the profitability of its insurance contracts. However, based on the materiality concept, the Committee recommends that PDR to be created at LOB level. In addition, PDR shall be provided for products which contribute more than 5% of the insurer's GWP.

The Committee is suggesting introduction of setting up of standard statistical reserve for products meeting a pre-defined criterion. The Committee continues with the existing practice of estimating IBNR reserve amount instead of having a separate amount estimated for IBNER and IBNYR. Additionally it also recommends specific inclusion of expenses (both ALAE and ULAE).

The Committee recommends <u>28 lines of business for Liability valuation and RSM calculation</u> – Motor (8); Health (4); Personal Accident (3); Travel; Fire; Marine Hull; Marine Cargo; Engineering; Aviation; Product Liability; Liability Insurance; Workmen Compensation / Employer Liability; Crop Insurance; Weather Insurance; Credit Insurance and Others. This is recommended to be mapped into the segments as per financial regulations.

A fair share of committee's time was spent on discussing and crystallizing the number and definition of lines of business. The factors considered were current definitions, proposed definition in financial condition report, definitions used in draft accounting regulations, principle of homogeneity etc. The consensus that had emerged is to have 28 line of business as provided in the recommendations.

The Committee recommends that <u>for the time being</u> the <u>Health Insurance Line of Business within each general insurance company is treated in the same way as any other Line of Business</u>. This could be <u>relooked once the long term and short term health insurance products are allowed to be sold by life insurers, health insurers and general insurer</u>.

The Committee felt that serious relook at Health Insurance regulations will be needed when there is a level playing field between the general insurers, standalone health insurers and the life Insurers. The Committee recommends that till such time, the health business is treated in the same way as any other line of business. Having a separate set of regulation for a line of business separately within the overall company could be difficult to implement.

The Committee has prescribed three methods to be known as Standard Actuarial Methods for IBNR estimation: <u>Basic Chain Ladder; Bornhuetter Ferguson; and Frequency Severity Method</u>. The estimation should be done on more than one method and the AA has to reason out the choice of one method over the other method. The <u>AA is further provided with flexibility in using other methods for certain lines of business</u> (other than Motor; Health; Personal Accident; and Travel) however subject to certain conditions. The estimation is to be provided both on gross and net basis

The Committee reached a consensus after a prolonged deliberation on giving flexibility to the Appointed Actuary on the methodology for lines other than those that contribute majority of IBNR for most general insurers. Additionally, in order to increase the robustness of the process it is recommended to use more than one method before the reserves are finalized.

The <u>Solvency Ratio is recommended to be retained at 150%</u>.

The Solvency Ratio should be calculated as the ratio of Available Solvency Margin (ASM) to Required Solvency Margin (RSM).

The ASM is recommended to be calculated as per the current norms (including changes proposed in asset valuation).

The <u>RSM is recommended to be calculated as the maximum of Total RSM1 and Total RSM2</u>. The RSM1 and RSM2 should be calculated for individual lines of business as per the current norms (including the revised lines of business and factors).

It is found that even mature economies like Ireland insist on an extra guarantee fund at 150% of RSM. The industry globally is slowly moving to risk based capital which requires additional capital to what is being maintained currently. The Committee felt that at this juncture diluting the solvency requirement may not be a sound approach. This may however be considered once a formal Risk Based Capital structure is in place

The Committee recommends that the <u>Appointed Actuary should perform Risk Transfer Tests (RTTs) on all reinsurance contracts and comment on the same to ensure appropriate risk transfer in a reinsurance arrangement</u>. It is further suggested that the reinsurance policy which is presented to Board for approval and then sent to the Authority should be accompanied by the comments prepared by the Appointed Actuary as to the appropriateness of reinsurance programme for company's risk management and capital adequacy.

The Committee felt that the role of Appointed Actuary, as far as reinsurance is concerned, is currently restricted to a review alone as a part of the preparation of Financial Condition Report. Since the Appointed Actuary is responsible for solvency and the solvency is heavily reliant on the reinsurance arrangement in place, it is suggested that the Appointed Actuary should perform Risk Transfer Tests (RTTs) on all reinsurance contracts and comment on the adequacy of reinsurance program.

The Committee recommends that the Appointed Actuary Annual Reporting should be as prescribed in a separate Regulation. The required forms have been provided as an Annexure. Further a system of Peer Review, Annual Presentation to the Authority and an expanded Financial Condition Report is recommended.

The Committee recommends that the Public Disclosure should be as prescribed in a separate Regulation along with all other financial disclosures. The required forms have been provided as an Annexure. This disclosure is recommended to be made mandatory on a prospective basis.

The motivations behind recommendations are the need to take small but tangible steps towards establishing Solvency II regime.

In line with Pillar 2 (i.e. increased supervisory oversight) of Solvency II regime, it is recommended that every insurer makes a presentation to the Regulator on reserve adequacy of technical liabilities. Further the gradual strengthening of financial condition reporting and peer review process has also been recommended.

In accordance with Pillar 3 (i.e. Enhanced Public Disclosure) of Solvency II regime, the Committee has suggested the need for increased public disclosure (especially the development of actual claims paid and claims incurred). However, recognizing the data and other systemic challenges a prospective implementation has been suggested.

In respect of Appointed Actuary Regulations, the current regulation requires the eligible candidate to have specialization in the relevant class of business as evidenced by "Qualification and/or working experience". The Committee recommends a minor change ("and / or" to be corrected as "or") to provide more clarity. The other provisions could be retained.

Further the Committee recommends that a co-ordination committee be formed between the Authority and the Institute of Actuaries of India with members drawn from both – for expanding the current capacity and considering suitable candidates from Global Actuarial Professional Bodies.

The Committee deliberated at length on the current Appointed Actuary regulations and how to address the issue of shortage of qualified actuaries and quality of actuarial work faced by the industry and regulator respectively. The prevalent practice in many countries were analysed.

What comes out clearly is that qualification is a necessary but not a sufficient criterion to take on the job of the Appointed Actuary. The reliance everywhere is on experience. In line with the global practice the Committee has suggested a small change in the extant regulation wherein experience is given more value.

While it may be difficult to meet all the requirements in the current regulation fully the overriding power of the Authority to waive the conditions on a case to case basis, appointment of mentors and move towards peer review should help overcome the problems for the time being. In another 5-6 years the Committee foresees that the issue of supply will be adequately addressed and hence there is no pressing need to recommend drastic changes to the extant regulation.

Key Statutory and Regulatory Developments

The very need of reviewing the regulations relating to General Insurance (including Health Insurance) arose due to several regulatory developments in the not so distant past. The most important of these developments is the promulgation of Insurance Laws (Amendment) Act, 2015. In terms of relative importance, the only other law that influenced the insurance industry so comprehensively was the Insurance Act amendment in 1999 that opened up the Insurance sector to foreign companies by allowing them ownership up to 26%. The Insurance Laws (Amendment) Act, 2015 has increased the foreign ownership up to 49%, paving the way for another inflow of foreign capital in the country. In addition to increasing foreign direct investment, the new act has also devolved quite a few powers in the hands of IRDAI to facilitate quick regulatory response to changing insurance environment. These amendments, inter-alia others, have necessitated many changes in the regulations

In addition to this most significant development, some other developments that have a bearing on the work of this committee are:

1. Draft Regulations on Claims reserving for General Insurers circulated by Authority In December, 2014. These draft regulations proposed to bring a more structured approach to technical reserves in the general insurance industry and better regulatory oversight on the Appointed Actuary's responsibilities.

2. Report of non life work group on File and Use for General Insurance Products (Sep 2014) that recommended introduction of Use and File approach for commercial products while retaining proper regulatory due diligence and File and Use process for retail products. This report also introduced the concept of higher board oversight in product development and approval.

3. Report of expert committee on Health Insurance (April 2015) which recommended significant changes in the way health insurance is transacted. The report, inter-alia, recommended parity between life insurers selling health insurance, stand alone health insurers and general insurers selling health insurance by allowing all to sell health insurance of all terms. The report also recommended similar intermediary remuneration, similar regulatory treatments and solvency structure for all insurers selling health insurance of any form.

4. Draft IRDAI (Preparation of Financial Statements and Auditors' Report of Insurers) Regulations 2015 (July 2015). These regulations are separate for health insurance business and separate for general insurance business. The key changes in these drafts impacting this committee's work are
    a. Increased number of lines of business at which financial reporting is required
    b. Estimation of Premium Deficiency Reserve by underwriters

The regulatory changes discussed above have influenced the Committee members' thought process and the report has actively considered the stipulations in all these regulatory changes.

Recommendations

Please note that the recommendations are in totality; and not in a piecemeal manner.

(1) Board Oversight

Current

The extent of Board oversight in technical reserves booked by the company is not explicit in current regulation. It may be deduced that through the audit committee, the Board oversees the fairness of the financial results, of which technical reserves are a part.

Current regulation also gives the Appointed Actuary access to the Board in case of any concerns / issues.

Recommendation

The Board shall maintain direct oversight on the technical reserves of the Company through formation of a Technical Reserve Committee (TRC).

The Board Oversight could be brought in the Regulations with other details such as Composition and Roles and Responsibilities detailed in the Guidelines

Composition of TRC

The Chairman of the Committee shall be an independent Director of the Board who is also a member of the Audit Committee. CEO, Appointed Actuary, CFO, Chief Claims Officer and Chief Underwriting Officer shall be members of the Committee.

Roles and Responsibilities of TRC

1. Assist the Board in effective management of technical liabilities of insurer by performing specialised analysis and quality reviews.

2. Oversee the governance of the reserve setting process at the company and implementation of and compliance with the technical reserve policy[1] both on annual and quarterly basis. It shall set-up procedures and processes to address all concerns relating to adequacy of checks and control mechanisms for insurer's technical liabilities.

3. The Committee shall have the oversight on the procedures and processes established to ensure that the technical reserve policy is implemented in a true and fair way . It shall

[1] *Discussed later in the report*

also ensure that the management has adopted reserving methods and policies and applied them consistently and made judgements and estimates that are responsible and prudent so as to give a true and fair view of the estimate of liability at all times.

4. The Committee shall monitor the progress made in rectification of irregularities and changes in processes wherever deficiencies have come to notice.

5. The Committee shall update the Board at every Board meeting about the actions taken by the Committee and the plans for the next quarter.

Rationale

Technical reserves constitute more than 70% of total liabilities of a general insurer and hence strength of technical reserves is a critical component of the financial strength of an insurance company. The quality of reserves has a direct bearing on the continued financial solvency of an insurance company. Board is the apex governing body of the company and its direct oversight is expected to ensure that all stakeholders understand the reserving policy and practices followed by the management.

The Appointed Actuary is responsible for estimating the technical reserves of the insurer which have a critical impact on insurer's solvency. This estimate of ultimate liability is critically dependent on the reserving practices and changes to such practices followed by the Company. In the presence of various data insufficiencies and information asymmetries within a Company, the estimate produced by Appointed Actuary, may be different from the actual outcome. But many a time this variability in reserve estimates may not be completely understood by the other stakeholders e.g. Management and the Board.

Hence, this formal committee is expected to provide a platform for the management and the Appointed Actuary to share information, thereby:

- Helping the Appointed Actuary to estimate the appropriate ultimate liability; and

- Helping the management and Board to understand the Appointed Actuary's opinion regarding the risk of material adverse deviation, sources of risk and what amount of adverse deviation the Appointed Actuary judges to be material.

The issue was deliberated in considerable details amongst the Committee members on the merits/demerits of having a board led committee for what is supposed to be an Appointed Actuary's work. What tilted the Committee's views in favour of the above recommendations were the following facts:

- Board led committees are already functional in the areas of Audit, Risk Management, Corporate Social Responsibility, Investments etc. Technical Reserves comprise most of the liabilities of an insurer and have a significant impact on company's financial strength and solvency. Hence board oversight for this critical piece in insurer's balance sheet is in line with the increasing need for better corporate governance.

- Life Insurance companies in India have a "With Profit Committee". The Reserve Committee in general insurance would be similar in comparison, though would have differences in terms of the nature of the business.

- There are examples of such corporate governance structures in Lloyds' market and Ireland market apart from some large companies including Allianz of Germany and Royal Sun Alliance of UK. The provisions of Lloyds reserving guidance and Irish reserving rules are appended below:

Lloyds' Reserving Guidance v 1.1 dated April, 2014 provides:

Reserving is the responsibility of the managing agent's board. In many managing agents, there is a reserving committee that brings together the appropriate experts and makes a recommendation for the board to consider. Lloyd's supports the use of such a structure when the managing agent believes it works best, but the existence of an expert reserving committee does not remove the onus on the board to give due consideration to the reserve decisions and to be ultimately responsible for the result. The board should allocate sufficient time to consider reserves themselves, and must provide an objective challenge to the proposals brought to them

Ireland rules on reserving stipulate:[2]

Companies designated as High impact companies shall establish a Reserving Committee. This committee shall meet at least quarterly. This committee shall contain all relevant senior staff with significant input into reserving process. The Committee shall include at least one independent Non-Executive Director, the member of executive management with responsibility for claims, the Signing Actuary (And Chief Actuary, where different), the Head of Underwriting and Head of Finance.

It is to be noted that the formation of the above committee does not dilute the Appointed Actuary's responsibility towards certifying the technical reserves. Appointed Actuary shall be ultimately responsible for estimating and signing the technical reserves.

[2] *As per the provisions of "Reserving Requirements for Non Life Insurers and Non Life and Life Reinsurers" published by Irish regulator Central Bank of Ireland in 2014*

(2) Technical Reserve Policy

Current

While the current regulations mandate that certain policies e.g. the underwriting policy of the insurer be filed with the Authority after Board approval, no such provisions exist for claims reserving policy followed by the Insurer.

Recommendation

Every general insurer shall file a Board Approved Technical Reserve Policy prepared by Appointed Actuary for the succeeding financial year with the Authority by 15th March of every year.

The requirement for a Technical Reserve Policy could be brought in the Regulations while the contents of this policy could be detailed in the Guidelines issued by Authority

Coverage of Technical Reserve Policy

The Technical Reserve Policy should cover the following at a minimum:

1. Company's approach to reserving and the reserving objectives;
2. An overview of the Company's reserving process, including
    a. Key roles and responsibilities;
    b. Process of recognizing a claim after its occurrence;
    c. Process of estimating the loss reserve, including statistical reserves, if any;
    d. Process of reviewing the loss estimates from time to time till eventual settlement of claims; and
    e. Technical audit process to ensure appropriate reserving for known claims at all time.
3. Key controls on reserving such as actual versus expected analysis and feedback mechanism;
4. Adequacy of Claims data and analysis of emerging trends
5. IBNR Methodology;
6. UPR & PDR Methodology; and
7. Method of building margin for uncertainty

Rationale

The technical reserve policy is expected to ensure that Board is updated with the reserving policy to be followed by the Company and approves the same.

Appointed Actuary and Statutory Auditors are expected to rely on the technical reserve policy to form their professional opinions.

Authority would have access to the technical reserve policy followed by the insurers and hence will be able to have regulatory oversight on the reserving practices followed by insurers.

(3) Certification (Data, Qualification, Auditor, Principal Officer)

Current

As per the existing regulations, an Appointed Actuary of a general insurer certifies only IBNR valuation in Form HG of IRDAI (Assets, Liabilities and Solvency Margin of insurer) Regulations, 2000 and subsequent amendments.

She/he does not specifically certify adequacy of all technical liabilities (i.e. UPR, PDR, URR, outstanding claims reserve and IBNR). In addition, she/he does not explicitly certify asset valuations of a general insurer and solvency calculations. The responsibility of such certification currently rests with the statutory auditor of the general insurer.

However, as per IRDAI (Appointed Actuary Regulations), an appointed actuary is responsible for continued solvency of the general insurer (and life insurer) at every point of time. There appears to be inconsistency between an implied need to continuously value and assess solvency as per current regulations by an appointed actuary as against no explicit certification requirement from the appointed actuary.

Recommendation

The Committee's recommendation as regards certification may be categorized into (a) those that need to be signed solely by an Appointed Actuary, (b) those that need to be jointly / co-signed by Appointed Actuary and (c) those that an Appointed Actuary needs to obtain.

It is recommended that an Appointed Actuary of a general insurer independently certify adequacy of each component of technical reserve (i.e. UPR, PDR, URR, outstanding claims reserve and IBNR). The certification may be continued in the same format as existing in Form HG of IRDAI (Assets, Liabilities and Solvency Margin of insurer) Regulations, 2000 with more specific wordings as provided in Annexure 1.

Additionally, Form AA (Asset Valuations) and Form KG (Solvency Calculations) of IRDAI (Asset, Liability and Solvency) Regulations may be jointly signed by an Appointed Actuary and Statutory Auditors of the general insurer. The Principal Officer shall jointly sign the Form KG (Solvency Calculations) of IRDAI (Assets, Liabilities and Solvency Margin of insurer) Regulations, 2000.

Along with the above certificates, the Committee also suggests that the Appointed Actuary should obtain certification / declaration from Statutory Auditors and Principal Officer. The Statutory Auditors / Principal Officer should provide an assurance to the Appointed Actuary by way certificate that the data used to arrive at the estimation of technical liabilities is reconciled with the financial statements of the general insurer. Additionally, the certificate should also mention that the amount reserved for outstanding claims is a true and fair amount and is arrived at in accordance with board approved process for estimation of outstanding claim reserves.

The above could be covered as part of the Regulation.

Rationale

The primary motivation for the above recommendation is to bring in more clarity on roles, responsibilities and accountability of various stakeholders (viz. Principal Officer, Statutory Auditor and Appointed Actuary). Additionally, clarity is also brought into various components or elements that have been included (or excluded) in the reserve estimation exercise. Such certification helps better understanding of public disclosure. In addition, the recommendation is in line with established practice in various jurisdictions like Australia, Ireland, and United Kingdom etc.

An Appointed Actuary is a subject matter expert and is solely responsible for the adequacy of reserves for technical liabilities. Hence the Committee has recommended that he has to solely and independently take the responsibility of certifying the technical reserves. It may be noted that an appointed actuary is not a subject matter expert for estimation of outstanding claim reserve. However, generally accepted actuarial methods results in to estimation of an unpaid liabilities (i.e. outstanding claim reserve and IBNR) and hence IBNR provides a compensating amount. In addition, in order to ensure the robustness of the process, the Committee has also recommended that an Appointed Actuary should obtain the certificate from Statutory Auditor / Principal Officer on the true and fair value of amount reserved for outstanding claims.

The duties and obligations of Appointed Actuaries stipulated in Appointed Actuary Regulations, 2000 clearly state 'ensuring insurer's solvency at all times' as one of his / her responsibilities. Asset strength of the insurer is equally critical for maintaining solvency as is reserve strength. Hence it is in keeping with the regulatory intentions that the Appointed Actuary certifies the asset valuation. It is not expected of the Appointed Actuary to verify assets valuation of every asset, but to create appropriate structures that ensure that IRDAI rules have been followed in asset valuation. Hence it is recommended to be jointly signed by Statutory Auditor.

Certifying solvency is in line with regulatory expectations from Appointed Actuary, as discussed in the forgoing paragraph.

(4) Asset Valuation

Current

Currently the assets are valued as per the IRDAI (Assets, Liability and Solvency Margin of Insurers) Regulations, 2000. The assets are valued in three buckets:

(A) The following assets are placed with value zero:

- Agent's balances and outstanding premiums in India, to the extent they are not realised within a period of thirty days;
- Agents' balances and outstanding premiums outside India, to the extent they are not realisable;
- Sundry debts, to the extent they are not realisable;
- Advances of an unrealisable character;
- Furniture, fixtures, dead stock and stationery;
- Deferred expenses;
- Profit and loss appropriation account balance and any fictitious assets other than pre-paid expenses;
- Reinsurer's balances outstanding for more than three months;
- Preliminary expenses in the formation of the company;

(B) The value of computer equipment including software is computed as under:

- seventy five per cent of its cost in the year of purchase;
- fifty per cent of its cost in the second year;
- twenty five per cent of its cost in the third year; and
- zero per cent thereafter.

(C) All other assets of an insurer have to be valued in accordance with the Insurance Regulatory and Development Authority (Preparation of Financial Statements and Auditor's Report of Insurance Companies) Regulations, 2000.

Recommendation

It is proposed to retain the same format; however with two changes.

(1) The list as in (A) above should be retained. However, the Committee discussed certain assets, whose realisable value from solvency perspective appeared suspect. A list of such assets is produced below and the Committee recommends that Authority review these assets for their inclusion under admissible or inadmissible assets.

- Loans and Advances to or any other amount receivable from related parties;
- Any kind of expenses on leasehold improvements;
- Intangible assets of the general insurer;
- Un-reconciled dues from other entities carrying insurance business;
- Un-reconciled coinsurance/reinsurance dues from other entities carrying insurance business;
- Unutilized service tax credit and unutilized VAT credit;
- Financial lease recognized as an operating lease;
- Funds with lien of foreign regulators;
- Un-reconciled premium reserves held by cedants;
- Balances held under Alternate Risk Transfer arrangements;
- Amount deposited in Court towards IT Refund receivable

(2) The Appointed Actuary should also certify the Statement of Assets as per the IRDA (Assets, Liability and Solvency Margin of Insurers) Regulations, 2015.

Rationale

The function of an Appointed Actuary is to evaluate the Solvency of an insurance company, including both asset and liability risks, under a broad range of economic and insurance assumptions. It would not be possible for an Appointed Actuary to monitor the solvency of the insurer unless he understands and values the assets. This is also applicable for the Life Insurance business.

The proposal as above should be made consistent with the corresponding Regulations for Life Insurance and Preparation of Financial Statements and Auditor's Report of Insurance Companies.

(5) Liability Valuation

General insurance companies need to provide for following technical liabilities,

- Unearned Premium Reserve
- Premium Deficiency Reserve
- Unexpired Risk Reserve
- Outstanding Claims Reserve
- IBNR Claims reserve

Unearned Premium Reserve

Current

This reserve is currently not defined in any of the regulations. However, IRDA (Preparation of financial statements) Regulations, 2000 did define Unearned Premium Reserve (UPR), which was replaced by IRDA (Preparation of financial statements) Regulations, 2002 which defined only Unexpired Risk Reserve (URR). Draft regulation on Claims Reserving circulated by Authority in December 2014 also defined UPR. Both these documents define UPR as below:

Unearned Premium Reserve means an amount representing that part of the premium written which is attributable and to be allocated to the succeeding accounting periods.

Under the current practice of estimating this liability, most companies estimate UPR naming it as URR by following different approaches as below:

- Some companies estimate it on 1/365th basis or 1/24th basis or 1/8th basis, while some simply assume 50% of written premium as UPR

- Very few insurers recognize varying risk patterns of risks and estimation of UPR using a suitable methodology, while many write project engineering policies, crop/weather insurance policies which have varying risk pattern as the risk develops.

Recommendation

The Committee recommends a clear demarcation and understanding of UPR and URR. The UPR may be defined in regulations as given above, which is already a part of an earlier regulation (Accounting Regulations of 2000) and a draft regulation (Draft Claims Reserving Regulations, 2014).

It is also recommended that method of estimation of UPR be defined by Authority more clearly through detailed guidelines, particularly in respect of risks having uniform risk spread, separately for:

- Policies having annual duration
- Policies having shorter or longer duration than annual

The guidelines should specifically mandate calculation of UPR using 1/365 basis for risks with uniform risk pattern with due provisions for short and long term policies. This would help bring uniformity of approach amongst General Insurance companies' UPR estimation. The different approaches followed by insurers in UPR estimation render financial statements comparison unreliable and introduces the element of financial arbitrage.

However, as regards UPR for risks having uneven risk pattern, the task of arriving at a scientific method for estimation of UPR may be left to Appointed Actuary in view of its complexity and high level of dependence on nature of a particular risk. The Appointed Actuary must separately certify UPR for risks with uneven risk pattern for every financial statement. It is recommended that, over a period of time, Authority may bring guidelines for estimating UPR for risks with uneven risk pattern through a consultative process involving practicing actuaries and underwriters.

Rationale

The industry commonly understands this reserve as Unexpired Risk Reserve and provides for the same. The essential difference between the two (based on the current Indian practices) is that while UPR is a prorated part of the premium written towards unexpired period of risks from contracts in force on the balance sheet date, URR is a risk weighted reserve such that the reserve is sufficient to cover the unexpired liabilities arising out of contracts in force as on the balance sheet date. UPR is more of an estimation based on accrual principle, while URR is based on an actuarial estimate of expected liabilities from unexpired risks. Hence it is important to clearly define the UPR and URR and estimate them separately.

Part II (Disclosures forming part of financial statements), Para A (8) of existing accounting regulations require the following:

Extent of premium income recognised, based on varying risk pattern, category wise, with basis and justification there for, including whether reliance has been placed on external evidence

Same provision exists in the Draft accounting regulations, 2015. However, very few companies recognize varying risk pattern, while many write risks with varying risk patterns like project engineering, weather insurance, crop insurance etc. As an example, we take a project engineering policy say, Storage cum erection insurance to see how it has an uneven pattern of risk and how its UPR estimation would require a different approach. Under this policy, the premium is typically collected in evenly spread instalments over the project period (except that the first instalment may typically be 5% more than all other instalments). Earning of premium on 1/365 or 1/24 basis presupposes uniform spread of risk exposure at each time interval, whereas, in such projects risks exposure is very low when the project starts and builds up as structures and machineries are erected. The risk exposure is probably the highest during the testing and commissioning phase of the project. The pattern of risk pattern may vary from project to project, but surely UPR estimation assuming even risk spread is not correct. It is imperative that actuaries recognize this and estimate UPR keeping in view incidence of risk.

Hence a clear definition of UPR, URR and guidelines on this in addition to a higher regulatory oversight will help strengthen the premium reserves in the industry

Premium Deficiency Reserve

<u>Current</u>

Currently PDR is defined and estimated as below:

Premium Deficiency Reserve (PDR) means the reserve held in excess of the unearned premium reserve, which allows for any expectation that the unearned premium reserve will be insufficient to cover the cost of claims and maintenance expenses incurred during the period of unexpired risk.

Till Mar 2015, PDR was being estimated at enterprise level. However, the following developments summarise different thought processes on PDR:

- Master circular on financial statements required PDR to be estimated at segmental revenue account level and to be certified by the Appointed Actuary with effect from 1st April, 2015. What is segmental revenue account level has been a matter of debate and interpretation in the industry.

- The draft reserving regulations circulated by Authority recommended recognition of PDR separately for each product, without any cross subsidization between lines of business and to be certified by the Appointed Actuary.

- Draft IRDAI (Preparation of financial statements and Auditor' Report of Insurers) Regulations, 2015, Schedule D, Part I, section 3 requires PDR to be recognized on the basis of underwriter's assumption. The PDR is suggested to be recognized at segment level.

None of the regulations or guidelines specifies any basis or methodology for estimation of PDR or expense assumption to be used in PDR estimation.

Recommendation

The below could be covered as part of the Regulation.

1. PDR should be certified by the Appointed Actuary at each balance sheet date.

2. PDR should be recognized at the 28 lines of business (explained later in the report) without any cross subsidy amongst the lines of business (LOBs). Insurers may recognize PDR at a more granular level of LOBs / Products than specified, but they will map these LOBs / Products into the LOBs specified. For the purpose of Motor package policies, negative PDR, if any, in OD or TP may be recognized and offset between them, since TP is not a product, but just a cover in a package policy. The 28 LOBs specified uniquely map into LOBs specified in draft regulations on preparation of financial statements.

3. In addition, PDR should be recognized for any single product amongst the lines other than Motor, Health and PA, that contributes more than 5% GWP of the insurer during the rolling 12 month period. However, this product should be mapped to one of the LOBs specified.

4. Authority may prescribe guidelines for estimation of PDR and expense assumption.

5. Authority may allow a suitable transition period (at least 1-2 years) before this is implemented since this could be onerous for insurers, if implemented immediately.

Rationale

1. Premium Deficiency estimation requires actuarial estimation of liabilities from unexpired risks and actuaries are suitably placed to estimate this liability and certify this.

2. The recognition of PDR at 28 lines of business was discussed in detail amongst the Committee members. The current contribution of Motor, Health and PA is very significant in the overall general insurance business.

3. Motor, Health and PA:
    a. The high loss ratio segment within Motor insurance is Third Party while within Health and PA these are Group insurance and Government schemes. Owing to this, the Committee agreed for a granular PDR recognition in Motor, Health and PA.

b. Even within Motor, Private Car, Commercial Vehicle and Two wheelers have significant share and the TP experience and premium adequacy of each is quite different.
c. Also, Motor TP Pool and DR pool has been retained separately to capture the developments in these pools which have had and continue to have significant financial implication for the industry

4. Others:
   a. This has been split into crop, weather and credit lines of business so as to ensure appropriate representation for specialized companies writing only these classes of business.
   b. Also, the risk characteristics of each of these lines of business are different from the other lines of business.

5. Keeping in view the large contribution of Motor, Health and PA, 5% of GWP of the insurer amongst the remaining business would indicate a significantly large product requiring recognition of PDR, if it exists.

6. Allowing benefit of cross subsidy between Motor OD and TP within a Motor package policy is an equitable proposal since these are sold together as one policy and separate PDR for TP part of a package would tantamount to recognizing PDR at cover level. This is also in line with the FASB Accounting Standard No. 60, Para 32, *which states that Insurance contracts shall be grouped consistent with the enterprise's manner of acquiring, servicing, and measuring the profitability of its insurance contracts to determine if a premium deficiency exists.*

7. Guidelines on a standard framework to estimate PDR will ensure uniformity of approach amongst insurers which is critical to reduce chances of methodology arbitrage amongst insurers.

8. In view of a higher level of granularity required, than what the industry has been used to, a suitable transition period of 1-2 years will help industry smoothly transition into the new regime

9. The rationale of PDR for Motor Liability Only policies was debated. One view was to not recognize PDR for Liability policies since the premium of these is determined by Authority and these are believed to be loss making. Obligation to write a minimum Motor TP business under Insurance Amendment Act 2015 makes it look like a double whammy on insurers. The Committee deliberated on this and decided on separate provision of PDR for Motor Liability product for following reasons:
   a. Appropriate recognition of expected liabilities on contracts in force is in line with generally accepted accounting principles as well as prudent actuarial norms.
   b. Not recognizing PDR for Liability policies defers the liability recognition only by a maximum of one year (for annual policies) since the UPR will unwind in an year's time and then the liability would need to be recognized as IBNR.

c. Regardless of who fixes the price of the product, PDR recognises a potential liability and protects policyholder interest by ensuring appropriate provision for written insurance contracts.
d. Motor Liability products may be uneconomically priced today. But this must not influence prudent reserving practices that define the character of an industry
e. This is in line with banking industry where they are required to fulfil priority sector lending obligations, often at uneconomical interest rates without any relaxation on provision for bad and doubtful debts (NPAs).

Unexpired Risk Reserve

Current

The current practice involves estimating UPR and calling it URR. Accounting regulations require:

A reserve for unexpired risks shall be created as the amount representing that part of the premium written which is attributable to, and to be allocated to the succeeding accounting periods and shall not be less than as required under section 64 V(1) (ii) (b) of the Act.

Insurance Act 1938, section 64 V (1) (ii) (b) stipulates

Reserve for Unexpired Risks shall be

(i) Fire and Miscellaneous business, 50 per cent,
(ii) Marine Cargo business[3], 50 per cent; and
(iii) Marine hull business, 100 per cent,

of the premium, net of re-insurances, received or receivable during the preceding twelve months

Corrigendum to Master circular on financial statements dated 3rd July 2013 states that URR need not be recognized on short period policies where policy period lapses within the accounting year.

Recommendation

The Committee after a detailed deliberation on the subject recommends as under:

1. Unexpired Risk Reserve should be defined as sum total of UPR and PDR

2. URR for each line of business specified above, separately should not be less than:
   a. 100% of the premium, net of reinsurance, received or receivable during the preceding 12 months, for Marine hull business, AND
   b. 50% of the premium, net of reinsurance, received or receivable during the preceding 12 months, for all lines of business other than Marine Hull business

[3] IN IRDA (Asset, Margin and Solvency Margin) Regulations, 2000, this is stipulated as "*Marine business other than Marine Hull business*"

3. The practice of not recognizing URR on short period policies where policy period lapses within the accounting year, may continue since this recognizes absence of unexpired liabilities on the contracts written during a financial year. However, for unexpired short period policies, the stipulation of minimum URR as above should be applied.

Rationale

1. The definition of URR as sum of UPR plus PDR is in line with standard actuarial definitions in actuarial literature.

2. Provision of URR at a minimum of 100% of premiums written for Marine Hull and 50% for all other lines has been in place for many years, which is reasonable and has withstood test of time.

3. The treatment of UPR, PDR and URR is explained below for the sake of abundant clarity.

Assume that for a line of business, the written premium is 100 and the UPR estimated on an appropriate basis is 40. Also assume this line of business is other than Marine hull where URR needs to be 50% of premium written, at the minimum.

Scenario 1: Let us assume that this line of business has PDR estimated at 8. Hence the expected liability from unexpired contracts is 48.

Scenario 2: Let us assume that the PDR estimated is 15. In this case, expected liability from unexpired contracts would be 55.

For the sake of accounting treatment, the Committee suggests following two approaches and adoption of any one so as to achieve consistency with accounting regulations.

Approach 1

No need to provide UPR and PDR separately. Only URR must be provided which would be 50 in scenario 1 and 55 in scenario 2

Approach 2

Provide UPR and PDR separately such that if the sum total of UPR and PDR is lower than the minimum URR as required above, the difference shall be provided as additional UPR such that the sum total of UPR, Additional UPR and PDR is not less than the minimum URR as required. Hence in scenario 1, UPR would be 42 and PDR 8, whereas in scenario 2, UPR would be 40 and PDR 15.

Outstanding Claims Reserve

Current

Outstanding claims reserves are set by claims officers and certified by statutory auditors as representing true and fair view of liabilities.

Recommendation

1. Case by case estimation of claims reserves may continue as per the established practices of the industry. In cases where case by case estimation is not feasible, the Appointed Actuary (AA) shall help create statistical methods of claims reserving and certify the appropriateness of such reserves. It is emphasized here that statistical methods should be used only for those lines of business and claims that satisfy the following criterion collectively:
    a. Large claims frequency and relatively small severity; AND
    b. Low volatility in claims severity; AND
    c. Claims have short tail; AND
    d. Claims that are outstanding for less than 3 months at the month end date

2. Statistical reserving methods are visualized typically for Motor Own Damage, Health and Home lines of business and should not be used for Motor TP and commercial lines of businesses. The Appointed Actuary may be given the final say to decide whether particular claims should be reserves using statistical methods or case by case method.

3. AA needs to ensure adequacy of claims liabilities. In case he/she believes, on the basis of appropriate analytical tests, that the claims outstanding reserves may not be able to meet ultimate liability of known and reported claims, he/she must appropriately factor this in his/her IBNR (including IBNER) estimation.

4. AA shall create outstanding claims reserving process and make it part of Technical Reserve Policy which shall be approved from the board in accordance with the board oversight practice described earlier. This should include the following at the minimum:
    a. Time lines and process of recognizing a claim in company's claims registers after coming to know of an incident that may give rise to a claim
    b. Process of estimating the loss reserve, including statistical reserves, if any
    c. Process of reviewing the loss estimates from time to time till eventual settlement of claims
    d. Technical audit process to ensure appropriate reserving for known claims at all time

Rationale

1. AAs don't necessarily have the technical know-how and/or resources to assess claims reserve on a case to case basis, which requires specialized knowledge of the subject

matter of insurance and nature of loss. Hence the current practice of loss assessment on a case to case basis by claims managers/loss assessors may continue.

2. However, for some lines of business, as discussed in recommendations, case by case method of claims reserve may be sub-optimal from operational cost or efficiency perspective. In such cases AA may use his/her skills of using appropriate statistical methods to estimate outstanding claims reserves. This is an accepted practice in many jurisdictions for types of claims with high frequency, relatively small severity, small variance and short tail.

3. Given the AA's responsibility of maintaining adequacy of reserves, solvency and financial soundness, it is only fair that AAs assess any possible inadequacies in outstanding reserves and supplement it by IBNR (including IBNER).

4. This is part of the governance process that AA is expected to institutionalize in the insurance company

IBNR Claims Reserves

<u>Current</u>

IBNR claims reserves (including IBNER reserves) are currently estimated by AAs in accordance with stipulations under IRDAI (Preparation of financial statements and Auditor's Report) Regulations, 2002, IRDAI (Asset, Liability & Solvency Margin) Regulations, 2000, IRDAI guidelines on IBNR dated 8th June, 2005 and their amendments to date. Currently there is no requirement of estimating and providing ULAE reserves (Un-allocated Loss Reserve Expense reserve, commonly known as reserves for operating expenses required for servicing claims). It is not clear why this requirement is not there while this is part of PDR estimates.

In December 2014, Authority issued draft regulations on claims reserving. This regulation intended to cover all kinds of technical reserves. Some of the main changes it proposed with respect to IBNR regulations are:

1. Separate and independent estimation of IBNYR and IBNER
2. Introduction of various diagnostic tests
3. Stipulation of accepted methods of IBNR determination

<u>Recommendation</u>

1. AA should estimate IBNR (including IBNER), without necessarily estimating IBNR and IBNER separately. IBNR methodology and data used must be such that IBNR includes IBNER, reserve for reopened claims, reserve for orphan claims and reserve for delayed incoming coinsurance claims.

2. AA should estimate ULAE reserves and must provide for it in company's books of accounts, either as a separate reserve or as addition to IBNR reserves. ULAE reserves should be estimated on going concern basis.

3. Since ULAE reserves have not been provided by general insurers till date, Authority may provide an appropriate transition provision so that the burden is spread over a period of time.

4. AA must conduct various diagnostic tests to satisfy himself/herself that a particular method is suitable for the job at hand

5. Some standard methods of estimating IBNR must be stipulated by Authority as necessary to ensure a modicum of uniformity in IBNR across insurers and to ensure a minimum level of prudence in IBNR estimation. The recommended methods have been discussed later in the report.

Rationale

The purpose of estimating IBNR (including IBNER) is to ascertain the amount of claims liability that has accrued to insurer but not known yet. Segregation of IBNR and IBNER does not necessarily improve this estimation. IBNR estimation suffers from several uncertainties due to issues relating to data insufficiencies, judicial and other external changes and random variations. Splitting IBNR into IBNYR and IBNER aggravates this uncertainty and may introduce higher variance in the estimates. Several jurisdictions are moving towards sufficiency of unified claims reserves, without segregating them into outstanding reserves and IBNR reserves, leave alone segregating IBNYR and IBNER. Ireland, for example requires signing actuary to certify total outstanding reserves (including IBNR).

Unallocated Loss Expenses may not be very large on a going concern basis, but may not be as small as to be insignificant from reserve strength perspective. Most western jurisdictions require actuaries to estimate and provide ULAE reserves. Further, it is already part of PDR and hence its estimation may not pose any problem for insurers. The reason for recommending ULAE reserves on going concern basis is that the ULAE reserves for a company in run off may not be just onerous but also difficult to estimate.

Contingency and other reserves

Current

The draft claims reserving regulation requires the Appointed Actuary to provide catastrophe reserve separately.

Recommendation

The contingency, catastrophe and other reserve may not be provided for separately.

Rationale

The Committee felt that provision of catastrophic reserves may be quite onerous for insurers in view of the increasing granularity of reserves, unpredictability of catastrophes and their severity. The need for a separate catastrophe reserve reduces significantly due to availability of appropriate CAT reinsurance covers in the market.

Catastrophe reserve can be seen in two parts:

a. Catastrophes that have happened: These are known fairly quickly to the world and the insurers and need to be estimated and provided as part of outstanding claims, IBNR and IBNER. Hence a separate provision may not be desirable.
b. Catastrophes that may happen on the unexpired risk: These are extremely difficult to estimate. CAT models do give a distribution of some CAT perils which provides probabilities of CAT occurrence for various severities. Typically insurers purchase reinsurance protection for CAT perils on 200, 250 or 400 year return period basis. A CAT reserve estimated using the expected value of claims (known as E{x} in actuarial parlance) arising out of a CAT event is not likely to be sufficient to meet the actual liabilities arising out of a real event. For example, the reserve may be created using a 1/200 probability of a CAT event. When the event does occur, the actual liability will be 200 times that of the reserve. Accumulating this reserve for several years will negate the existence of CAT reinsurance and be a drag on scarce capital.

The Committee deliberated that the current solvency margin requirement at 1.5 times the RSM provides a cushion to meet the liabilities arising out of a CAT event in most cases.

The Committee could not find a strong justification for any other contingency reserve.

(6) Lines of Business

Current

There are 3 classes of insurance and 11 lines of business as per the existing Regulation for Preparation of Financial Statements. They are: Fire (1), Marine (2) and Miscellaneous (8).

The current IBNR requirement is in line with the above lines of business. However the lines may be further classified if adequate data is available and if required.

The draft claims reserving regulations have suggested 27 lines of business.

Recommendation

There should be 28 lines of business as below:

- Motor OD – Private Car

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

Rationale

The underlying rationale is that the homogenous risk classes are to be grouped together so as to improve the quality of reserving.

This is also in line with the current thinking of the regulator as implied in the draft claim reserving regulations.

There is a minor change from the draft claim reserving regulations – an additional line under PA called Personal Accident (Group – Government Schemes) has been introduced in view of a slew of Government schemes (PMJDY, PMSBY, Suraksha Bandhan Bima Yojana etc).

This classification is different from the proposed Regulation on Preparation of Financial Statements (11 lines of business for non life and 6 for health).

The Committee deliberated on the lines of business proposed in draft accounting regulations, but felt that we should have 28 lines as proposed for all actuarial work and reporting. If considered appropriate, Authority may review the need to align the lines of business for financial statements preparation with the above recommendations. The lines as above can be grouped if required for the purposes of Financial Statements.

The Committee felt that the reporting requirements for health business done by a general insurer should form part of the regulations pertaining to the general insurer (and not separate).

(7) Health Insurance Business

Current

"Health Insurance Business" has been defined by the Insurance Laws Amendment Act 2015. Currently both Life insurers and General insurers sell health insurance products which are governed by the IRDAI (Health Insurance) Regulations, 2013. Additionally, the other regulations for health insurance in terms of product design, pricing, reserving, reinsurance etc are also governed by the regulations applicable differently to Life and General Insurance Companies.

Stand Alone Health Insurance companies are currently registered as General Insurance company and hence General Insurance regulations are applicable for them. General insurers are allowed to sell only short term health insurance products (less than or equal to 3 years term) without any savings or investment component. Life insurers are allowed to sell only long term health insurance products (more than 3 year term) with or without a savings or investment component.

The Committee deliberated about which regulations should be applicable for Health Insurance business and whether any changes to the Solvency and Reserving regulations should be made for health insurance business. Specifically, it was discussed whether regulations should be changed to account for the possibility that long term health insurance products might be allowed to be sold by General and Stand Alone Health Insurance companies (as per the recommendation by the Expert Committee on Health Insurance). As the exact modalities of this aspect are not yet laid out, it was felt inappropriate to propose the solvency and reserving regulations for long term health insurance business as of now.

Recommendation

1. The regulations will need to be changed only in the scenario when the same insurer is allowed to sell both short term and long term health insurance products. This has been recommended in the Report Expert Committee on Health Insurance submitted to Authority in April 2015.

2. However, until the time this is implemented and the exact contours of the regulations are clear, it may not be appropriate to suggest actuarial regulations applicable for health insurance business.

3. The Committee felt that the regulations may continue in their current form until the overall regulations for health insurance business are implemented.

4. Within general insurance regulations, the company deliberated on needs for a different regulation for reserving, solvency, reinsurance etc for the Health LOB. The Committee felt that Health LOB should be treated in exactly the same way as other LOBs of general insurance business.

5. One important aspect in which Individual Health insurance products are different than other general insurance LOBs is the increasing loss ratio with policy vintage. This happens due to selective lapses (where unhealthy and older lives tend to renewal more), natural deterioration of health with time, effect of medical underwriting weaning off, some benefits become eligible only after a waiting period etc. The risk related to high loss ratio for higher vintage policies becomes higher due to guaranteed renewability regulation for health insurance products.

6. However, as the insurer has the flexibility of revising the premium rates based on the loss ratio experience, the loss ratio is expected to remain close to the pricing assumptions. In case the loss ratio is very high, the PDR requirement will become effective to ensure that the reserves are sufficient to meet future liabilities.

Rationale

- The actuarial regulations related to common health insurance business regulations will depend on the exact regulations for the overall business such as products, distribution, solvency etc.
- If and once it is decided to be implemented, the Authority may constitute a committee for forming the regulations applicable to health insurance business, including the actuarial regulations (related to solvency, reserving, reinsurance etc.).

(8) Reserving Methods

Current

In case of a general insurer, unlike life insurer, there are no specific regulations prescribing estimation method for arriving at IBNR reserve amount. However, IRDAI circular No 11 / IRDA/ ACTL/IBNR/2005-06, dated 8th June 2005 prescribes Basic Chain Ladder applied on claims paid for computation of IBNR. The other methods may be used only to cross check the results. On other hand, the exposure draft on claim reserving had suggested following methods for estimation of IBNR

- Basic Chain Ladder Method (both on incurred and paid claims)
- Bornhuetter Ferguson Method (both on incurred and paid claims) and
- Frequency – Severity Method

The draft regulations also allowed usage of any other method as long as the reserve estimated is higher than that arrived by using Basic Chain Ladder method applied on paid claims.

The triangle workings can be done on a net basis. However the 2005 guidelines gave a choice that if the same is not possible, they can be done on a gross basis and scale it down appropriately based on retention levels.

Recommendation

1. The Committee deliberated on the methodology / technique that should be used for estimating IBNR reserve and also the extent of flexibility that an AA may have in selecting the methods to arrive at an estimate that is adequate to cover future liabilities. The Committee recommends that the following listed methods may be termed as "standard actuarial methods".
    - Basic Chain Ladder Method (both on incurred and paid claims), or BCL method
    - Bornhuetter Ferguson Method (both on incurred and paid claims) and
    - Frequency – Severity Method

2. The Committee is of the view that an AA should use more than one method to arrive at an estimate that he believes is an adequate to meet the future liabilities. In his annual report submission to the Regulator, an AA should provide an explanation of the rationale underlying the selection of a particular method over the other available methods along with the advantages and the disadvantages of doing so. Where the results of different methods or assumptions differ significantly, an AA must comment on the likely reasons for the differences and explain the basis for the choice of results.

3. It is also recommended that an AA may be given the flexibility to select any method other than "Standard Actuarial Methods" to arrive an estimate which he believes to be an adequate to cover future liabilities.
    a. This flexibility is recommended to be made available only for all LoBs other than Moto, Health, PA and Travel LOBs (IBNR estimates in case of Motor, Health, PA and Travel should be at-least minimum to those that has been arrived at using BCL Method applied on paid claims).
    b. Further this flexibility comes with additional disclosure requirements and the annual report submission should clearly highlight the reasons for non-applicability of any of the standard methods and also the rationale for selection of any other methods.
    c. Also a more detailed description of the method selected along with its advantages and disadvantages and associated uncertainty in the estimation process.

4. The estimation should be provided on both gross and net of reinsurance cession.

5. The IBNR reserves should neither be discounted nor inflated for future, other than the inflation inherent in the past claims trends.

Rationale

Standard Actuarial Methods as defined above would be applicable in most instances of reserve estimations. Hence the recommendation is in line with current actuarial practices. The recommendation to use more than one methodology is to increase the robustness of the reserving process since it forms part of actuarial best standards in other geographies as is evident by practice standards of various actuarial bodies.

Standard actuarial methods may not be applicable in every scenario such as new line of business, new general insurer, highly volatile class (catastrophe cover, marine hull, aviation etc.) and in such instances an AA should have flexibility to use other more suitable method.

This is in line with international practice (in USA, Australia, UK, Canada no specific methodology is prescribed) where any signing actuary has freedom to use methodology which is appropriate for the estimation of reserves. The recommendation on freedom of choice of method is associated with additional reporting requirement to ensure that the quality of reserving process is not compromised. Additionally, an AA irrespective of the methodology used, is signing and taking responsibility of the adequacy of reserves.

The motivation to restrict Motor, Health, PA and Travel to a reserve estimation which is at least equal to the one arrived using BCL method stems from the fact that these line of business have adequate data points to use the BCL Method and need for application of other methods may not arise. The only exceptions would be new companies, however in general new companies would have a reserve estimates which would be higher than those estimated using BCL Method.

The recommendation on estimating both gross and net of reinsurance stems from the need to calculate gross incurred claim for the purpose of determining Required Solvency Margin (RSM 2). Additionally, it is also needed to estimate the expected recovery from reinsurance and make adequate provision, if needed, for doubtful recoveries.

The idea to not discount the reserves is in line with the principle of prudence. Some countries in the west where discounting of reserves is allowed also insist on providing a risk margin for adverse deviation in reserve amounts. After implementation of IFRS, it is probable that reserves may need to be discounted. But till then committee recommends a prudent approach. Not allowing inflation for future is to maintain consistency with not allowing discounting. This stipulation was also part of draft reserving regulations.

(9) Solvency Margin

Current

General Insurer's solvency margin is governed by IRDAI (Assets, Liabilities and Solvency Margin of insurer) Regulations, 2000 amended to date. The structure of solvency margin is as below:

- Required Solvency Margin (RSM) 1, that is dependent on written premiums with some credit for reinsurance, defined by factors A & B, that differ for every line of business

- Required Solvency Margin (RSM) 2, which is dependent on incurred claims with similar credit for reinsurance as in RSM1. The incurred claims currently considered are higher of current year or average of past three years. It is noteworthy here that Insurance Act 1938 defines incurred claims as the average of incurred claims over preceding three financial years

- RSM, which is higher of RSM1 and RSM2 separately for each line of business and then added to give RSM at aggregate level

- Available Solvency Margin (ASM), which is excess of admitted assets over estimated liabilities

- Solvency Ratio, then, is the ratio of ASM over RSM. This is required to be at a minimum of 150% by a separate order of IRDAI to each registered general insurer. As per Insurance Act this ratio is only 100%

There has been a considerable debate on the following issues in the industry, with industry arguing in favor of a more relaxed interpretation of each:

1. Relaxation in factors that give reinsurance credit. For example, in aviation insurance most insurers cede as high as 95%-99%, but the maximum credit available for aviation line of business is 50%, thereby meaning requirement of additional capital for the difference between actual retained and 50% of premium written or claims incurred, which is very onerous. Similar is the case with Motor insurance where most insurers cede only 5-10% of their motor book and that too to national reinsurer, but the credit available for Motor insurance is only 75%, meaning additional capital for the difference between actual retained and 75% of premium written or claims incurred.

2. Reinsurance credit depending on credit rating of reinsurer rather than flat credit for all reinsurers

3. Relaxation in credit for reinsurance in calculation of net incurred claims where full reinsurance recovery has already been made.

4. Aligning definition of incurred claims with that in Insurance Act, 1938

5. Aggregation of RSM1 and RSM2 and then selecting the higher of the two for the purpose of RSM at aggregate level for solvency ratio calculation

6. Reduction of solvency ratio to that required under Insurance Act, 1938, that is 100% from the current 150%

Recommendation

The issue was deliberated at length amongst the Committee members. While deliberating on the above issues the Committee weighed each of these on the need from different stakeholders as below:

- The need to ease capital requirements that makes insurance business more attractive to shareholders. This may attract more insurance players in the market and may help better penetration

- The need of policyholders for higher level of confidence in the financial strength of insurers that guarantees his/her claim in the hour of distress

- The need of regulator that calls for prudence so insurance industry can withstand the onslaught of adverse developments and black swan events, which is necessary for a sustainable confidence of general public in the institution of insurance

The Committee concluded that the best option to balance the interests of each of these stakeholders would be to move to a Risk Based Capital regime and the Authority must consider constituting an expert panel to provide a detailed assessment of the impact of the implementation of the same on the industry. Since the transition is a long drawn out, the consultative process the Committee gave out that the current system maybe continued.

As of now the Committee's recommendations are listed below:

1. Retain the solvency structure in more or less similar form with some modifications discussed in the ensuing paragraphs

2. The new lines of business recommended in this report easily group into the lines of business being used currently. Hence the current factors A&B may be used for the granular lines of business as given in Annexure 5

3. The RSM1 and RSM2 may be aggregated across lines of business and the higher of aggregate of RSM1 and RSM2 shall be RSM for the purpose of calculating solvency ratio. This allows RSM cross subsidy amongst lines of business, thereby reducing the burden that may be caused due to a more granular RSM calculation and possibly giving some relief in capital as compared to the present requirement.

Rationale

As discussed above the best option in the context of solvency would be to move to risk based solvency. Short of this, the members debated each of the issues and the collective views of the Committee members are discussed below:

1. The factors A&B have been in the industry for a fairly long period and any change in them requires a lot of back ground work justifying a change in these. Owing to paucity of time the Committee decided on retaining the factors that have withstood test of time and have helped the industry in bad weather.

2. Reinsurance credit depending upon reinsurer credit rating is again a very sound idea and is already a part of Economic Capital. However as stated in Para 1, this requires a lot of back ground work and hence kept on hold.

3. For situations where reinsurance recovery has already been made, relaxation in estimation of incurred claims may not be a very sound idea. Capital is held for what could happen in future on the contracts already written or would be written during the year. The purpose of estimating capital requirements on past claims experience is the assumption that past experience is a proxy or predictor for future. However, reinsurance recovery made on past claims is no predictor for recoveries that would be made on future claims due to several changes that could have been made to reinsurance arrangements in terms, conditions, deductibles and carrier.

4. The insurance act provision of calculating incurred claims as the average of preceding three years' claims is a very robust provision that smoothes the effect of one of large claims. However, it is suitable for industries where the growth rates are static or very low. For a fast growing Indian general insurance industry, three year average incurred claims could be significantly lower than the current year incurred claims and may result in under-provision of capital. Hence, the current stipulation of incurred claims being higher of current year or immediately preceding three years is a prudent provision and may be retained.

5. A guarantee fund over and above the RSM (At least 50% of RSM in case of India) is not unique to just India. Similar provisions exist in many jurisdictions under solvency I regime. The Committee felt that changing this ratio under the current solvency regime would not be a sound idea, unless we move to RBC. The paragraph below gives an example of solvency ratios in some of the developed insurance markets.

The current Indian solvency system is compared to the Solvency I regime prevalent currently in many parts of the world. EU regulation regarding the same requires companies to maintain a guarantee fund which is higher of (1) One third of the General Insurance Capital Requirement (GICR) and (2) Base Capital Resources Requirement (BCRR) (the Minimum Guarantee Fund).

The BCRR (also known as Minimum Guarantee Fund) is defined as:

An absolute minimum amount on the capital resources that an insurer must hold as set out in GENPRU 2.1.30 R (Table: Base capital resources requirement for an insurer). The amount depends on the type of insurer and the classes of business underwritten. The BCRR is subject to an indexation procedure in line with consumer price inflation at European level.

Countries like Ireland have kept the guarantee fund at 150% of RSM.

The purpose of the guarantee fund is to ensure that the regulator gets time to act and impose restrictions if needed when the financial condition of an insurer deteriorates. This is critical for high growth markets like India where profits are under stress and thus increase in ASM may not be able to catch up with increase in RSM.

The results of QIS 5 which was conducted to understand the preparedness of the players to move to Solvency II revealed that the required capital is higher than what is being maintained currently. When mature markets like Ireland and EU maintain a guarantee fund at these levels it may not be advisable for a higher growth emerging market like India to dilute the solvency requirement.

The Indian equivalent of BCRR (currently at 100 crores for insurer and 200 crores for reinsurer) may also be linked to inflation in some manner with revision say once in 5 years so that the regulation doesn't get outdated.

(10) Reinsurance

<u>Current</u>

AA's are not required to review or approve the protection plan put in place by the insurance company at the time of inception. AA's comment on the adequacy of the protection plan has to wait until the annual FCR exercise that is completed in the first quarter after the financial year has been closed.

<u>Recommendation</u>

AA's should be required to comment on the protection plan as follows:

1. Evaluate the protection plan's adequacy with reference to the risk tolerance and capital availability of the insurance company and report to the insurance company's board in a timely manner.

2. Perform the necessary "Risk Transfer Tests" "(RTT) on all "reinsurance" contracts. Contracts that pass RTT would qualify for "reinsurance accounting" and provide the corresponding capital relief. Reinsurance protection is deemed not available from contracts that fail RTT. Transactions from such a contract would be subject to "deposit accounting", and capital relief will not be available to insurance companies from such contracts.

3. The amount of protection that is available from "Alternate Risk Transfer" mechanism contracts (ART) should be quantified by the AA. The AA also needs to quantify the remaining protection available from ART contracts as and when claims are settled and their overall impact on the protection plan.

As per the IRDA (General Insurance – Reinsurance) Regulations, 2013 every (re)insurer shall submit to the IRDA, his reinsurance programme for the forthcoming year, 45 days before the commencement of the financial year.

The Committee recommends that the Appointed Actuary's comments on the proposed protection plan as mentioned above should be a part of the programme placed before the board for approval and the submission made to the Authority in this regard. The recommendation requires preparation of a separate guidance note to be created as to how the RTT is done.

Rationale

- The AA has responsibility for ensuring solvency of the company which is critically dependent upon the appropriateness of reinsurance protection.
- The AA is suitably qualified to understand the interaction between available capital and the adequacy of the underlying reinsurance protection plan. Therefore, it makes for improved governance if the AA is pro-active rather than reactive to these issues.
- Insurance Accounting is contingent on there being an underlying transfer of risk in the transaction. RTT provides the necessary proof. This test is routine in all the advanced markets. As more and more insurers seek protection from ART contracts this testing should become an integral part of the AA's role.

(11) Long term business

Current

The current regulation on Preparation of Financial Statements stipulates:

The estimate of claims made in respect of contracts where the claims payment period exceeds four years shall be recognised on an actuarial basis, subject to regulations that may be prescribed by the Authority.

In such cases, certificate from a recognised actuary as to the fairness of liability assessment must be obtained. Actuarial assumptions shall be suitably disclosed by way of notes to the account.

Necessary provision for unexpired risk shall be made subject to any minimum, statutorily required.

Recommendation

The Committee felt that this requirement can be retained in the current form.

Rationale

The current provision meets the prudence norms, though the probability of this provision getting invoked is fairly low in view of current claims practices.

(12) Business Outside India

Current

The current regulation on Asset, Liability and Solvency Margin requires the Appointed Actuary to set additional reserves if required.

Recommendation

This provision can be retained.

A copy of every regulatory filing made to the regulator in the country of operation should be filed with the Authority countersigned by the Appointed Actuary.

The Appointed Actuary has to furnish the required forms as in the proposed Actuarial Report and Abstract regulations for General Insurers for business outside India as well.

However the Authority may publish a list of countries (say – where regulatory submissions are strong) for which the above submission of forms can be waived.

In view of the onerous nature of this requirement, it is recommended that Authority allow a transition period of 3 years before these requirements get implemented fully.

Rationale

The Committee felt that this is needed from a futuristic perspective as there are chances of a company starting operations in a country where regulatory requirements are not strong thereby posing a disproportionate risk to the parent insurer.

The Committee deliberated the issue of data. It is possible that data may be maintained in a format which is different from the local requirement. It might be difficult for the Appointed Actuary to comply in such a situation. It is suggested that the companies may be advised to capture the data at the required level of details.

The regulation will help ensure that appropriate structures and processes are set up by companies when they open business outside India.

(13) Annual Reporting

Current

In case of a general insurer there is no specific regulation on the actuarial report to the regulator. There are only two actuarial reports that are submitted to the regulator viz. Report on IBNR and Financial Condition Report and both of them are by way of guidelines / circular issued by the Regulator. There may be few additional certification requirements, which are not covered as part of this report unless they are forming part of any specific recommendation on regulations.

Recommendation

In respect of Annual Reporting, the Committee has the following recommendations:

1. Regulations pertaining the Annual Report on Valuation of Technical Liabilities (i.e. Unearned Premium Reserve, Premium Deficiency Reserve, Outstanding claim liabilities, Incurred But Not Report and Incurred But Not Enough Reported) of a general insurer may be formulated. The report should be addressed to Board of the general insurer and the regulator.

2. IRDAI may request Institute of Actuaries of India to introduce the system of peer review, issue relevant professional standards and ensure compliance of those standards.

3. A system may be introduced in which annual presentation on valuation of technical liabilities is made to the Regulator. The presentation may be made by the Appointed Actuary along with the Principal Officer.

4. A comprehensive financial condition report, which would be an annual report may be introduced initially by way of IRDAI circular and later to be introduced as a regulations. The financial condition report, amongst other things may cover an assessment of adequacy of past estimates of technical liabilities, an assessment of pricing including adequacy of premiums, an assessment of current and future capital adequacy, an assessment of the suitability and adequacy of reinsurance arrangements.

Rationale

The recommendations pertaining to annual report on and the peer review of valuation of technical liabilities is in line with international regulatory practice in various jurisdictions such as United States of America, Australia, Singapore, United Kingdom and other such regulations. Additionally, in India similar regulations (i.e. Actuarial Report and Abstract) exist for Life Insurance Companies. Similarly, Institute of Actuaries of India already has a system of peer review for life insurance companies.

The recommendation of annual presentation to the Regulator by an Appointed Actuary and the Principal Officer stems from the need to have a formal, regular and two way channel of communications between the Regulator, Principal and Appointed actuary of the insurer to the extent that it pertains to the valuation of technical liabilities of the insurer. This will give an opportunity to have a much quicker feedback loop resulting in early initiation of preventive and developmental action being taken. Additionally, given that Appointed

Actuary is representative of policyholders interest a regular and constant interaction with the Regulator is of prime importance.

The process of annual reporting of Financial Condition of the insurer was universal across jurisdiction reviewed by the Committee and hence there is a strong justification to have them introduced by way of regulations rather than in form of guidelines, as it exist now. However, the Committee was of the view that we may continue to have Financial Condition Report by way of guidelines for next couple of years and once the system is stabilized the same may be converted as regulations. This may be the first concrete step for introducing risk based capital regime. This is in line with current practice amongst the life insurance companies.

One of the mandates for the Committee is to provide recommendations on the contents of Financial Condition Report and the same would be provided in the Part 2 (Final) report.

(14) Public Disclosure

Current

As per the existing quarterly disclosure requirements every general insurer is required to provide break up of technical liabilities for each defined line of business as at the end of reporting period. The format is prescribed in NL-21 "Statement of Liabilities" and the format of the disclosure is reproduced in Annexure 2 of the report. Additionally NL-30 "Analytical Ratios" provides some ratios giving an indication on the quality/strength of claims reserves.

Recommendation

The Committee deliberated on the existing disclosure requirements and the need to further enhance the existing norms. The recommendations with respect to public disclosure may be categorized into two distinct aspects viz. granularity with respect to LoB definitions and granularity with respect to historical development. The Committee's recommendation as regards LoB definition is covered earlier in the Report.

The recommendations with respect to granularity of historical development are stated below

1. To show the historical development pattern of claims, the recommended template for which is provided in Annexure 3(i) & 3(ii);

2. The revised disclosure norms should be made mandatory on the prospective basis, implying that in the year in which the regulation comes in force, the general insurer would be required to publish the expected Ultimate Loss Cost, Earned Premium, Paid Claims, Incurred Claims (Gross or Net of reinsurance, as the case may be) for the occurrence year covered by that reporting period.

3. For every subsequent year of reporting, the general insurer would need to disclose year wise development of Paid Claims and Incurred Claims (Gross and Net of reinsurance) for prior years.

4. Additionally, insurer needs to disclose ultimate loss cost and earned premium for each occurrence year (since the year in which the recommended regulations may come in force) as updated or revised up-to the reporting period.

5. To further clarify the recommendations, this would mean that in the year in which the regulations comes in force only the last row of the table mentioned in Annexure 3 would be completed. In subsequent year, last two rows of the table mentioned in Annexure 3 would be completed and with every passage of year number of bottom rows that would be completed will keep increasing.

Rationale

In case of a typical general insurer, technical liabilities would constitute roughly about 70% of the total liabilities. Hence any assessment of a general insurer needs to be further supplemented by a corresponding assessment of historical reserve strength of that general insurer. The Committee's recommendations on this were further corroborated by

- European nations are moving towards Solvency II regime, which has public disclosure as one of its key pillar;
- Disclosure requirements in North America (i.e. USA and Canada)
- Life insurance companies disclosure requirements on Embedded Value Calculations

The motivation behind suggesting a prospective reporting is to ensure that the transition is smooth and helps address difficulties that are associated with generating the historical data especially for companies with older systems and processes. Additionally, ultimate loss cost may not have been estimated at the expected granular level. It was also felt that with the increased public disclosure on the quality of reserve, some of the general insurer may want to further strengthen the reserve quality and the recommendation for prospective disclosure may provide for smooth transition for such reserve strengthening.

As an example, US statutory data disclosures for General Insurers, knows as Schedule P disclosures are given below:

Schedule P is organized in four parts. Part one provides performance details (by accident year) both on a gross and on a net basis over a number of years. Part 2 provides the triangulation of the net incurred losses. Part 3 provides the triangulation of the net paid losses. Part 4 provides the triangulation of the BULK and IBNR reserves.

These numbers are provided both on an overall aggregate basis as well as by 34 (+) defined lines of businesses (LOB). These LOB definitions are homogeneous and credible aggregations of different products. For example "Third Party loss experience (known as

Bodily Injury in the US) of Commercial Vehicles and those of Private Passenger Vehicles (including motorized cycles) form two separate lines.

Usually 10 (+) development year tables are provided for long tail lines (like Liability) and 3 (+) development year tables are provided for short tail lines (like Homeowner/ Farm owners).

(15) Appointed Actuary Regulation

Current

The Committee was asked to look into the Insurance Regulatory Development Authority (Appointed Actuary) Regulations, 2000 along with the amendment in February 2013. The Committee understands that the primary issue that needs to be addressed is the paucity of actuaries with the required competency and capability and addressing the supply issue without compromising on quality of the actuary.

Indian Regulation

The Indian regulations are more or less in line with general global practice except for the fact that the eligibility criterion for the AA has been mentioned in the regulations itself in section 3 subsections 2(i) to 2(ix). There is also a provision in section 3, subsection 6 where the regulator has been given an over-riding power to grant exemptions to one or more of the criteria mentioned in 2(i) to 2(ix).

Capacity

Actuarial profession in India as far as general insurance is concerned is at a nascent stage of development. In fact there are only about 20 fully qualified actuaries who have cleared the specialisation paper in general insurance which tests the candidates from an "Indian Perspective". Many of them are recently qualified and don't satisfy the experience criteria. Some of them prefer to not be Appointed Actuary considering the responsibilities involved while some others have shifted abroad. With about 30 companies in the industry already, there is an acute shortage of suitable candidates. So the regulator in most of the cases has to provide exemptions on a case to case basis. Industry continues to clamour about the shortage of eligible candidates.

Recommendation

Indian Regulation

The Committee deliberated the issue at length. Globally the emphasis is on experience. Hence one recommendation that is proposed is to take experience as a proxy for specialisation.

This would involve a minor change in the regulation with section 2(ii) reading as follows:
*...with specialisation (as evidence by qualification **or** working experience) in....*

from the current
*...with specialisation (as evidence by qualification **and/or** working experience) in....*

Appropriate changes, if any, in other sections maybe made by the Authority based on the above recommendation of valuing experience.

Capacity

The Committee recommends that the Authority may consider suitable candidates from Global Actuarial professional bodies, whose standards are at least as rigorous as that of the Indian professional body subject to the candidates displaying requisite knowledge of India specific regulations. This of course needs to be done in consultation with Institute of Actuaries of India in such a way that the Insurance Act, Actuaries Act and other relevant acts are fully complied with. For this purpose, the Committee recommends that a co-ordination committee be formed between the Authority and the Institute of Actuaries of India with members drawn from both.

The Committee felt that though it will be difficult to satisfy the conditions 2(i) to 2(ix) of section 3 fully, the over-riding power to the regulator to give exemptions is expected to ensure that the supply issue will be addressed to an extent. The Authority is addressing the quality issue by providing mentors to recently qualified actuaries and by considering peer review for reserving. The Committee is of the opinion that this is a short term problem and there are many bright student actuaries working in General Insurance who will get qualified over the next 5 years and the issue will not be as critical as it is today.

Rationale

Global Practice

The Committee spent time understanding the corresponding regulations in other countries like:

- Canada
- Singapore
- Ireland
- New Zealand and
- Australia

The IAIS *Suitability of Persons* (ICP 7) puts the requirement in a very succinct manner:

"Auditors and actuaries occupy special positions of influence over insurance companies and also have wider responsibilities to the public and to the supervisor, which make it particularly important that they should possess the skills and experience necessary to discharge their responsibilities and that they adhere to high standards of professional competence, conduct, and integrity.

Although the professional bodies to which they typically belong often prescribe codes of conduct that they must observe, and breach of which may lead to disciplinary action, supervisors should not rely on membership in these bodies in considering whether individuals, or the firms to which they belong, meet the necessary standards.

In some jurisdictions, the appointment of auditors or of actuaries to particular positions of influence is subject to the specific approval of the supervisory authority. In others, it is likely to be of relevance to the supervisor's assessment of the overall governance of the company."

Most of the countries mentioned above have a published guideline on the "Fit and Proper" criteria to be satisfied by the key personnel in a company which includes, apart from the actuary, the auditor, CFO, CRO, CEO etc. While the onus of selection of the candidate lies with the Board of the company the candidate maybe appointed only if they are able to satisfy the concerned regulator about the suitability of the candidate with respect to the "Fit and Proper" guideline. Exemptions if any are granted by the regulator under exceptional circumstances. So the regulator exerts absolute power in so far as selection of key personnel goes. The "fit and proper" guidance in general places a lot of emphasis on factors like:

- Competence and capability
- Appropriate Experience (Relevant / Recent)
- Conduct and Values (Honesty / Integrity) and
- Financial Soundness

apart from insisting on the fact that the selected person in case of an actuary is a Fellow member of the professional actuarial body in the country or other bodies that are considered equivalent or better.

(16) Other Considerations

Data / System Issues

The Committee has given a lot of emphasis on enhanced disclosure of data to the Authority as well as a few new forms to be incorporated in public disclosure. The idea behind this is based on one of the pillars of Solvency II regime – disclosure which automatically increases accountability and public confidence.

But the Committee is also aware that there may be several problems that the industry may face to actually comply with these requirements. This could be because of legacy systems incapable of generating the data in the required formats or the installed software requiring several modifications which is a time consuming and expensive process. One point to note here is that the level of compliance usually increases when the LOBs as defined for the purpose of accounting and as suggested for actuarial analysis are similar. In fact in US the disclosure is on 35 different sections for actuarial purposes. While the actuarial requirements in terms of LOB definition should not be diluted as it is based on principle of homogeneity it may not hurt to expand the definition of LOBs for the purpose of financial accounting.

Some of the key issues related to data that the Committee foresees are as follows:

- Inability of companies to generate paid/incurred triangles on a quarterly basis à this maybe an issue for PSUs and a few private sector players. Even if it is generated there could be issues of reconciliation as several entries that happen outside of the system is often done at LOB level while the IBNR claim triangles is required at a much higher level of granularity. The Committee has retained A, B1 and B2 forms in current format for past data and is recommending the new format only on a prospective basis annually so that the companies can set their systems right.

- Data on a gross as well as net basis: The draft claims reserving regulations suggest that the data needs to be provided on net basis only. The Committee felt that the true risk is reflected only in gross data and hence it is imperative that this is also to be provided. If the authority would like to aggregate data and form industry wide development pattern for different LOBs which is not only useful for new companies for reserving but also affords comparison between existing companies, then the purpose is better served by gross data as RI policy of each company will be different from one another. The main issue that may happen here are as follows
    - Some companies have the system developed only to generate gross data and find it difficult to provide net data
    - For some others RI is captured at policy level and their reserving software directly gives out net triangles – they may have readjust the software to generate gross data

  Hence, while the Committee has recommended data collection at both gross and net basis, collection of data is recommended only on prospective basis so that there is a transition time for companies to modify systems in a way as to generate required data. The requirement of this data is in line with the recommendation that AA must give estimate of Gross and net IBNR separately.

- In the expanded asset list to be considered at zero value there are some assets like un-reconciled coinsurance/reinsurance balance – it will require a huge effort from the companies in the industry to sit together and sort out the issue. The recommendation is expected to bring more discipline to accounting of coinsurance and reinsurance balances. There could be data maintenance related issues here which industry players have to grapple with. But at the end of the exercise the companies should emerge leaner and stronger.

- Standard reserving – is being suggested for the first time though some companies are already following it. To follow this method a robust IT system is a pre-requisite.

While these are the recommendations and suggestions which the Committee feels should be in place the Authority is requested to gather feedback from the industry and based on that provide an appropriate transition time. In the opinion of the Committee 1-2 years of transition time would ease the implementation.

Overall the Committee feels that the data and disclosure related requirement though onerous for the companies in the short term will finally help in making the industry more robust. This may be taken as the first step towards meeting listing requirements and thereafter where a variety of data will have to be provided to analysts, mutual funds, FIIs and other shareholders.

Forms

The Committee deliberated on the forms that should be included in the Annual Report on Technical Liability Valuation. There was a consensus that the tables / forms prescribed in the draft claims reserving guidelines were good to be used with a few modifications. The underlying rationale for modification was to ensure consistency in reporting, reduce overlap of reporting requirements and allow for professional judgment of the Appointed Actuary. The Committee recommends that these submissions should be Annual. The revised forms have been incorporated in **Annexure 4(i) to 4(vi)**.

Accounting Framework and Consistency

The Committee has provided recommendations on areas which may have commonality with stipulations in regulations relating to other insurance functions, particularly financial statements. Example of such instance could be line of business classifications, asset valuations norms etc. The Committee is of the view that Authority may adopt any such commonly accepted norms in related regulatory areas. However, when it comes to actuarial issues, the Committee is of the view that the recommendations pertaining to actuarial certification may not be diluted given the statutory responsibility of an Appointed Actuary.

This page has been left blank

Glossary

1/8th Method
A method of estimating unearned premium reserve, based on the assumption that annual policies are written evenly over each quarter and risk is spread evenly over the year.

1/24th Method
A method of estimating unearned premium reserve, based on the assumption that annual policies are written evenly over each month and risk is spread evenly over the year.

1/365th Method
A method of estimating unearned premium reserve, based on the assumption that annual policies are written evenly over each day and risk is spread evenly over the year.

Allocated Loss Adjustment Expenses (ALAE)
The expenses incurred in handling and settling claims.

Bornhuetter Ferguson (BF) method
A reserving method which uses weights based on an a priori loss ratio and claim development.

Case by case estimation
A method of determining the reserve of outstanding reported claims. Each outstanding claim is individually assessed to arrive at an estimate of the total payments to be made.

Catastrophe
A single event which gives rise to exceptionally large aggregation of losses.

Catastrophe reserve
A reserve built up over periods between catastrophes to smooth the reported results over a number of years.

Chain ladder method

Technique of reserving for future claims in general insurance business which compares the emergence of claims year by year, to arrive at an ultimate loss estimate by applying development factors to losses already paid or incurred; the relevant data are set out in triangular arrays.

Claim
An assertion by a policyholder that an insurer is liable to make a payment in accordance with the terms of a policy.

Claim frequency
Number of claims in a period per unit of exposure.

Claim severity
The average cost per claim.

Coinsurance
An arrangement whereby two or more insurers enter into a single contract with the insured to cover a risk in agreed proportions at a specified premium. Each insurer is liable only for its own proportion of the total risk.

Earned premium
The total premiums attributable to the exposure to risk in an accounting period; they can be gross or net gross or net of reinsurance.

Incurred but not enough reported (IBNER) reserve
A reserve reflecting expected changes (increases and decreases) in estimates for reported claims only.

Incurred but not reported (IBNR) reserve
A reserve to provide for claims in respect of claim events that have occurred before the accounting date but still to be reported to the insurer by that date.

Incurred claims
Incurred claims refers to the total amount paid on a cohort of claims up to a specified valuation date plus the total of all case estimates (or standard reserves) on these claims as at the valuation date. Incurred claims usually include ALAE.

Long-tailed business
Types of insurance in which a substantial number of claims take several years from the date of exposure and/or occurrence to be notified and/or settled.

Premium deficiency reserve
Reserve held in excess of the unearned premium reserve, which allows for any expectation that the unearned premium reserve will be insufficient to cover the cost of claims and expenses expected to be incurred during the period of unexpired risk.

Reinsurance

An arrangement whereby one party (the reinsurer), in consideration for a premium, agrees to indemnify another party (the cedant) against part or all of the liability assumed by the cedant under one or more insurance policies, or under one or more reinsurance contracts.

Short-tailed business
Types of insurance in which most claims are usually notified and/or settled in a short period from the date of exposure and/or occurrence.

Statistical reserve
This is a method of reserving for outstanding claims using statistical techniques as against case by case reserve method. This method is more useful for classes of insurance where there are lots of claims (e.g. private motor) and where there is stability in number and amount of claims

Technical reserves
The accounting entries in the balance sheet that represent the insurer's liabilities from the business that has been written

Unallocated Loss Adjustment Expenses (ULAE)
All external, internal, and administrative claims handling expenses, including determination of coverage, that are not included in allocated loss adjustment expenses (ALAEs)

Unearned premium reserve (UPR)
The amount set aside from premiums written before the accounting date to cover risks incurred after that date

Unexpired risks reserve (URR)
The reserve required to cover the claims and expenses that are expected to emerge from an unexpired period of cover

Written premiums
The amount of premium, either gross or net of reinsurance, for which cover commenced in an accounting period

Bibliography

- Australian Prudential Regulation Authority (APRA). "Prudential Standard CPS 520 - Fit and Proper." August 2014.
- Central Bank of Ireland. "Fitness and Probity Standards." 2014.
- Central Bank of Ireland. "Reserving Requirements for Non-Life Insurers and Non-Life and Life Reinsurers." 2014.
- FASB. "Statement of Financial Accounting Standards No. 60." June 1982.
- "Insurance Act." 1938.
- International Association of Insurance Supervisors (IAIS). "ICP 7: Suitability of Persons." 2006.
- IRDAI. "General Insurance Claims Reserving Draft Guidelines." Dec 2015.
- IRDAI. "Guidelines on estimation of IBNR Claims provision under General Insurance Business." May 2005.
- IRDAI. "Insurance Regulatory and Development Authority (Appointed Actuary) Regulations." July 2000.
- IRDAI. "Insurance Regulatory and Development Authority (Assets, Liabilities, and Solvency Margin of Insurers) Regulations, 2000." July 2000.
- IRDAI. "Master Circular on Preparation of Financial Statements - General Insurance Business ." October 2012.
- Lloyd's. "Lloyd's Reserving Guidance V1.1." April 2014.
- Monetary Authority of Singapore. "Guidelines on Fit and Proper Criteria." January 2012.
- Monetary Authority of Singapore. "Insurance (Actuaries) Regulations." 2013.
- NAIC's Casualty Actuarial and Statistical (C) Task Force. "Regulatory Guidance On Property and Casualty Statutory Statements of Actuarial Opinion." 2014.
- Office of the Superintendent of Financial Institutions (OSFI) - Canada. "Appointed Actuary: Legal Requirements, Qualifications and Peer Review." September 2012.

- *Premium deficiency reserves: How much and why?* 2011, Casualty Loss Reserve Seminar, Las Vegas.
- Reserve Bank of New Zealand. "Fit and proper policy." December 2012.
- "The Insurance Laws (Amendment) Bill." 2015.

Annexures

Annexure 1

Appointed Actuary's Certificate on Reserves for Technical Liabilities

<u>Opinion on Gross and Net Reserves for Technical Liabilities</u>

I, <name of the actuary>, am an appointed actuary employed by <name of the general insurer> (the Company). I am Fellow member of Institute of Actuaries of India with experience of claim reserving and approved by IRDAI to act as an Appointed Actuary of the Company.

The Company has established below mentioned reserves in its books of accounts and has reported to IRDAI.

Reserve	Gross Reserve	Net Reserve
Unearned Premium Reserve (UPR)		
Premium Deficiency Reserve (PDR)		
Unexpired Risk Reserve (URR)		
Outstanding Claim Reserve		
IBNR Reserve		
Total Reserves for Technical Liabilities		

The reserve for premium liabilities (i.e. UPR, PDR & URR) includes provision for future claims arising from unexpired period of risks. The reserves for claims liabilities (i.e. outstanding claim and IBNR) include claims handling expense (both allocated and unallocated claims handling expenses) and are net of salvage and subrogation. The reserves are not discounted for time value of money. The net reserves exclude any allowance for reinsurance bad debts.

I have relied on the data provide by the company and certified by the Statutory Auditor of the Company. However, I have completed reasonable checks and completeness of this data. I have not encountered anything during the course of my work that gives me material concern in this respect. I consider that the data and information are an appropriate basis for the purposes of this Opinion. Additionally, I have also relied on certification and assurance from the Statutory Auditor on true and fairness of the values for outstanding claim reserves.

In my opinion, subject to the above comments (and except for the qualifications stated below), the total reserves identified above, gross and net of reinsurance, comply with applicable IRDAI regulations and are a reasonable estimate for the insurance contracts written or in force by <Name of Non-Life Insurance Company> as at ,<year ending>. An actuarial report, supporting the findings expressed in this statement of opinion, is being separately provided to IRDAI and the Board of the Company.

This statement of opinion is solely for the use of, and only to be relied upon by, the company and IRDAI in each case for the purposes of compliance with IRDAI regulatory requirements.

Place:
Date: Signature of the Appointed Actuary

Annexure 2

Current Public Disclosure for Liabilities

NL 21 - Statement of Liabilities											INR '000
		Reserves For Reporting Period					Reserves For Corresponding Prior Period				
Sr.No	Line of Business	URR	Outstanding Claims	IBNR	PDR	Total	URR	Outstanding Claims	IBNR	PDR	Total
1	**Fire**										
2	**Marine**										
3	Marine Cargo										
4	Marine Hull										
5	**Miscellaneous**										
6	Motor										
7	Engineering										
8	Aviation										
9	Liabilities										
10	Others										
11	**Health Insurance**										
12	**Total Liabilities**										

Annexure 3(i)

Additional Public Disclosures for Development of Incurred Liabilities (For each Line of Business as per financial statements)

Cumulative Statement of Claims Paid Development (By Amount) as at Year Ending ______________

Financial Year			
Reporting period from		Reporting period to	
Name of insurer		Name of Appointed Actuary	
Line of Business		Gross or Net of Reinsurance	

INR '000

Year of occurence	Earned Premium	Ultimate Loss Cost	Cumulative Claim Paid Amount as at the end of number of months as at date of statement									
			12 months	24 months	36 months	48 months	60 months	72 months	84 months	96 months	108 months	120 months
	1	2	3	4	5	6	7	8	9	10	11	12
Prior Preceeding Years												
Ninth Preceeding Year												
Eighth Preceeding Year												
Seventh Preceeding Year												
Sixth Preceeding Year												
Fifth Preceeding Year												
Fourth Preceeding Year												
Third Preceeding Year												
Second Preceeding Year												
First Preceeding Year												
Current Year												

Annexure 3(ii)

Cumulative Statement of Claims Incurred Development (By Amount) as at Year Ending ______________

Financial Year			
Reporting period from		Reporting period to	
Name of insurer		Name of Appointed Actuary	
Line of Business		Gross or Net of Reinsurance	

INR '000

Year of occurence	Earned Premium	Ultimate Loss Cost	Cumulative Claim Incurred Amount as at the end of number of months as at date of statement									
			12 months	24 months	36 months	48 months	60 months	72 months	84 months	96 months	108 months	120 months
	1	2	3	4	5	6	7	8	9	10	11	12
Ninth and Prior Preceeding Year												
Eighth Preceeding Year												
Seventh Preceeding Year												
Sixth Preceeding Year												
Fifth Preceeding Year												
Fourth Preceeding Year												
Third Preceeding Year												
Second Preceeding Year												
First Preceeding Year												
Current Year												

Annexure 4(i)

Technical Liability Forms

IBNR-A1: Statement of claims development during the Period ending 31 March______

Financial Year			
Reporting period from		Reporting period to	
Name of insurer		Name of Appointed Actuary	
Line of Business		Gross or Net of	

Amount in INR '000

S. No.	Year of occurrence of loss	Provision at the beginning of the			Part Payments on the claims during the reporting period		Payment on claims finally settled during the reporting period		Claims provided for the first time during the reporting period		Claims reopened during the reporting period		Claims closed without payment during the reporting period		Provision at the end of the reporting			Written Premium for the year	
		Outstanding Claims		IBNR reserve											Outstanding Claims		IBNR reserve		
		No.	Amount	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	Amount	No.	Amount
Column Code	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	Prior Preceeding Years																		
2	Ninth Preceeding Year																		
3	Eighth Preceeding Year																		
4	Seventh Preceeding Year																		
5	Sixth Preceeding Year																		
6	Fifth Preceeding Year																		
7	Fourth Preceeding Year																		
8	Third Preceeding Year																		
9	Second Preceeding Year																		
10	First Preceeding Year																		
11	Current Year																		
	Total																		

All figures / amounts are in Rupees
All figures / amounts will have to be entered in

Annexure 4(ii)

IBNR-B1(a):Cumulative Statement of Paid Claims Development (By Amount) as at Period ending ____________

Financial Year			
Reporting period from		Reporting period to	
Name of insurer		Name of Appointed	
Line of Business		Gross or Net of	

Amount in INR '000

Year of occurrence	Earned Premium	Cumulative Claim Amount Paid as at the end of number of months as at date of statement										Total cumulative amount paid	Total cumulative amount paid	Outstanding Amount	IBNR reserves	Cumulative paid + outstanding	Cumulative paid + OS + IBNR amount	Incurred loss ratio	Ultimate loss ratio	Ultimate loss ratio as at previous date
		12 months	24 months	36 months	48 months	60 months	72 months	84 months	96 months	108 months	120 months									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16=12+14	17=16+15	18=16/1	19=17/1	20
Prior Preceeding Years																				
Ninth Preceeding Year																				
Eighth Preceeding Year																				
Seventh Preceeding Year																				
Sixth Preceeding Year																				
Fifth Preceeding Year																				
Fourth Preceeding Year																				
Third Preceeding Year																				
Second Preceeding Year																				
First Preceeding Year																				
Current Year																				

All the numbers filled in the form should be net of reinsurance

The same form will be repeated to capture the development of incurred claim amounts.

Annexure 4(iii)

IBNR-B1(b):Cumulative Statement of Incurred Claims Development (By Amount) as at Period ending ____________

Financial Year			
Reporting period from		Reporting period to	
Name of insurer		Name of Appointed	
Line of Business			

Amount in INR '000

Year of occurrence	Earned Premium	Cumulative paid + outstanding claim amount as at the end of following months										Total Cumulative Amount	Outstanding amount	IBNR reserves	Cumulative paid + OS + IBNR amount	Incurred loss ratio	Ultimate loss ratio	Ultimate loss ratio as at previous date
		12 months	24 months	36 months	48 months	60 months	72 months	84 months	96 months	108 months	120 months							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15=12+14	16=12/1	17=15/1	18
Prior Preceeding Years																		
Ninth Preceeding Year																		
Eighth Preceeding Year																		
Seventh Preceeding Year																		
Sixth Preceeding Year																		
Fifth Preceeding Year																		
Fourth Preceeding Year																		
Third Preceeding Year																		
Second Preceeding Year																		
First Preceeding Year																		
Current Year																		

All the numbers filled in the form should be net of reinsurance
All figures / amounts are in Rupees
All figures / amounts will have to be entered in absolute numbers

Annexure 4(iv)

IBNR-B2(a):Statement of Settled Claims Development (By Number) as at Period ending ____________

Financial Year			
Reporting period from		Reporting period to	
Name of insurer		Name of Appointed	
Line of Business			

In Absolute

Year of occurrence	No. of policy years exposed	No. of insured risk years exposed	Cumulative no. of claims paid as at the end of the following months										Cumulative no. of fully settled claims	Frequency of claim per insured risk
			12 months	24 months	36 months	48 months	60 months	72 months	84 months	96 months	108 months	120 months		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14=13/2
Prior Preceeding Years														
Ninth Preceeding Year														
Eighth Preceeding Year														
Seventh Preceeding Year														
Sixth Preceeding Year														
Fifth Preceeding Year														
Fourth Preceeding Year														
Third Preceeding Year														
Second Preceeding Year														
First Preceeding Year														
Current Year														

All figures / amounts are in Rupees
All figures / amounts will have to be entered in absolute numbers

Annexure 4(v)

IBNR-B2(b):Statement of Reported Claims Development (By Number) as at Period ending ____________

Financial Year			
Reporting period from		Reporting period to	
Name of insurer		Name of Appointed Actuary	
Line of Business			

In absolute Units

Year of occurrence	No. of policy years exposed	No. of insured risk years exposed	Cumulative no. of claims reported (settled or opened)as at the end of the following lags										Cumulative number of claims	Cumulative no. of claims fully settled	Frequency of claim per insured risk
			12 months	24 months	36 months	48 months	60 months	72 months	84 months	96 months	108 months	120 months			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15=13/2
Prior Preceeding Years															
Ninth Preceeding Year															
Eighth Preceeding Year															
Seventh Preceeding Year															
Sixth Preceeding Year															
Fifth Preceeding Year															
Fourth Preceeding Year															
Third Preceeding Year															
Second Preceeding Year															
First Preceeding Year															
Current Year															

All figures / amounts are in Rupees

All figures / amounts will have to be entered in absolute numbers

Annexure 4(vi)

Form D : Ultimate Loss Cost by Occurrence (Accident) Year - in the Current and the Preceeding Reporting Period

Financial Year			
Reporting period from		Reporting period to	
Name of insurer		Name of Appointed Actuary	
Line of Business		Gross or Net of Reinsurance	

Amount in INR '000

S. No.	Occurence Year	Earned Premium	Estimated Ultimate Loss Cost as at									
			At the date of statement (T)	at (T-1)	at (T-2)	at (T-3)	at (T-4)	at (T-5)	at (T-6)	at (T-7)	at (T-8)	at (T-9)
Column Code	1	2	3	4	5	6	7	8	9	10	11	12
1	Prior Preceeding Years											
2	Ninth Preceeding Year											
3	Eighth Preceeding Year											
4	Seventh Preceeding Year											
5	Sixth Preceeding Year											
6	Fifth Preceeding Year											
7	Fourth Preceeding Year											
8	Third Preceeding Year											
9	Second Preceeding Year											
10	First Preceeding Year											
	Current Year											

Annexure 5

Factor A&B for Solvency Calculation

New Line of Business	Old Line of Business	Factor A	Factor B
Motor OD - Private Car	Motor	0.75	0.75
Motor OD - Two Wheeler	Motor	0.75	0.75
Motor OD- Commercial Vehicle	Motor	0.75	0.75
Motor TP - Private Car	Motor	0.75	0.75
Motor TP - Two Wheeler	Motor	0.75	0.75
Motor TP - Commercial Vehicle (Declined Pool)	Motor	0.75	0.75
Motor TP - Commercial Vehicle (TP Pool)	Motor	0.75	0.75
Motor TP - Commercial Vehicle (Other than Pool)	Motor	0.75	0.75
Health Insurance – Individual	Health	0.75	0.75
Health Insurance – Group (Government Schemes)	Health	0.75	0.75
Health Insurance – Group (Employer/Employee)	Health	0.75	0.75
Health Insurance – Group (Others)	Health	0.75	0.75
Personal Accident – Individual	Personal Accident	0.75	0.75
Personal Accident – Group (Government Schemes)	Personal Accident	0.75	0.75
Personal Accident – Group (Others)	Personal Accident	0.75	0.75
Travel	Health	0.75	0.75
Fire	Fire	0.50	0.50
Marine Hull	Marine Hull	0.50	0.50
Marine Cargo & Others	Marine Cargo	0.60	0.60
Engineering	Engineering	0.50	0.50
Aviation	Aviation	0.50	0.50
Product Liability	Liability	0.75	0.75
Liability insurance	Liability	0.75	0.75
Workmen Compensation / Employer's Liability	Liability	0.75	0.75
Crop Insurance	Others	0.70	0.70
Weather Insurance	Others	0.70	0.70
Credit Insurance	Others	0.70	0.70
Others	Others	0.70	0.70

This page has been left blank