THE CENTRAL BANK OF ARMENIA
BOARD RESOLUTION
Number 312-N
October 2, 2007

ON APPROVAL OF REGULATION 3/03 ON "TYPES OF TECHNICAL RESERVES, THE PROCEDURE OF THEIR FORMATION"[1]

Pursuant to part 4 of Article 69 of the Law of the Republic of Armenia "On insurance and insurance activities", point "e" of Article 20 of the Law of the Republic of Armenia "On the Central Bank of the Republic of Armenia", Article 16 of the Law of the Republic of Armenia "On legal acts", the Board of the Central Bank of the Republic of Armenia

d e c i d e s:

1. to approve Regulation 3/03 on "Types of technical reserves, the procedure of their formation", in accordance with the Appendix.
2. This Resolution shall come into force on January 1, 2008. The Resolution of the Central Bank of the Republic of Armenia number 664-N "On approval of Regulation 31 on "Types of technical reserves, the procedure of their formation"", dated November 7, 2006, shall stay in force till January 1, 2008.
3. From the moment of entering of this Resolution into force, to repeal the Resolution of the Board of the Central Bank of the Republic of Armenia number 664-N "On approval of Regulation 31 on "Types of technical reserves, the procedure of their formation"", dated November 7, 2006.

Chairman of the Central Bank
of the Republic of Armenia **Tigran Sargsyan**

[1] This Regulation includes the amendments and supplements and all other changes endorsed under the following Resolutions of the Board of the Central Bank:
No. 219-N, dated 31.08.10; No. 191-N, dated 01.09.17

Appendix

APPROVED BY	APPROVED BY
Resolution of the Board of the Central Bank of the Republic of Armenia number 219-N, dated August 31, 2010	Order of Minister of Finance of the Republic of Armenia number _____, dated ___________ 2010
Chairman of the Central Bank of the Republic of Armenia	Minister of Finance of the Republic of Armenia
___________________ Arthur Javadyan 03.09.2010	___________________ Tigran Davtyan __.__.2010

REGULATION 3/03
TYPES OF TECHNICAL RESERVES, THE PROCEDURE OF THEIR FORMATION

CHAPTER 1. GENERAL PROVISIONS

1. This Regulation defines the types of technical reserves, formed by insurance companies, reinsurance companies, branches of foreign insurance companies and foreign reinsurance companies, operating within the territory of the Republic of Armenia (hereinafter, insurer), the principles of their formation and the rules of calculation.

2. For the purpose of fulfilling the obligations and covering the possible risks, envisaged under insurance contracts or certificates, co-insurance contracts or certificates (within the scope of the obligation of the given insurer), reinsured contracts (hereinafter, contracts), the insurer forms technical reserves, in accordance with the Law of the Republic of Armenia "On insurance and insurance activities" and this Regulation.

CHAPTER II. THE MAIN CONCEPTS, USED IN THIS REGULATION

3. The main concepts, used in this Regulation, have the following meanings:
   1) **Reserve for outstanding claims –** the sum of the reserve for claims, reported to the insurer but not yet settled, and the reserve of claims, incurred but not yet reported to the insurer, calculated in accordance with this Regulation,
   2) **Reported claim –** a claim on insurance compensations, reported to the insurer by the policyholder (insured person, beneficiary); an appeal on insurance compensations, reported to the insurer; a claim on insurance compensations,

submitted to the Financial System Mediator; a charge on insurance compensations, submitted against the insurer to the Court or an arbitrage tribunal. Furthermore, the claim on insurance compensations is being considered as submitted to the insurer from the moment of informing the insurer about the insurance event, in accordance with the contract.

3) **Settled claim –** a reported claim, about which a decision is made by the insurer to satisfy or to reject the claim; a document, certifying in a written form the refusal of the policyholder (insured person, beneficiary) from the insurance compensation; a response of the insurer, resolving the appeal as such. Furthermore, in case the claims on insurance compensation are submitted to the Financial System Mediator, the decision of the insurer to satisfy or to reject the claims is being made after the Financial System Mediator has informed the insurer about becoming or not becoming of that decision mandatory for the parties involved. In case the charges against the insurer on compensation are submitted to the Court or an arbitrage tribunal, the decision of the insurer to satisfy or to reject the claims is being made after the decision of the Court or the Arbitrage tribunal, resolving the issue as such, has entered into force, except for the cases, when the insurer does not intent to appeal the respective verdict (decision) of the Court, fully resolving the charges of the plaintiff. Furthermore, in case the insurer does not intend to appeal, the respective decision of the insurer is being made after publication of the decision of the Court or the Arbitrage tribunal, resolving the issue as such.
4) **Partially settled claim –** a claim, a part of which has been settled by the insurer with the other part being still in the stage of settlement, that is, the decision of the insurer to satisfy or reject the claim, the document, certifying in a written form the refusal of the policyholder (insured person, beneficiary) from the insurance compensation, the response of the insurer on the appeal is in place for only one part for the claim and is still absent for the other part.
5) **Settlement costs –** costs, related to examination of the claims, arising from the insurance contract, and making the payment, including the costs of examination of the grounds of the claim, appraisal of losses and making of the payments, as well as legal, judicial costs and those related to the execution of the claim.
6) **Observed period –** the whole period of operation (except for the reporting year) for the insurer, operating less then fifteen years, and the last fifteen years (except for the reporting year) for the insurer, operating for fifteen years and more.
7) **Proportional reinsurance –** the reinsurance, in case of which the insurance compensations and insurance premiums are being allocated between the insurer and the reinsurer in proportion of shares, defined by the reinsurance contract.

8) **Non-proportional reinsurance –** the reinsurance, other than the proportional reinsurance.

CHAPTER III. THE GENERAL PRINCIPLES OF FORMATION OF RESERVES (SHARE OF THE REINSURER IN THE RESERVES)

4. The types of reserves to be established are differentiated for life- and non-life insurance (reinsurance) companies.

5. The reserves (the share of the reinsurer in the reserves) are being calculated for each class of insurance separately.

6. The reserves (the share of the reinsurer in the reserves) are being calculated on each insurance contract separately, and in case of general insurance contract – separately on each policy, provided within the general insurance contract, except for the cases, specified by this Regulation. Statistical methods of calculating the reserves (the share of the reinsurer in the reserves) may be applied, if they provide approximately the same result, as those for individual calculation.

7. In case the contract includes different risks under different classes of insurance, then when calculating the reserves (the share of the reinsurer in the reserves), the risks are being separated in accordance with points 22 and 23 of Regulation 3/04, approved by Resolution No. 366-N of the Board of the Central Bank of the Republic of Armenia, dated November 16, 2007.

8. The insurer may form also additional reserves for certain classes of insurance, not specified by this Regulation, or to calculate the reserves, specified by this Regulation, using methods, not specified in this Regulation, only in case of existence of the consent of the Central Bank of the Republic of Armenia (hereinafter, Central Bank). Furthermore, in cases, specified by this point, the methods of calculation of the share of the reinsurer in the reserves should also be agreed with the Central Bank. In order to obtain the mentioned consent, the insurer submits an application to the Central Bank with respective justifications, approved by the responsible actuary of the insurer. If necessary, the Central Bank may require additional information.

(Point 8 was supplemented by Resolution No. 191-N, dated 01.09.17)

9. The decision to provide the consent or to reject the application, specified by point 8 of this Regulation, is being made by the Central Bank within 10 working days after receiving the application from the insurer. If within the mentioned period the Central Bank does not make any decision to provide the consent or to reject the application, then the consent is being considered as provided.

(Point 9 was amended by Resolution No. 191-N, dated 01.09.17)

10. In order to obtain additional information, the time-period, specified by point 9 of this Regulation, may be suspended for a period of maximum 6 months.

(Point 10 was amended by Resolution No. 191-N, dated 01.09.17)

10.1. The consent, provided by the Central Bank pursuant to point 8 of this Regulation, may be revoked by the Central Bank, if after the provision of the consent circumstances have appeared, as a result of which, according to the reasonable opinion of the Central Bank, the formed technical reserves are not or will not be sufficient for the fulfillment of the obligations and for possible risk coverage. Before making a decision to revoke the consent, the Central Bank shall discuss it with the insurer. The consent shall be considered as revoked on the 10th day following notification of the insurer by the Central Bank, unless otherwise specified in the notice, directed to the insurer.

(Point 10.1 was added by Resolution No. 191-N, dated 01.09.17)

10.2. The Central Bank may require from the insurer to form additional reserves not stipulated under this Regulation, or for certain classes of insurance to calculate the reserves, specified by this Regulation, with methods, not specified by this Regulation, if according to the reasonable opinion of the Central Bank, the formed technical reserves are not or will not be sufficient for the fulfillment of the obligations and for possible risk coverage.

(Point 10.2 was added by Resolution No. 191-N, dated 01.09.17)

11. The insurer shall keep the calculations of the reserves (the share of the reinsurer in the reserves) in electronic form for at least 15 years in a manner, that makes it possible to review the elements of the calculation by separate classes of insurance, and if the reserve (the share of the reinsurer in the reserves) is being calculated on each separate contract – then also by separate contracts. The documents (contracts, documents related to insurance compensations, etc.), used as a basis for calculation of the reserves (the share of the reinsurer in the reserves), should be kept by the insurer for at least 5 years, in a hard copy.

CHAPTER IV. THE TYPES OF TECHNICAL RESERVES AND PERIODICITY OF THEIR CALCULATION

12. The insurers, providing non-life insurance and/or reinsurance, form the following types of reserves:

1) unearned premiums reserve (hereinafter, UPR),
2) reported, but not settled claims reserve (hereinafter, RBNSR),
3) incurred, but not reported claims reserve (hereinafter, IBNRR),
4) bonuses and rebates reserve (hereinafter, BRR),
5) equalization reserve (hereinafter, ER).

13. The insurers, providing life insurance and/or reinsurance, form the following types of reserves:

1) mathematical reserve (hereinafter, MR),
2) unearned premiums reserve (hereinafter, UPR),
3) reported, but not settled claims reserve (hereinafter, RBNSR),

4) incurred, but not reported claims reserve (hereinafter, IBNRR),

5) bonuses and rebates reserve (hereinafter, BRR).

14. UPR, RBNSR, IBNRR, BRR are not being formed for life insurance contracts, if the potential liabilities of the insurer, included in these reserves, are fully included in the calculation of the MR. If those liabilities have not been included in the calculation of the MR or have been included partially, then the respective reserves, listed in this point, are being formed for the part of the liabilities, not included in the MR.

15. In addition to life insurance contracts, the reserves, specified by this Regulation for non-life insurance, are being formed for accident insurance and health insurance contracts, if the potential liabilities of the insurer for those contracts have not been fully included the mathematical reserve.

16. The insurer calculates the reserves (except for IBNRR and ER), mentioned in this Regulation, on a daily basis. The calculation of the ER is being done on December 31 of the reporting year, for the following year; and the IBNRR is being calculated on a monthly basis, as of the last day of each month.

CHAPTER V. THE CALCULATION OF UNEARNED PREMIUMS RESERVE (UPR)

17. For the respective class of insurance, the UPR is the sum of unearned premiums reserves, calculated for each contract. The gross UPR of the insurer is the sum of UPRs, calculated for separate classes of insurance.

18. When the amount of premiums and (or) the expiration of the contract remains unchanged during the validity of the contract, the UPR is being calculated for the given contract with the following formula:

$$UPR_i = P_i * D_i / T_i$$

where

UPR_i – the amount of the unearned premiums reserve under the contract i,

P_i – the amount of the insurance premium (in case of reinsured contracts – the amount of the reinsurance premium, and in case of co-insurance – the amount of the insurer’s share in the insurance premiums, specified by contract i), specified by contract i, without deducting the amount of rebates, provided by the insurer at the moment of signing the contract,

D_i – the number of days, remaining until the expiration of the contract i, as of the day of calculation of the UPR,

T_i – the validity period of the contract i, in days.

(Point 18 was amended by Resolution No. 191-N, dated 01.09.17)

18.1. When the amount of premiums and (or) the expiration of the contract changes during the validity of the contract, the UPR is being calculated for the given contract with the following formula:

$$UPR_i = (UPR_{to} + P_{ch}) * D_i / T_i$$

where

UPR_i – the amount of the unearned premiums reserve under the contract i,

UPR_{to} - the amount of the unearned premiums reserve under the contract i, as of the day of the change of the amount of the premium and/or the expiration of the contract

P_{ch} – the amount of change of the insurance premium (in case of reinsured contracts – the amount of change of the reinsurance premium, and in case of co-insurance – the amount of change of the insurer's share in the insurance premiums, specified by contract i), specified by contract i, without deducting the amount of rebates, provided by the insurer at the moment of the change of the insurance premium,

D_i – the number of days, remaining until the expiration of the contract i, as of the day of calculation of the UPR, taking into consideration the change of the expiration of the contract (if any),

T_i – the period between the change of the insurance premium and (or) the expiration of the contract i and the validity of the contract, in days, taking into consideration the change of the expiration of the contract (if any).

(Point 18.1 was added by Resolution No. 191-N, dated 01.09.17)

CHAPTER VI. THE CALCULATION OF THE REPORTED BUT NOT YET SETTLED CLAIMS RESERVE (RBNSR)

19. The principles of calculation of the RBNSR are the followings:
    1) the amount of the RBNSR should be sufficient enough to cover all the claims reported but not yet settled up to the day of calculation of the RBNSR, and in case of partially settled claims – the unsettled portion of the partially settled claims; as well as their settlement costs
    2) the amount of the RBNSR should be based on the preliminary calculation of the funds (compensations), payable by the insurer for the settlement of the claims, as well as the settlement costs. The preliminary calculation of the costs should be reasonable and justified.

20. The total RBNSR of the insurer is the sum of RBNSRs, calculated for individual classes of insurance.

21. The calculation of the RBNSR for individual classes of insurance is being conducted with the "case by case" method and/or "average amount of compensation for a claim" method.

22. The choice of calculation method of the RBNSR for each class of insurance is being defined by internal legal acts of the insurer. Furthermore, the "average amount of compensation for a claim" method may be used for those classes of insurance, where the average monthly

amount of claims for the twelve months, preceding the reporting date, has been fifty or more, and the amounts of claims compensations have not significantly fluctuated during those months.

23. In case of use of “case by case” method of calculation of the RBNSR, separate assessment should be conducted for the claims (including the settlement costs of the claims), reported but not yet settled before the day of calculation of RBNSR.

24. When applying the “case by case” method of calculation of the RBNSR, in case the appeals for insurance compensations have been reported to the insurer, the RBNSR is being formed in an amount of 50% of the reported claims and settlement costs, and in case the appeals for insurance compensations have been reported to the Financial System Mediator, as well as in case the charges for insurance compensations against the insurer have been submitted to the Court or the arbitrage tribunal, the RBNSR is being formed in an amount of 75% of the reported claims and settlement costs.

(Point 24 was amended by Resolution No. 191-N, dated 01.09.17)

25. In case a claim has been reported to the insurer, but nothing about the size of the claim is still known to the insurer, then when using the “case by case” method, the RBNSR is being formed in the amount of the sum insured.

26. In case the “average amount of compensation for a claim” method is used for calculation of the RBNSR, the insurer, by its internal legal acts, defines the amount of extremely large claims on each class of insurance, for which the RBNSR is being calculated with the “case by case” method.

27. For each class of insurance, the RBNSR is the sum of the $RBNSR_{case}$, calculated for each individual insurance contract with the “case by case” method, and the $RNBSR_{average}$, calculated with the “average amount of compensation for a claim” method.

28. The RNBSR, calculated with the “average amount of compensation for a claim” method, is being defined as the follows:

$$RNBSR_{average} = (N_{unsettled} - N_{case})*C_{average}, \qquad C_{average} = AC/NC,$$

where

$RNBSR_{average}$ – the reserve for claims reported to the insurer but not yet settled, for each class of insurance, calculated with the “average amount of compensation for a claim” method,

$N_{unsettled}$ – for the given class of insurance, the number of claims reported but not yet settled before the day of calculation of the RNBSR,

N_{case} – for the given class of insurance, the number of claims reported but not yet settled before the day of calculation of the RNBSR, which were assessed with the “case by case” method,

$C_{average}$ – for the given class of insurance, the average amount of the claims for the period of 12 months preceding the reporting date,

AC – for the given class of insurance, the amount of settled claims and settlement costs for the period of 12 months preceding the reporting date, except for extremely large claims and their settlement costs, NC – for the given class of insurance, the number of settled claims for the period of 12 months preceding the reporting date, except for extremely large claims and the claims, rejected by the insurer.

29. The unconditional deductibles are being included in the calculation of the RNBSR (in cases of both “case by case” and “average amount of compensation for a claim” methods) in the case, when the contract assumes the compensation of the whole sum of the liability (including the unconditional deductible sum) by the insurer to the policyholder or another person, to whom the payment will be made, on condition that afterwards the unconditional deductibles will be reimbursed.

CHAPTER VII. THE CALCULATION OF THE RESERVES ON INCURRED BUT NOT YET REPORTED CLAIMS (IBNRR)

30. The principles of calculation of the IBNRR are the followings:

1) the IBNRR is being formed to cover the possible payments on the claims incurred but not yet reported to the insurer before the day of calculation of the IBNRR,
2) The settlement costs should be included in the calculation of the IBNRR.

31. The total amount of IBNRR of the insurer is the sum of IBNRRs, calculated for each class of insurance.

32. For the given class of insurance, the IBNRR is being calculated in accordance with the following formula:

$$IBNRR = C * (A + R),$$

where

IBNRR – for the given class of insurance, the amount of the reserve for the claims incurred but not yet reported to the insurer,

C – the coefficient of the IBNRR for the given class of insurance. Calculation of the coefficient is being conducted only in case when the reporting month coincides with the month of December; and in case of other months, the coefficient, calculated on December 31 of the year preceding the year including the reporting month, is being used as a coefficient,

A – the sum of insurance compensations and settlement costs, accrued during the reporting month and preceding 11 months; and for the insurers, providing the given class of insurance less than one year – the sum of insurance compensations and settlement costs accrued during the whole period of activity,

R – the amount of RBNSR as of the day of calculation of the IBNRR.

33. The insurers, which have provided the given class of insurance for three and more years, calculate the coefficient “C” on December 31 of each year, for the following year, in accordance with the following formula:

$$C = (a_t + a_{t-1} + a_{t-2})/3,$$

where a_t, a_{t-1} and a_{t-2} are being defined as follows:

$$a_t = c_t/b_{t-1}, \qquad a_{t-1} = c_{t-1}/b_{t-2}, \qquad a_{t-2} = c_{t-2}/b_{t-3}$$

where

b_{t-3} – the sum of insurance compensations, accrued in the year t-3, and the RBNSR as of December 31 of the year t-3,

b_{t-2} – the sum of insurance compensations, accrued in the year t-2, and the RBNSR as of December 31 of the year t-2,

b_{t-1} – the sum of insurance compensations, accrued in the year t-1, and the RBNSR as of December 31 of the year t-1,

c_{t-2} - the sum of insurance compensations, accrued in the year t-2, and the RBNSR as of December 31 of the year t-2, with respect to those insurance events that have occurred in year t-3, but were reported in year t-2,

c_{t-1} - the sum of insurance compensations, accrued in the year t-1, and the RBNSR as of December 31 of the year t-1, with respect to those insurance events that have occurred in year t-2, but were reported in year t-1,

c_t - the sum of insurance compensations, accrued in the year t, and the RBNSR as of December 31 of the year t, with respect to those insurance events that have occurred in year t-1, but were reported in year t,

t – the reporting year.

34. The insurer, which have provided the given class of insurance for 2 to 3 years, calculated the coefficient "C" with the following formula:

$$C = (a_t + a_{t-1}) / 2$$

35. For the insurer, which have provided the given class of insurance for a period of up to two years, C=0.05.

36. In case the calculated coefficient "C" is lower than 0.05, the C=0.05 coefficient is being used in calculations.

CHAPTER VIII. THE CALCULATION OF THE BONUSES AND REBATES RESERVE (BRR)

37. The BRR is being calculated for all those contracts, which assume:

1) upon occurrence of the conditions, specified by the contract, to make payments (except for insurance compensations) to the policyholder and/or to provide other services and/or to grant privileges to the policyholder, that can cause the outflow of the funds, representing economic benefits for the insurer (hereinafter, bonus) and/or

2) upon occurrence of the conditions, specified by the contract, to fully or partially refund the insurance premiums (in case of reinsured contracts – the reinsurance premiums) to the policyholder (hereinafter, rebate).

(Point 37 was amended by Resolution No. 191-N, dated 01.09.17)

38. The BRR is being calculated separately for each contract. The total BRR of the insurer is the sum of BRRs, formed for separate contracts.

39. The BRR for each contract is being calculated by the following formula:

$$BRR_i = (1 - N_i / P_i) * A_i,$$

where

BRR_i – the amount of the BRR with respect to contract i,

P_i – the period (in days), during which, upon the occurrence of conditions, specified by contract, the policyholder should get a bonus and/or a rebate i (a period for applying a bonus/rebate),

N_i – the number of days remaining until the end of the period for applying a bonus/rebate, as of the day of calculation of the BRR,

A_i – the amount of the bonus or rebate, specified by contract i. In case the bonuses assume provision of other services or granting of privileges to the policyholder, the projected amount of outflow of the funds, representing economic benefits for the insurer, shall be taken as "A", the calculation of which should be reasonable and justified. Furthermore, if granting a bonus or a rebate is excluded in case of occurrence of some conditions, then A=0.

CHAPTER IX. THE CALCULATION OF THE EQUALIZATION RESERVE (ER)

40. The ER should be calculated separately for each class of insurance. The total ER of the insurer is the sum of ERs, calculated separately for each class of insurance.

41. For each class of insurance, the ER is being calculated with the following formula:

$$ER = ER_{t-1} + EP_t * (LR_{average} - LR_t)$$

where

ER – the amount of the ER for the given class of insurance, as of December 31 of the reporting year,

ER_{t-1} – the amount of the ER for the given class of insurance, as of December 31 of the year preceding the reporting year,

EP_t – the amount of insurance premiums earned during the reporting year for the given class of insurance, calculated in accordance with this Chapter. Furthermore, if $EP_t<0$, then it is takes as equal to zero,

LR_t – the loss ratio in the reporting year for the given class of insurance, calculated in accordance with this Chapter,

$LR_{average}$ – the normal average of loss ratios for the years of the observed period, which is being calculated with the following formula:

$$LR_{average} = \begin{cases} \frac{\sum_{t=1}^{n} S_t}{\sum_{t=1}^{n} EP_t}, if\ for\ each\ of\ the\ years\ during\ the\ observed\ period\ EP_t > 0 \\ \frac{\sum_{t=1}^{n} LR_t}{n}, if\ for\ any\ of\ the\ years\ during\ the\ observed\ period\ EP_t \leq 0 \end{cases}$$

where:

n – number of years within the observed period,

S_t, EP_t, LR_t – the respective figures, calculated pursuant to this Chapter.

(Point 41 was amended by Resolution No. 191-N, dated 01.09.17)

42. The amount of insurance premiums earned during the reporting year for the given class of insurance is being calculated by the following formula:

$$EP_t = A – R - UPR_{change}$$

where

EP_t - the amount of insurance premiums earned during the reporting year for the given class of insurance,

A – for the given class of insurance, the difference between the insurance premiums, accrued during the reporting year, and the share of the reinsurer in the accrued insurance premiums,

R – the difference between the insurance premiums, refunded against the contracts, terminated during the reporting year, and the share of the reinsurer in those funds,

UPR_{change} – the change in the reserves of unearned premiums (deducted by the share of the reinsurer in the reserve) during the reporting year, which is equal to the difference between the amounts of unearned premiums reserves as of the end of the reporting year and the beginning of the reporting year (deducted by the share of the reinsurer in the reserve), calculated in accordance with this Regulation.

43. The loss ratio in the reporting year for the given class of insurance is being calculated by the following formula:

$$LR_t = (S_t / EP_t) * 100\%$$

where

LR_t - the loss ratio in the reporting year for the given class of insurance,

S_t – the sum of insurance compensations accrued during the give year for the given class of insurance (deducted by the share of reinsurers), regulatory expenses and the change in the amount of claims reserves during the given year (deducted by the share of the reinsurer in the claims reserve),

EP_t - the amount of insurance premiums earned during the given year for the given class of insurance.

(Point 43 was amended by Resolution No. 191-N, dated 01.09.17)

44. Furthermore, if in the given year

1) $S_t \leq 0$ and $EP_t \geq 0$, then $LR_t = 0$,
2) $S_t > 0$ and $EP_t \leq 0$ or $S_t = 0$ and $EP_t < 0$, then $LR_t = 100\%$
3) $S_t < 0$ and $EP_t < 0$, then $LR_t = EP_t / S_t$

(Point 44 was amended by Resolution No. 191-N, dated 01.09.17)

45. The ER is being formed by the insurers, who have provided the respective class of insurance for at least three years.

46. The insurer forms an ER for a separate class of insurance, if at least one of the following conditions is in place:

1) for the given class of insurance, there is at least one year in the observed period, for which the loss ratio of the insurer has exceeded 100%;
2) for the given class of insurance, the standard deviation of the loss ratio in the observed period is 5% and more. The standard deviation is calculated in accordance with the following formula:

$$SD = \sqrt{\frac{\sum_{t=1}^{n}(LR_t - LR_{average})^2}{(n-1)}}$$

where

SD – the standard deviation of the loss ratio,

n – the number of years in the observed period.

(Point 46 was amended by Resolution No. 191-N, dated 01.09.17)

47. If the loss ratio for any of the years of the observed period exceeds 100%, then when calculating the $LR_{average}$ and the SD, the loss ratio is being taken equal to 100%.

(Point 47 was amended by Resolution No. 191-N, dated 01.09.17)

48. If none of the conditions, mentioned in point 46 of this Regulation, is any more in place for the given class of insurance, then the insurer, having formed the ER for the respective class of insurance in the previous periods, reduces the formed ER at the end of each year by 20% of the ER for the next 5 years, starting from the year, when it was found out, that none of the conditions, mentioned in point 46 of this Regulation, is any more in place.

49. The ER should not be less than 0 and should not exceed the maximum value of the ER (MV_{ER}), which is being calculated as follows:

$$MV_{ER} = EP_t * 5 * SD,$$

where

EP_t – the amount of insurance premiums earned during the given year for the given class of insurance. Furthermore, if $EP_t<0$, then it is being taken as equal to zero,

SD – the standard deviation of the loss ratio, calculated in accordance with this Chapter.

50. If the calculated value of the ER is less than zero, then it is being equalized to zero; and if it exceeds the maximum value of the ER (MV_{ER}), then it is being taken as equal to the MV_{ER}.

CHAPTER X. THE CALCULATION OF THE MATHEMATICAL RESERVE (MR)

51. The mathematical reserve is being formed in an amount equal to the present (discounted) value of future liabilities, assessed under life-insurance contracts, deducted by the amount of estimated present (discounted) value of future insurance premiums payable to the insurer under such contracts.

52. The mathematical reserve is being calculated in accordance to actuarial methods, approved by the responsible actuary of the insurer, taking into consideration all the future liabilities, arising from individual insurance contracts, including:

1) the guaranteed payments, which the policyholder has right to receive,
2) the bonuses, which the policyholder individually or collectively with other policyholders has right to receive, irrespective of the type of the bonuses,
3) other right, which the policyholder performs, based on the insurance contract,
4) mandatory payments, including commission fees.

53. If according to the insurance contract, the policyholder has the right to receive funds from the insurer in case of early termination of the contract, then the mathematical reserve, formed in respect to than contract, should not be lower than the amount of that fund.

54. The maximal annual interest rate, used in the calculation of the MR, is defined as follows:

$$I_{max} = \min(4\%, Y_{average}), \text{ where}$$

I_{max} – the maximal annual interest rate, used in the calculation of the MR,

$Y_{average}$ – the average annual yield of assets, equivalent to the MR during the reporting month and the preceding 35 months.

55. For the insurers, providing life-insurance services for up to 3 years, the maximal annual interest rate is being defined as 4% in the calculation of the MR.

CHAPTER XI. THE PROCEDURE OF CALCULATION OF THE SHARE OF THE REINSURER IN THE TECHNICAL RESERVES

56. The share of the reinsurer in the reserves (except for ER) is being formed as an asset by the insurer, in accordance with the provisions of the reinsurance contract. The share of the reinsurer in the reserves is being recognized as an asset after receiving the documents (contract, cover note, slip, etc.), certifying that the risks have been borne by the reinsurer.

57. The share of the reinsurer in the reserves is being calculated with the periodicity of calculation of the respective reserve, mentioned in this Regulation.

58. The share of the reinsurer in the UPR (R_{UPR}) is being calculated separately for each contract. The total R_{UPR} of the insurer is the sum of R_{UPR}-s, calculated separately for each contract.

59. When the amount of reinsurance premiums and (or) the expiration of the reinsurance contract remains unchanged during the validity of the reinsurance contract, the R_{UPRi} is being calculated for the given contract with the following formula:

$$R_{UPRi} = RP_i * N_i / T_i$$

where

R_{UPRi} – the share of the reinsurer in the UPR for contract i,

RP_i – the amount of reinsurance premiums, specified by the reinsurance contract for reinsurance contract i,

N_i – for contract i, the number of days remaining until the expiration of the reinsurance contract, as of the day of calculation of the R_{UPR},

T_i – the validity period of the reinsurance contract for the contract i, in days.

(Point 59 was amended by Resolution No. 191-N, dated 01.09.17)

59.1. When the amount of reinsurance premiums and (or) the expiration of the reinsurance contract changes during the validity of the reinsurance contract, the R_{UPR} is being calculated for the given contract with the following formula:

$$R_{UPRi} = (R_{UPRto} + RP_{ch}) * N_i / T_i$$

where

R_{UPRi} – the share of the reinsurer in the UPR for contract i,

R_{UPRto} - the share of the reinsurer in the UPR for contract i, as of the day of the change of the amount of the reinsurance premium and/or the expiration of the reinsurance contract

RP_{ch} – the amount of change of the reinsurance premiums, specified by the reinsurance contract for reinsurance contract i,

N_i – for contract i, the number of days remaining until the expiration of the reinsurance contract, as of the day of calculation of the R_{UPR}, taking into consideration the change of the expiration of the reinsurance contract (if any),

T_i – the period between the change of the reinsurance premium, specified by the reinsurance contract under contract i, and (or) the expiration of the reinsurance contract, and the validity of the reinsurance contract, in days, taking into consideration the change of the expiration of the reinsurance contract (if any).

(Point 59.1 was added by Resolution No. 191-N, dated 01.09.17)

60. The share of the reinsurer in the RBNSR (R_{RBNSR}) is being calculated based on the amount of the RBNSR for the given insurance contract, formed in accordance with this Regulation, and the size of liability of the reinsurer, specified by the reinsurance contract. Furthermore, if due to certain facts as of the day of calculation of the R_{RBNSR}, the reinsurer has the right not to pay the compensation, in accordance with the reinsurance contract, then no R_{RBNSR} is being formed for the given contract, except for cases when as of the day of formation of the R_{RBNSR}, a confirmation has been received from the reinsurer in a proper way that the

reinsurer would pay its part of the insurance compensation, should the insurer decide to satisfy the claim.

61. The share of the reinsurer in the IBNRR (R_{IBNRR}) may be formed by the insurer as an asset, in accordance with the actuarial methods, developed by the responsible actuary of the insurer. Furthermore, those methods should be beforehand agreed with the Central Bank, in accordance with the procedure, specified by point 9 of this Regulation. If the consent of the Central Bank about application of the methods, mentioned in this point, is not in place, then the R_{IBNRR} is not being formed.

62. The share of the reinsurance in the BRR (R_{BRR}) is being calculated separately for each contract. The total R_{BRR} of the insurer is the sum of R_{BRR}-s, calculated separately for each contract.

63. For insurance contract i, the R_{BRR} is being calculated as follows:

$$R_{BRRi} = (1 - N_i / P_i) * RS_i$$

where

R_{BRRi} – the share of the reinsurer in the BRR for contract i,

P_i – the period (in days), during which, upon the occurrence of conditions, specified by contract, the policyholder should get a bonus and/or a rebate i (a period for applying a bonus/rebate),

N_i – the number of days remaining until the end of the period for applying a bonus/rebate, as of the day of calculation of the R_{BRR},

RS_i – the share of the reinsurer in the bonus or rebate, specified by contract i. Furthermore, if the payment of the bonus or the rebate and/or the share of the reinsurer in that sum by the reinsurer is excluded in case of occurrence of some conditions, then the $RS_i = 0$.

64. The share of the reinsurer in the MR is being calculated in accordance with the actuarial methods, approved by the responsible actuary of the insurer, taking into consideration the methods of calculation of the MR and the provisions of the reinsurance contract.

65. The share of the reinsurer in the reserves for non-proportional reinsurance contracts is being calculated in accordance with the actuarial methods, approved by the responsible actuary of the insurer. Furthermore, those methods should be beforehand agreed with the Central Bank, in accordance with the procedure, specified by Chapter 3 of this Regulation. If the consent of the Central Bank about application of the methods, mentioned in this point, is not in place, then no assets are being formed with respect to those contracts.

(Point 65 was amended by Resolution No. 191-N, dated 01.09.17)