

The Insurance Regulatory and Development Authority (General Insurance - Claims Reserving) Regulation, 2013.

F. No. IRDA/Reg/..../2013 dated - *In exercise of the powers conferred under Section 114A of the Insurance Act, 1938(4 of 1938) read with Sections 14 and 26 of the Insurance Regulatory and Development Authority, Act 1999, the Authority in consultation with the Insurance Advisory Committee, hereby makes the following regulations, namely:-*

CHAPTER 1

1) Short title and commencement

- a) These regulations may be called Insurance Regulatory and Development Authority (General Insurance - Claims Reserving) Regulation, 2013**
- b) They shall come into force on the date of their publication in the Official Gazette by the Central Government.**
- c) Unless otherwise provided by these regulations, nothing in these regulations shall deem to invalidate the reserving methodologies entered prior to these regulations coming into force.**
- d) This regulation is applicable to all insurers carrying on general insurance business in India, registered in accordance with section 3 of the Insurance Act, 1938.**

2) Definitions: In these Regulations, unless the context otherwise requires,--

- a) “Act”** means the Insurance Act, 1938 (4 of 1938).
- b) “Authority”** means the Insurance Regulatory and Development Authority established under sub-section (1) of section 3 of the Insurance Regulatory and Development Authority Act, 1999 (41 of 1999)
- c) “Case estimate”** means the reserve for outstanding reported claims where each outstanding claim is individually assessed to arrive at an estimate of total payments to be made.
- d) “Catastrophe”** means a single event which gives rise to exceptionally large aggregation losses.
- e) “Allocated Loss Adjustment Expenses”** are claim-related expenses that are directly attributable to a specific claim.
- f) “Unallocated Loss Adjustment Expenses”** are claim-related expenses that cannot be directly assigned to a specific claim.

- g) **“Claim frequency”** means the number of claims in a period per unit of exposure.
- h) **“Exposure unit/measure”** is the basic unit used by the insurer to measure the amount of risk insured, usually over a given period.
- i) **“Incurred but not enough reported (IBNER)”** is a reserve reflecting expected changes in estimates for reported claims only.
- j) **“Incurred but not yet reported (IBNYR)”** is a reserve to provide for claims in respect of events that may have occurred before the accounting date but has still to be reported to the insurer by that date.
- k) **“Incurred but not reported (IBNR)”** is a combination of IBNER and IBNYR.
- l) **“Outstanding claims reserve”** is the reserve set up in respect of the liability for all reported outstanding claims.
- m) **“Claims paid”** includes amount of claim with explicit allowance for allocated loss adjustment expenses.
- n) **“Premium deficiency reserve”** 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 expenses incurred during the period of unexpired risk.
- o) **“Technical reserves”** means the insurer’s liabilities from the business that has been written such as URR, outstanding claims, IBNR, Contingent reserves etc...
- p) **“Unearned premium reserve”** means the amount set aside from premiums written before the accounting date to cover risks incurred after that date.
- q) **“Unexpired risk reserve”** means the reserve required to cover the claims and expenses which are expected to emerge from an unexpired period of cover.

Chapter II

3) **PRODUCT KNOWLEDGE AND DATA CHECKING**

- a) The Appointed Actuary shall be familiar with all the operational issues such as underwriting processes and claim processes that may affect the estimation of the insurance liabilities. This may include
 - i) familiarity with the nature of coverage, including any unusual terms and conditions offered under the contracts;
 - ii) the underwriting strategy, the nature and mix of risks underwritten;

- iii) the benefits payable under policy terms or by virtue of legislation, including deductibles and limits;
 - iv) the reinsurance arrangements, including any special or unusual features of reinsurance agreements that might affect reinsurance recoveries;
 - v) the claim management philosophies, rules, guidelines, and the company's practices in setting case estimates;
- b) The Appointed Actuary shall also be familiar with economic, technological, medical, environmental, regulatory changes, social changes and trends within the broader community that may affect the value of the insurance liabilities.
- c) The Appointed Actuary shall take into account the possibility of changes in data quality or interpretation when staff turnover affects key positions, where personnel have a central role in the preparation of accounts or other relevant data.
- d) The Appointed Actuary shall ensure that the data used is suitable and gives an appropriate basis for estimating the insurance liabilities. The data used for estimation of liabilities shall include the insurer's own experience, and may also include industry data, where the insurer's own data is not sufficient to reduce the uncertainty to an acceptable level. Where the industry data is also sparse, the Appointed Actuary shall explain in the report in detail the methodology adopted in estimating the liabilities with suitable justifications.
- e) The Appointed Actuary shall consider the policy level data to analyze the insurer's own experience to arrive at the estimates and shall not depend only on summarized or aggregate data.
- f) The Appointed Actuary shall apply all reasonable validation checks to better understand the data, to identify data anomalies and seek appropriate rectifications, if any. A brief report on the validation checks applied and the treatment of any errors or anomalies in the calculation of the liabilities shall be stated explicitly in the report.

4) Reserve for Outstanding claims: Reserve for outstanding claims shall be determined in the following manner in consultation with the claims department and certified by the Auditor:

- a) Where the amounts of outstanding claims of the insurers are known, the amount is to be provided in full;
- b) Where the amounts of outstanding claims can be reasonably estimated according to the insurer, he may follow the 'case by case method' after taking into account the explicit allowance for changes in the settlement pattern or average claim amounts, expenses and inflation etc, provided the standard

reserving practices and methodologies are recommended by the Appointed Actuary;

- c) The standard reserving practice shall necessarily have the following features:
 - i) The standard reserve methodology shall consider the line of business, the main risk groups, the nature of damage and the place or other details such as location, the service provider at which the repair or treatment of the damage takes place.
 - ii) If the standard reserving methodology is developed through a statistical or actuarial analysis there shall be a similar process of review and reconfirmation periodically, with a frequency of at least quarterly review.
 - iii) The averages for claims amounts derived for each of the cells of the matrix created for standard reserving shall be reviewed at least on a quarterly basis.
 - iv) The standard reserving process shall be recommended by the Appointed Actuary based on the nature of the business and documented after discussion with an internal committee of the company with members drawn from claims department, finance department and the actuarial department.

5) Procedure for Case Estimates:

- a) In order to determine the case estimates the following shall be considered:
 - i) The nature of the insured object, details of damage along with the complete history of earlier claim settlements.
 - ii) Complete details of claim progression made;
 - iii) Analyze the stance of the jurisdiction in which the claim is likely to be made
 - iv) If claim is above retention limit, the history of claim settlements by the re-insurer.
 - v) Changes in circumstances relating to insured objects and nature of damages.
 - vi) Changes in excess limits or other policy conditions.
 - vii) For a non-standard risk, manner in which reserve is setup and the significance of the non-standard details considered for setting up the reserve.
 - viii) Where the claim is from a portfolio where the insurer is a “follow” co-insurer, past experience of the efficiency of the reserves communicated by the lead co-insurer and any consequent upward and downward revision to the reserves shall be examined thoroughly.

6) Incurred But Not Reported (IBNR):

- a) In accordance with the IRDA (Assets, Liabilities and Solvency Margin of Insurers) Regulations, 2000 relating to valuation of liabilities for General Insurance Business, the Appointed Actuary shall establish separate reserves for IBNYR and for IBNER using actuarial principles, in respect of each product for each lines of business.
- b) The Appointed Actuary shall ensure that the insurer maintains necessary data to enable estimation of IBNYR reserve and IBNER reserve in respect of each product in particular, on past data of policies & claims, and maintenance of complete and correct data.
- c) The approach to be adopted in IBNYR reserving shall be in accordance with chapter III.

7) Ultimate Loss Ratios (ULR):

- a) For the purpose of this regulation, ULR shall always be measured as claim amounts already paid for a defined cohort year plus estimated claim amount relating to losses already known plus the estimated claims expected to occur in the defined cohort year by the end of a full development period for the cohort year divided by the earned premium for the defined cohort year.

8) Unearned Premium Reserve (UPR):

- a) 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
 - i) Fire business, 50 per cent,
 - ii) Miscellaneous business, 50 per cent,
 - iii) Marine business other than marine hull business, 50 per cent; And
 - iv) Marine hull business, 100 per cent,

Of the premium, net of re-insurances, during the preceding twelve months;

9) Premium Deficiency Reserve (PDR):

- a) The Appointed Actuary shall establish the Premium deficiency reserve:
 - i) if the sum of expected claim costs, related expenses and maintenance costs exceeds UPR for unexpired risks or
 - ii) From the experience of the ultimate loss ratios (ULR) for the past few years and the current year's development, it becomes apparent or clear that the

ultimate loss ratio for current year is likely to exceed the originally expected ratio at the time of pricing/reserving.

- b) The Appointed Actuary shall examine the need for premium deficiency reserve for each product under all lines of business. Where the PDR for a product is negative, the value for PDR for such product shall be taken as zero and such negative PDR shall not be offset to the positive PDR established for another product.

Currently insurer shall provide the PDR for Fire, Marine Cargo, Marine Hull, Motor, Engineering, Aviation, Liability, Rural Insurance, Others and Health. However, with effect from 01/04/2016, insurer shall provide the premium deficiency reserve explicitly for each product offered.

- c) The Appointed Actuary's Annual report shall provide details of the calculations along with statement of justification.

10) Catastrophe Reserve:

a) The Appointed Actuary shall establish an explicit additional contingency reserve to cover the losses that might arise from a catastrophe. The Appointed Actuary's Annual report shall provide complete details of possible catastrophe events assumed along with the methodology, assumptions adopted in the reserving process along with statement of justification.

b) The Appointed Actuary shall also comment on the insurer's ability to meet such events and the processes established by the insurers' to manage the possible risk exposures.

11) Required Solvency Margin:

a) The insurers shall comply with the required solvency margin calculations in accordance with Section 64 VA (1A) (ii) of the Insurance Act, 1938.

b) For the purpose of solvency calculations, in accordance with Section 64 VA (1A) (ii) of the Insurance Act, 1938, "net incurred claims" shall mean the net incurred claims which correspond to the current financial year (i.e. the financial year for which the solvency of the insurer is being computed).

12) Discordant features:

a) The Appointed Actuary shall check all the possible discordant features before reserving for the claims like:

- i) Whether IT systems are free of errors such as, policy and claim records may not be in the system, significant numbers of records, particularly relating to claims, may be through manual/ uncontrolled systems.

- ii) Whether inflation rate chosen may be arbitrary, in particular, for lines of businesses like liability claims and third party property damage where claims are subject to inflationary increases during pre-settlement stages.
- iii) Whether the system enables reconciliation of claim records by micro level classification such as intimated, paid, outstanding, closed, repudiated/ rejected and reopened
- iv) Whether total number of claims with necessary sub divisions are part of the accounting systems
- v) Whether the differential characteristics of various types of claim, claim settlement speeds are analysed suitably and the parameters values for reserving reflect it.
- vi) Whether impact of one off events in claims or claim settlement procedures are appropriately allowed in the calculations for IBNR or outstanding claim reserves
- vii) Data transmission processes in large offices with many data entry points/ centres would imply consequential data losses/ errors
- viii) Whether the time lags of data flow from call centres or TPAs to company's claims head office has been addressed and suitably allowed for in overall reserving and for IBNR.
- ix) How large claims behave and whether it needs different thresholds/ formulae for each product and how it is allowed in the calculations.
- x) Whether high proportion of cases are closed too early leading to subsequent reopening resulting to under reserves.
- xi) Whether any products classes need change in reserving methodology from a "standard/ default reserving" to "case estimates" and how it is carried out.
- xii) Whether premium rate changes during the year in one or more products have been appropriately dealt.
- xiii) Whether on a regular basis deficient study of monitoring provisioned amounts either outstanding or IBNR is made, i.e. whether the system compares the reserves held with the subsequent actual claim payments for each product.
- xiv) How reserving is arrived where the products report high loss ratios. Whether the corresponding provisions for Premium Deficiency Reserves reflect the trend allowed suitably.

- xv) Whether the amounts shown in IT systems' statistical files, schedules attached to IBNR statutory submissions and financial statements approved by auditors are reconciled on a regular basis.
- xvi) Whether the accounts and the corresponding reserves of the Pools reflects the reconciled position up to date.
- xvii) Whether net of reinsurance reserves and accounting happens on a policy basis or on an approximate basis. How the delays is addressed.

13) Diagnostic tests-Test of Reasonableness:

- a) The general aspects to be considered in the diagnostic tests with respect to date, results or both:
 - i) The Appointed Actuary shall conduct the tests for each product. If the insurer has not gained sufficient volumes and does not have credible volumes of data, the Appointed Actuary may conduct such tests by line of business or at overall company level depending on the data availability. The results of the test shall be compared to the study of industry averages from all available sources like IIB and assess the likely impact on the specific results.
 - ii) The Appointed Actuary shall ensure that when using past experience as a guide to future, care is taken about "anchoring" errors and over reaction of the past data, in particular, situations like changes in experience taking place gradually and at some stage, past experience based results could no longer be applicable.
 - iii) The Appointed Actuary shall systematically analyse and quantify the impact of changes in methodology and changes in assumptions ensuring that there are no gaps or overlaps in the quantification.
 - iv) The Appointed Actuary conclusions for every diagnostic measure may relay on an appropriate range rather than an expected single value. The Appointed Actuary may use industry data available like in IIB or available published information after allowing for suitable adjustments for company specific characteristics which have a bearing on the diagnostic measure being reviewed. Any experience previously not allowed for, but relevant in the present scenario shall also be considered for this purpose.
 - v) In the case of new companies or portfolios with limited data, the Appointed Actuary shall conduct a thorough study of industry data available and a 4 to 6 year experience trends of similar portfolios as available. A detailed report on such study shall be appended to the report.
 - vi) Unusual features noticed may point to one or more of:

- (1) underlying factors of experience
- (2) need for a change in reserving process
- (3) need for change in methodology or assumptions
- (4) need for examining variations over different ways of grouping
- (5) need for examining growth rate and stage of development of the portfolio tested
- (6) Unexpected one off experience, such as, rate or policy condition changes, court award changes, etc.
- (7) Exceptionally large open items in a particular cohort and
- (8) Continuing changes in business mix and types of risks written such as in the case of new and fast growing companies may also lead to unstable values of diagnostic measures.

vii) The diagnostic measures, usually applied include:

- (1) IBNR / Premium: Rate changes, including market practices of allowing discounts and their levels, variations in growth rates of portfolio being tested shall be taken into account by the AA for checking inconsistencies in the reserving process.
- (2) Ultimate Loss Ratios (ULR): The AA shall consider the changes in underwriting standards, claim experience changes and business mix changes while checking any inconsistencies in the estimation of ULR
- (3) Inconsistencies in the loss ratios: The Appointed Actuary may consider examining the paid claims, outstanding claims, IBNR claims and incurred claims. In addition to premium estimates as exposure, other exposure measures like policies, claim numbers or sum insured may also be used. For this purpose, experience for each cohort year shall be examined. AA shall ascertain whether the increasing Loss Ratio is because of a unique feature or a worsening experience.
- (4) Paid claims/incurred claims or case estimate/incurred claims: In order to establish any distortions in the ratios, the Appointed Actuary shall examine the underlying change of business, acceleration in claim settlement, slow down in rate at which claims are established and distorting large losses.
- (5) Claim frequency and average cost per claim: AA shall assess any underlying increase in frequency per exposure and inflation of claim severity.

- (6) Triangulation of number of settled claims/ number of reported claims:
Using this ratio, AA shall assess the changes in the claim settlement rate
 - (7) All ratios shall be worked on a gross and net of reinsurance basis. AA shall study the impact of any changes in the reinsurance arrangements on the ratios.
 - (8) AA shall examine the Industry data published to check whether the tail length used by a company is appropriate i.e. too short or too long.
 - (9) AA shall study the historical large loss information to provide adequate provisions for large losses.
 - (10) AA shall discuss with underwriting and claims staff to understand the past and current practices before estimation of reserves.
- viii) If the management disagrees with the Appointed Actuary's estimates, the Appointed Actuary shall consider such situations in a dispassionate manner and communicate the conclusions to management in an appropriate manner.

Chapter III

14) MATHEMATICAL ESTIMATION OF IBNYR CLAIMS PROVISION

a) Approach for determination of IBNYR:

- (i) Appointed Actuary shall establish separate reserves for IBNYR and for IBNER for each line of business
- (ii) Subject to (iii) below, the AA shall use the method stated under this regulation to determine IBNYR provisions for direct insurance and reinsurance accepted business. Where the Appointed Actuary considers the method stated in this regulation is not suitable to any particular business line, he shall set out the reasons for such conclusion and provide justification for the alternative method proposed to be appropriate. Where the method used is not one of the well-known methods, the Appointed Actuary shall ensure that such method being used is suitable to the nature of the business and claims development pattern under consideration also describe the method and the underlying assumptions in the report.
- (iii) Estimation of IBNYR for specialized business such as crop insurance or credit guarantee insurance shall be based on methods more appropriate to the nature of the portfolio and its claims development pattern.
- (iv) AA shall describe the validity of the assumptions underlying the method proposed to be used

- (v) AA shall estimate the provision for IBNYR & IBNER separately for each year of occurrence and the figures shall be aggregated to arrive at the total amount to be provided.
- (vi) If estimate of IBNYR & IBNER provision for any year of occurrence is negative, the AA shall re-examine the underlying assumptions. Even after re-examination, if the mathematics produces negative value, AA shall ignore the IBNYR & IBNER provision for that year of occurrence. A detailed analysis on such cases shall be appended to the report.

b) Examination and validation of basic data

- (i) The Appointed Actuary shall apply all necessary checks as practically possible before estimation of IBNR provision, to ensure integrity, quality and completeness of the data.
- (ii) AA shall ensure homogeneity of data with regard to nature of business and claims development pattern.
- (iii) AA shall examine the data separately for each of the classes of business. If data of any class is aggregated with data for another class, AA shall ensure that the two classes are homogeneous in nature.
- (iv) In respect of Motor insurance business, AA shall compile data separately by class of vehicle, by scope of cover and by nature of claim.
- (v) In respect of products with term more than year, the Appointed Actuary shall adopt an appropriate basis to ensure that the earned premium for the year/quarter, as applicable, alone is used in the calculations.
- (vi) In respect of Comprehensive insurance products, the AA shall ensure that the adopted classification of the business and the related premium shall be consistently applied to data for all years used in the estimation process.
- (vii) The Appointed Actuary shall examine the impact of changes in underwriting policy over the period of observation and in particular, the changes made in current underwriting policy, on the claims development pattern and claims ratio.
- (viii) AA shall examine the progression of premium over the recent years/quarters. Where the premium income shows significant fluctuation, the reasons for it shall be examined.

c) Claims handling practices

- (i) Where AA identifies material changes in the claims handling practices, their impact on the claims development pattern shall be taken into account.

- (ii) Besides studying the practice with regard to recognition, reserving and review of reserve, AA shall examine the impact of claims settlement practice of the insurer on the claims development pattern.
- (iii) The Appointed Actuary shall invariably work on paid claims data as the core basis of the estimation process and shall also do another calculation using incurred claims as a point of comparison.
- (iv) AA shall examine the impact on the claims development pattern due to occurrence of unusual events over the period of observation such as:
 - 1) Individual large claims;
 - 2) Catastrophic events causing a large number of claims;
 - 3) Changes in Law affecting the incidence and size of claims; and
 - 4) Impact of external factors on the average size of claims.
- (v) When looking at estimation of IBNR on a “net of reinsurance” basis, AA shall take into account any changes in reinsurance arrangements and changes in size of retentions over recent years.

d) Allowance for trends

- (i) In order to make adequate allowance for trends, the following aspects shall be examined by the appointed Actuary:
 - 1) Composition of portfolio;
 - 2) External factors such as economic environment, inflation, changes in legal,
 - 3) Political or social conditions;
 - 4) Insurer’s underwriting policy; and
 - 5) Insurer’s claims settlement practice.
- (ii) The Appointed Actuary shall examine the impact of frequency of claims occurrence, the average size per claim paid and per claim outstanding on the claim experience.

e) Preferred method for estimation of IBNYR

- (i) The cumulative development of claims shall be compiled as shown in Form IBNR-B1(a), B1(b), B2(a), B2(b).
- (ii) The following methods are prescribed for the estimation of IBNYR reserve:
 - a) Basic Chain Ladder Method (both on incurred and paid claims)
 - b) Bornhuetter Ferguson Method (both on incurred and paid claims)
 - c) Frequency – Severity Method and
 - d) Any other method provided calculated reserve is expected to be at least equal to the amount that shall be produced by the prescribed methods defined above.

The amount of IBNYR will be the estimated ultimate claims cost less amounts paid so far less amount provided as outstanding on the date of estimation less IBNER reserve.

- (iii) If there were changes in portfolio or underwriting or claims settlement practices, the Appointed Actuary may use weighted average ratios or the latest available year's link ratios rather than the average ratios.
- (iv) The Appointed Actuary shall ensure that the estimation process shall not discount the estimated future development of paid /incurred claims to the current date nor shall it load the claims outstanding specifically to provide for inflation in the future cost of claims, other than the factor already inherent in the estimation process.
- (v) The method / modal used to calculate IBNYR & IBNER by Appointed Actuary for each LOB shall need to be explained explicitly.
- (vi) The Appointed Actuary shall exclude one of events that distort the claims development pattern from the data submitted in forms B1(a) , B1(b), B2(a), B2(b). Separate reserves in respect of such events shall be estimated by the Appointed Actuary. Complete details of such excluded events along with the methodology adopted in their reserving process shall be explained in the report submitted to the Authority.

f) Tests of credibility

- (i) The Appointed Actuary shall apply tests of credibility, such as frequency of claims occurrence, ultimate incurred claims ratios, average cost per claim paid and per claim outstanding etc., to the results produced.
- (ii) The Appointed Actuary shall test whether the ultimate incurred claims ratios for the successive years are credible as compared to ratios of other insurers in the market and for the same insurer over time. The Appointed Actuary shall provide suitable justifications for any variations or sharp fluctuations.
- (iii) The Appointed Actuary shall ensure that the results for the more recent years have been revised based on the complete knowledge of the business, the company's portfolio and claims settlement practices and the claims ratios of other insurers in the market.

Chapter IV

15) Report of the Appointed Actuary and Returns:

- a) The Report of the Appointed Actuary along with the returns signed by the persons as mentioned in the report shall be furnished to the Authority, within three months from the end of the financial year as stipulated in Annexure-I.
- b) The Returns shall be furnished as stipulated in Annexure-II in addition to Form HG and Form KG as stipulated in IRDA (Assets, Liabilities and Solvency Margin of Insurers) Regulations, 2000.

- c) The Authority may specify additional provisions, if any, to the Report of the Appointed Actuary and Returns from time to time.
- d) There shall be appended to every such Report and return:
- i) a certificate signed by the principal officer that full and accurate particulars of every policy under which there is a liability, either actual or contingent, has been furnished to the Appointed Actuary for the investigation and determination of reserves.
 - ii) a certificate signed by the Auditor that outstanding claims provisions for each line of business are estimated adequately.
 - iii) a certificate signed by the Appointed Actuary with his remarks, if any, to the effect that:—
 - (1) the data furnished by the principal officer has been included in conducting the estimation of liabilities for the purpose of investigation; reasonable steps have been taken to ensure the accuracy and completeness of the data.
 - (2) the estimated IBNR & PDR provisions for each line of business are adequate
 - (3) he/she has complied with provisions of the Act, all relevant regulations, guidelines, circulars issued by the Authority;
 - (4) he/she has complied with Actuarial Practice Standards and Guidance Notes issued by the Institute of Actuaries of India with the concurrence of the Authority;
 - (5) in his/her opinion, all the claims reserves estimated are adequate to meet the insurer's future commitments under the contracts.

Chapter V

Procedure for Implementation and Other Provisions

1) Power of the Authority to issue clarifications:

- a. In order to remove any difficulties in respect of the application or interpretation of any of the provisions of these regulations, the Authority may issue appropriate clarifications or guidelines, as and when required

2) Repeal and Savings:

a. All the guidelines/clarifications/circulars/letters issued in this regard shall be repealed from the date this regulation comes into force.

3) **Review of the guidelines:** The Authority to make a detailed review of the guidelines on an ongoing basis for such modifications as may be deemed necessary towards protection of the interest of the policyholders.

Annexure-1

REPORT OF THE APPOINTED ACTUARY ON THE ESTIMATION OF RESERVES AS AT 31 MARCH

Name of insurer:

Name of Appointed Actuary:

Class of business:

Section I – The insurer and its business:

- a) How active is the insurer in that class of business?
- b) Has the growth of premium income been steady and reasonable?
- c) Has there been any substantial change in the composition of business?
- d) What is the underwriting policy of the insurer in respect of:
 - i) Selection of risks
 - ii) Rates and deductibles
 - iii) Delegation of underwriting authority.
- e) Has the underwriting policy remained stable over the last six years?
- f) Have there been any changes in key underwriting personnel and how would that have impacted on the underwriting policy of the insurer?
- g) What has been the claims processing and settlement policy of the insurer in the matter of:
 - i) First recognition of claim;
 - ii) Default reserve provision;
 - iii) Provision for a claim where no information or inadequate information on facts is available

- iv) Periodicity of review of the provision for a claim;
 - v) Negotiation of bodily injury claims relating to motor accidents;
 - vi) Processing and settlement of claims; and
 - vii) Pursuit of recovery or sale of salvage.
- h) Has the claim processing and settlement policy remained the same over the past six years?
 - i) Have there been any changes in key claims personnel and how would that have impacted on the claims settlement practice of the insurer? If so, comment on how the impacts of these changes have been taken into account?
 - j) Has the insurer passed through cash flow or financial problems over the observation period? If so, has it affected the insurer's underwriting or claims settlement practices?
 - k) Was there a significant slowing down in claims settlements?
 - l) Were the observed claims data affected by catastrophic events such as earthquake, flood, windstorm, individual large claims etc.?
 - m) Which claims are categorized as large claims?
 - n) Did any individually large claims affect the claims development figures? If so, how are they taken note of in the estimation process?
 - o) Explain the methodology adopted in reserving for large claims.
 - p) Were there significant changes in the business environment such as a severe economic recession that would have affected the business experience? If so, how have they affected the observed claims figures?
 - q) Was there any change in the general business and insurance industry conditions in matters such as legislative environment, competition, consumerism, levels of court awards etc.? If so, the impact of these changes shall be commented upon.

Section II – The data

- a) Whether the data is separately compiled for each class of general insurance business, if not, then please comment on the reasons for variation.
- b) Please comment on the source of data and steps taken to ensure that the data is consistent, reliable, and complete
- c) Please confirm that the data tallies with the audited accounts.

- d) Please comment on the observed trends in the
 - 2.4.1. Growth of premiums,
 - 2.4.2. frequency of loss occurrence,
 - 2.4.3. average cost per claim paid and per claim outstanding,
 - 2.4.4. speed of emergence of claims and speed of settlement.

Please also state how these have been taken into account in the selection of the process of estimation.

- e) Was there any material change in the reinsurance programme? If so, describe the manner in which it was allowed for in the estimation process.
- f) Is the data available on the net of reinsurance basis? If not, please state the steps taken and time required to compile the data in net of reinsurance basis?
- g) Whether data on net of reinsurance basis is readily available? If not available, the steps taken by the Appointed Actuary to inform the management the need and importance of such data. In all cases where such information is not available, the Appointed Actuary shall work on the IBNR estimate on a gross basis and then work on the estimate of net IBNR based on the reinsurance ceded. The Appointed Actuary shall explain the methodology followed in this regard.

Section III – The method

- a) Please describe the method used for estimation of IBNYR & IBNER. Please also submit the working sheets in EXCEL.
- b) If the method used now is different from the method used previously, please state the reason for change.
- c) Please state the assumptions underlying the method and to what extent the validity of the assumptions was verified.
- d) Where the method used is not commonly understood, please explain the methodology and provide adequate working sheets to understand the calculations and results.
- e) Please cross-check the estimated IBNR using at least two other methods and comment on the results.

Section IV – Evaluation of the results

- a) Please describe the tests of logic applied to the results and the results of the tests.

- b) How do the figures of outstanding claims as per the estimation process compare with the actual provisions?
- c) If the calculated estimates are lower than the actual provisions, please advise the further tests applied to evaluate the validity of the results.

Section V

- a) Comment on calculated incurred claims ratios for the insurer over the years and also as compared to other insurers in the market.
- b) Please comment whether the claims ratios for the more recent years are logical. If not, please state how the estimation process was modified to achieve more credible results.
- c) Other aspects, if any.

Section VI - Attachments

- a) The Returns mentioned in Annexure II and the relevant calculation sheets shall be attached to the report.
- b) State whether the soft copies of all the calculation sheets are provided to the Authority in EXCEL
- c) The returns mentioned in Annexure II i.e. from (a) to (h) forms shall be net of reinsurance

Section VII – Certification as required.

1) **Returns to be furnished to the Authority**

- a) **IBNR-A1**
- b) **IBNR-A2**
- c) **IBNR-B1(a)**
- d) **IBNR-B1(b)**
- e) **IBNR-B2(a)**
- f) **IBNR-B2(b)**
- g) **Form C**
- h) **Form D**
- i) **Form E**
- j) **Form F**
- k) **Form G1**
- l) **Form G2**

2) **Instructions for filling up the returns:**

a) **IBNR-A1: Quarterly statement of claims development**

i) **Column 1:**

(1) Claims data shall be classified according to year of occurrence of the loss. Thus, in the statement for the first quarter ending 30 June 2013:

(a) **Current year** refers to claims relating to events that occurred during the year 1 April 2013 to 31 March 2014.

(b) **First preceding year** refers to claims relating to events that occurred during the year 1 April 2012 to 31 March 2013.

(c) **Second preceding year** refers to claims relating to events that occurred during the year 1 April 2011 to 31 March 2012 and so on....

ii) **Column 2 to 5:**

(1) **Number - Column 2** relates to the number of claims provided for as outstanding at the beginning of the reporting period. Thus, in the statement for the quarter ending 30 June 2013, the number of claims outstanding as at 1 April 2013 will be shown in this column, duly split according to the year of occurrence of the event giving rise to the claim.

(2) **Amount – Column 3** refers to the amounts provided in respect of claims in column 2, also split according to the year of occurrence of the event giving rise to the claim.

(3) **IBNR amount – Column 4** refers to the amount provided as a provision for IBNR claims at the beginning of the reporting period. The Provision for IBNR claims shall be calculated separately by year of occurrence of the event giving rise to the claim.

(4) **IBNER amount – Column 5** refers to the amount provided as a provision for IBNER claims at the beginning of the reporting period. The Provision for IBNER claims shall be calculated separately by year of occurrence of the event giving rise to the claim.

iii) **Columns 6 and 7:**

(1) **Number – column 6** represents number of claims in respect of which one of more part payments were made during the reporting period but the claims are not yet fully settled by the end of reporting period shall be shown in this column.

(2) **Amount – column 7** represents the total amount paid and the direct expenses debited in accordance with accounting standards (such as surveyor's fees, legal fees etc.), during the reporting period in respect of claims in column 6

iv) **Columns 8 and 9:**

(1) **Number – Column 8 represents** number of claims which were fully settled during the reporting period, with no further payments outstanding either in the form of claims or direct claims related expenses, shall be shown in this column.

(2) **Amount – Column 9** represents the total amount paid and the direct expenses debited in accordance with accounting standards (such as surveyor's fees, legal fees etc.), during the reporting period in respect of claims in column 8.

(3) Even if several payments were made in respect of a claim during the reporting period and if the claim was fully settled by the end of the reporting period, total payments made in respect of such claims during the reporting period will be shown in this column.

v) **Columns 10 and 11:**

(1) **Number – Column 10** relates to number of claims which were reported for the first time during the reporting period, split according to the year of occurrence of the event giving rise to the claim

(2) **Amount – Column 11** represents the amount provided at the end of the reporting period, in respect of claims in column 10.

vi) **Columns 12 and 13:**

- (1) **Number – Column 12** relates to the claims which were reopened during the reporting period, split according to the year of occurrence of the event giving rise to the claim
- (2) **Amount – Column 13** represents the amount provided in respect of each of the claims in column 12 during the reporting period.

vii) **Columns 14 and 15:**

- (1) **Number – Column 14** relates to number of claims that were closed during the reporting period without having made any payments in respect of these claims
- (2) **Amount – Column 15** represents the amount that was provided in respect of claims in column 14, which was written back on closure of the claim during the reporting period

viii) **Columns 16 to 19:**

- (1) **Number – Column 16** relates to the number of claims provided for as outstanding at the end of the reporting period. Thus, in the statement for the quarter ending 30 June 2013, the number of claims outstanding as at 30 June 2013 will be shown in this column, duly split according to the year of occurrence of the event giving rise to the claim.
- (2) **Amount – Column 17** refers to the amounts provided at the end of reporting period, in respect of claims in column 16, also split according to the year of occurrence of the event giving rise to the claim.
- (3) **Column 18** –shall show the estimation of provision for IBNYR claims as at the end of the reporting period.
- (4) **Column 19** –shall show the estimation of provision for IBNER claims as at the end of the reporting period.

b) **IBNR-A2: Yearly statement of claims development**

i) **Column 1:**

- (1) Claims data shall be classified according to year of occurrence of the loss. Thus, in the statement for the year ending 31 March 2014:
 - (a) **Current year** refers to claims relating to events that occurred during the year 1 April 2013 to 31 March 2014.
 - (b) **First preceding year** refers to claims relating to events that occurred

during the year 1 April 2012 to 31 March 2013.

(c) **Second preceding year** refers to claims relating to events that occurred during the year 1 April 2011 to 31 March 2012 and so on...

ii) **Column 2 to 5:**

- (1) **Number - Column 2** relates to the number of reported claims provided for as outstanding at the beginning of the reporting period. Thus, in the statement for the year ending 31 March 2014, the number of reported claims outstanding as at 1 April 2013 will be shown in this column, duly split according to the year of occurrence of the event giving rise to the claim.
- (2) **Amount – Column 3** refers to the amounts provided at the beginning of the reporting period, in respect of the claims in column 2, also split according to the year of occurrence of the event giving rise to the claim.
- (3) **IBNYR amount – Column 4** refers to the amount provided as a provision for IBNYR claims at the beginning of the reporting period. The provision for IBNYR claims shall be calculated separately by year of occurrence of the event giving rise to the claim.
- (4) **IBNER amount – Column 5** refers to the amount provided as a provision for IBNER claims at the beginning of the reporting period. The Provision for IBNER claims shall be calculated separately by year of occurrence of the event giving rise to the claim.

iii) **Columns 6 and 7:**

- (1) **Number – column 6** represents number of claims in respect of which one of more part payments were made during the reporting period but the claims are not yet fully settled by the end of reporting period shall be shown in this column.
- (2) **Amount – column 7** represents total amount paid and the direct expenses debited in accordance with accounting standards (such as surveyor's fees, legal fees etc.), during the reporting period in respect of claims in column 6

iv) **Columns 8 and 9:**

- (1) **Number – Column 8 represents** number of claims which were fully settled during the reporting period, with no further payments outstanding either in the form of claims or direct claims related expenses, shall be shown in this column.
- (2) **Amount – Column 9** represents the total amount paid and the direct

expenses debited in accordance with accounting standards (such as surveyor's fees, legal fees etc.), during the reporting period in respect of claims in column 8

- (3) Even if several payments were made in respect of a claim during the reporting period and if the claim was fully settled by the end of the reporting period, total payments made in respect of such claims during the reporting period will be shown in this column.

v) **Columns 10 and 11:**

- (1) **Number – Column 10** relates to number of claims which were reported for the first time during the reporting period, split according to the year of occurrence of the event giving rise to the claim
- (2) **Amount – Column 11** represents the amount provided at the end of the reporting period, in respect of claims in column 10.

vi) **Columns 12 and 13:**

- (1) **Number – Column 12** relates to the claims which were reopened during the reporting period, split according to the year of occurrence of the event giving rise to the claim
- (2) **Amount – Column 13** represents the amount provided in respect of each of the claims in column 12, during the reporting period.

vii) **Columns 14 and 15:**

- (1) **Number – Column 14** relates to number of claims that were closed during the reporting period without having made any payments in respect of these claims.
- (2) **Amount – Column 15** represents the amount that was provided in respect of claims in column 14, which was written back on closure of the claim during the reporting period.

viii) **Columns 16 to 19:**

- (1) **Number – Column 16** relates to the number of claims provided for as outstanding at the end of the reporting period. Thus, in the statement for the year ending 31 March 2014, the number of claims outstanding as at 31 March 2014 will be shown in this column, duly split according to the year of occurrence of the event giving rise to the claim.
- (2) **Amount – Column 17** refers to the amounts provided at the end of reporting period in respect of claims in column 16, also split according to the year of occurrence of the event giving rise to the claim.

(3) **Column 18** –shall show the estimation of provision for IBNYR claims as at the end of the reporting period.

(4) **Column 19** –shall show the estimation of provision for IBNER claims as at the end of the reporting period.

ix) **Columns 20 and 21:**

(1) **Number - Column 20** will show the number of policies issued in respect of the written business for the year concerned. For example, in the statement for the year ending 31 March 2014, the figure appearing here in respect of the current year will be the number of policies issued during the year 1 April 2013 to 31 March 2014 and so on.

(2) **Amount – Column 21** shows the amount of premium written during the year concerned, net of reinsurance cession.

(3) Normally, information in columns 20 and 21 will not change in respect of the same accounting year in subsequent returns.

c) **IBNR-B1 (a): Cumulative Statement of Paid Claims Development (By Amount):**

i) In the statement for the year ending as at 31st March 2014:

(1) **Current year (Q1) i.e In respect of events that occurred during the quarter 1 April 2013 to 30 June 2013**

(a) Claims paid as at 3 months will be cumulative claims paid during the period 1 April 2013 to 30 June 2013

(b) Claims paid as at 6 months will be cumulative claims paid during the period 1 April 2013 to 30 September 2013

(c) Claims paid as at 9 months will be cumulative claims paid during the period 1 April 2013 to 31 December 2013

(d) Claims paid as at 12 months will be cumulative claims paid during the quarter 1 April 2013 to 31 March 2014.

(2) **Current year (Q2) i.e In respect of events that occurred during the quarter 1 July 2013 to 30 September 2013**

(a) Claims paid as at 3 months will be cumulative claims paid during the period 1 July 2013 to 30 September 2013

(b) Claims paid as at 6 months will be cumulative claims paid during the period 1 July 2013 to 31 December 2013

(c) Claims paid as at 9 months will be cumulative claims paid during the period 1 July 2013 to 31 March 2014

(3) Current year (Q3) i.e In respect of events that occurred during the quarter 1 October 2013 to 31 December 2013

(a) Claims paid as at 3 months will be cumulative claims paid during the period 1 October 2013 to 31 December 2013

(b) Claims paid as at 6 months will be cumulative claims paid during the period 1 October 2013 to 31 March 2014

(4) Current year (Q4) i.e In respect of events that occurred during the quarter 1 January 2014 to 31 March 2014

(a) Claims paid as at 3 months will be cumulative claims paid during the period 1 January 2014 to 31 March 2014

ii) **The above procedure shall be followed for the preceding years.**

(1) **Column 1:** relates to Quarterly Net Earned Premium (as per financials)

(2) **Column 42:** Cumulative claim amount paid by the end of reporting period in respect of claims incurred in each quarter of each occurrence year.

(3) **Column 43:** Total claim amount paid in respect of fully settled claims shall be shown for each quarter in each occurrence year as on the date of statement.

(4) **Column 44:** outstanding claims reserve shall be shown for each quarter in each occurrence year as on the date of statement

(5) **Column 45:** IBNER reserve shall be shown for each quarter in each occurrence year

(6) **Column 46:** IBNYR reserve shall be shown for each quarter in each occurrence year

(7) **Column 47 to 50** is self explanatory

(8) **Column 51:** Estimated Ultimate loss Ratio assumed in the previous year shall be shown for each quarter in each occurrence year.

d) IBNR-B1 (b): Cumulative Statement of Incurred Claims Development (By Amount)

i) Incurred Claim is the cumulative claims paid *plus* outstanding claims reserve at the end of reporting period

ii) In the statement for the year ending as at 31st March 2014:

(1) Current year (Q1) i.e In respect of events that occurred during the quarter 1 April 2013 to 30 June 2013

- (a) Claims paid as at 3 months will be cumulative claims paid during the period 1 April 2013 to 30 June 2013 plus outstanding reserve as at the end of the period (i.e. 30 June 2013)
- (b) Claims paid as at 6 months will be cumulative claims paid during the period 1 April 2013 to 30 September 2013 plus outstanding reserve as at the end of the period (i.e. 30 September 2013)
- (c) Claims paid as at 9 months will be cumulative claims paid during the period 1 April 2013 to 31 December 2013 plus outstanding reserve as at the end of the period (i.e. 31 December 2013)
- (d) Claims paid as at 12 months will be cumulative claims paid during the quarter 1 April 2013 to 31 March 2014 plus outstanding reserve as at the end of the period (i.e. 31 March 2014).

(2) Current year (Q2) i.e In respect of events that occurred during the quarter 1 July 2013 to 30 September 2013

- (a) Claims paid as at 3 months will be cumulative claims paid during the period 1 July 2013 to 30 September 2013 plus outstanding reserve as at the end of the period (i.e. 30 September 2013)
- (b) Claims paid as at 6 months will be cumulative claims paid during the period 1 July 2013 to 31 December 2013 plus outstanding reserve as at the end of the period (i.e. 31 December 2013)
- (c) Claims paid as at 9 months will be cumulative claims paid during the period 1 July 2013 to 31 March 2014 plus outstanding reserve as at the end of the period (i.e. 31 March 2014)

(3) Current year (Q3) i.e In respect of events that occurred during the quarter 1 October 2013 to 31 December 2013

- (a) Claims paid as at 3 months will be cumulative claims paid during the period 1 October 2013 to 31 December 2013 plus outstanding reserve as at the end of the period (i.e. 31 December 2013)
- (b) Claims paid as at 6 months will be cumulative claims paid during the period 1 October 2013 to 31 March 2014 plus outstanding reserve as at the end of the period (i.e. 31 March 2014)

(4) Current year (Q4) i.e In respect of events that occurred during the

quarter 1 January 2014 to 31 March 2014

(a) Claims paid as at 3 months will be cumulative claims paid during the period 1 January 2014 to 31 March 2014 plus outstanding reserve as at the end of the period (i.e. 31 March 2014)

e) IBNR-B2 (a): Cumulative statement of paid Claims Development (By Number)

- i) In this statement number of claims paid includes both partly paid claims and fully paid claims
- ii) The procedure explained in the form IBNR B1 (a) in respect of column no. 2 to column no. 41 is also applicable here.
- iii) **Column 1:** Financial year wise number of policy years exposed shall be shown with quarterly bifurcation.
- iv) **Column 2:** Financial year wise number of insured risk years exposed shall be shown with quarterly bifurcation
- v) **Column 43:** Cumulative number of claims paid by the end of reporting period in respect of claims reported in each quarter of each occurrence year
- vi) **Column 44:** Total number of fully settled claims by the end of the reporting period in respect of claims reported in each quarter of each occurrence year.
- vii) **Column 45:** is self explanatory

f) IBNR-B2 (b): Statement of reported Claims Development (By Number)

- i) This statement compiles quarter wise information with respect to number of reported claims by the end of reporting period.
- ii) Number of Reported Claims = Cumulative number of fully paid claims + Number of outstanding claims, as at the end of each quarter of each occurrence year
- iii) The procedure explained in the form IBNR B1 (b) in respect of column no. 2 to column no. 41 is applicable here.
- iv) **Column 1:** Financial year wise number of policy years exposed shall be shown with quarterly bifurcation.
- v) **Column 2:** Financial year wise number of insured risk years exposed shall be shown with quarterly bifurcation
- vi) **Column 43:** relates to cumulative number of claims reported (as defined above) by the end of reporting period in respect of claims reported in each

quarter of each occurrence year

vii) **Column 44:** Total number of fully settled claims by the end of the reporting period in respect of claims reported in each quarter of each occurrence year

viii) **Column 45:** is self explanatory

g) Form C: Development of Reported Claims - By Reporting Period

i) The data in this format shall be classified according to reporting year of the loss.

ii) The fundamental idea of this format is to track the development of case reserves.

iii) In this statement reporting amount refers to cumulative claim amount paid plus provision for outstanding claims

iv) Thus, in the statement as at 31 March 2014

(1) **Current year** refers to claims relating to events that reported during the year 1 April 2013 to 31 March 2014.

(2) **First preceding year** refers to claims relating to events that reported during the year 1 April 2012 to 31 March 2013.

(3) **Second preceding year** refers to claims relating to events that reported during the year 1 April 2011 to 31 March 2012 and so on...

v) **Column 2:** It refers to number of claims reported in the respective reporting years as on date of statement.

vi) **Column 3:** It refers to number of claims fully settled out of the reported claims, as on date of statement

vii) **Column 4:** It refers to the reporting amount as at the end of the respective reporting years

viii) **Column 5:** It refers to reporting amount as at the end of 12 months after the respective reporting years and **So on.....**

ix) **Column 14:** This is self explanatory

h) Form D: Ultimate Loss Ratio (ULR) Accident Year wise – Current and the Preceding Years

i) This form captures the development of Ultimate Loss Ratios for the last 10 years duly split according to the year of occurrence of the event giving rise to the claim.

ii) **T** is defined as an Accident Year

iii) **Column 2:** relates to yearly Net Earned Premium (as per financials)

iv) In the Statement as at 31st March 2014

(1) **Column 3:** refers to estimated ULR as at 31st March 2014, split according to the year of occurrence of the event giving rise to the claim.

(2) **Column 4:** refers to the estimated ULR as at 31st March 2013, split according to the year of occurrence of the event giving rise to the claim and so on

i) **Forms E & F are self explanatory**

i) **Form G1** : Catastrophe claims and Large claims

(1) This is a yearly statement capturing the details of Catastrophe claims and large claims in the current and previous years.

(2) In the statement as at 31st March 2014

(a) **Current year** refers to financial year 2013-14

(b) **First preceding year** refers to the financial year 2012-13 and So on...

(c) Other columns are self explanatory

j) **Form G2:** Catastrophe details

i) This is a yearly statement capturing, Line of Business wise, details of Catastrophe events occurred in the current financial year

ii) All the columns in this statement are self explanatory