Pursuant to Article 163, paragraph 6 of the Insurance Law ("RS Official Gazette", No. 139/2014) and Article 15, paragraph 1 of the Law on the National Bank of Serbia ("RS Official Gazette", Nos. 72/2003, 55/2004, 85/2005 – other law, 44/2010, 76/2012, 106/2012 and 14/2015), the Executive Board of the National Bank of Serbia issues the following

D E C I S I O N ON THE CONTENTS OF THE OPINION OF A CERTIFIED ACTUARY

I. GENERAL PROVISIONS

- 1. This decision shall regulate in detail the contents of the opinion of a certified actuary.
- 2. A certified actuary appointed by an insurance and/or reinsurance company (hereinafter: company) shall issue an opinion on:
 - 1) method of calculating premiums;
 - 2) method of calculating technical provisions;
 - 3) business policy acts;
 - 4) financial statements and company's annual business report;
- 5) report on the implementation of coinsurance and reinsurance policies;
 - 6) portfolio transfer;
- 7) study on projected business results of the company, pursuant to Article 43 of the Insurance Law.
- 3. In addition to the information prescribed by this Decision, in his opinion a certified actuary may also include additional information and explanations which he considers important.
- 4. The opinion of a certified actuary must include full name of the certified actuary, number and issue date of the actuarial licence and signature of the certified actuary.

II. CERTIFIED ACTUARY'S OPINION ON THE METHOD OF CALCULATING PREMIUMS

5. On a quarterly basis, a certified actuary shall issue an opinion on whether premium has been determined in line with actuarial principles and regulations and whether it secures continuous fulfilment of all liabilities of a company stemming from insurance and/or reinsurance contracts (hereinafter: contract).

- 6. A certified actuary shall specify information on the amounts and changes in the amounts of premium, at least by class of insurance, in total and in self-retention.
- 7. A certified actuary shall specify the rights of the policyholder, insured and insurance beneficiary, whether guaranteed or not, covered risks and exclusions for important non-life and/or life insurance products, as well as any changes to the above data which he considers significant.

Important insurance products referred to in paragraph 1 of this Section are insurance products which, in the period from the start of the year until the end of the quarter, account for at least 5% of the premium of non-life and/or 5% of the premium of life insurances of a company.

- 8. A certified actuary shall give an overview of the loss ratio and the combined ratio (sum of the loss ratio and the expense ratio), at least by class of non-life insurance, in total and in self-retention, as well as an opinion on the reasons for changes to and unfavourable levels of such ratios which he consider significant.
- 9. A certified actuary shall issue an opinion on whether premium charged on new insurance products which are considered important will, based on reasonable actuarial assumptions, be sufficient for the fulfilment of all liabilities stemming from contracts and shall also give a description of the method of calculating premium to be charged on new insurance products, with information on statistical data based on which such premium was calculated.

III. CERTIFIED ACTUARY'S OPINION ON THE METHOD OF CALCULATING TECHNICAL PROVISIONS

- 10. On a quarterly basis, a certified actuary shall provide an opinion on whether technical provisions have been constituted in line with actuarial principles and regulations and whether they secure continuous fulfilment of all liabilities of a company stemming from contracts.
- 11. A certified actuary shall specify information on the amounts and changes in the amounts of the following technical provisions, at least by class of insurance:
 - unearned premium reserves;
 - 2) unexpired risk reserves;
 - 3) reserves for bonuses and rebates;
 - 4) outstanding claims reserves;
 - 5) mathematical reserve;

- 6) reserves for insurance where the investment risk is borne by the insured:
 - 7) risk equalization reserves;
 - 8) other technical reserves.

A certified actuary shall provide his opinion on the reasons behind changes in the amounts of individual technical provisions referred to in paragraph 1 of this Section which he considers important.

- 12. A certified actuary shall provide his opinion on whether individual technical provisions referred to in Section 11, paragraph 1 of this Decision have been constituted in line with company rules on the method of their calculation.
- 13. In the section of his opinion which refers to the calculation of unexpired risk reserves, a certified actuary shall give his opinion on the expected amount of claims, expenses and premium receivables used in such calculation.
- 14. In the section of his opinion which refers to the calculation of outstanding claims, a certified actuary shall also include information on the amounts and changes in the amounts of reserves for reported but unpaid claims, reserves for annuity claims, reserves for incurred but unreported claims (reserves for claims not reported until the end of the current period, reserves for not enough reported and/or not enough reserved claims and reserves for claims that could be reactivated in the future period) and reserves for expenses relating to the settlement and payment of claims, at least by class of insurance.

A certified actuary shall provide his opinion on the effect of collected recourse claims and discounting on the calculation of outstanding claims, at least by class of insurance.

- 15. In the section of his opinion which refers to the calculation of mathematical reserve, a certified actuary shall also include information on the amounts of total mathematical reserve and changes in such amounts for group insurances, for share in profit, for future expenses and for capitalized insurances, at least by the insurance tariff.
- 16. In the section of his opinion which refers to the calculation of reserves for insurance where the investment risk is borne by the insured, a certified actuary shall include information, at least by insurance tariff, on investment funds units to which contractual compensations are linked, the value of such

units, as well as the opinion on whether such reserves are adequate in view of the value of such units.

A certified actuary shall also include information on the amount of special mathematical reserve for guaranteed rights of insured persons and insurance beneficiaries and any changes to this amount, with an explanation of such guaranteed rights, as well as the amount of technical reserves for covering liabilities to insured persons and tontine beneficiaries and any changes to that amount.

17. In the section of his opinion relating to the calculation of other technical reserves, a certified actuary shall also include an explanation of the liabilities and risks in respect of which such provisions are constituted.

IV. CERTIFIED ACTUARY'S OPINION ON BUSINESS POLICY ACTS

18. A certified actuary shall provide his opinion on proposals of business policy acts and on proposals of amendments and/or supplements to such acts.

Business policy acts referred to in paragraph 1 of this Section shall include:

- 1) general and special policy conditions;
- 2) scales of premium;
- 3) technical basis for insurance;
- 4) decision on the establishing criteria, methods of establishing and the table of maximum retention, as well as the total amount of self-retention;
- 5) rules on the conditions and methods of coinsurance and reinsurance;
- 6) rules on the formation and methods of calculating technical provisions referred to in Section 11, paragraph 1 of this Decision.

In his opinion on proposed individual business policy acts referred to in paragraph 1 of this Section, a certified actuary shall assess whether these acts were prepared in line with actuarial principles and regulations.

- 19. With regard to the proposed general and special policy conditions, a certified actuary shall include information on the rights of the policyholder, insured and insurance beneficiary, covered risks and exclusions, and shall give his opinion on whether all covered risks and exclusions will be taken into account at the time of premium calculation.
- 20. With regard to the proposed scales of premium, a certified actuary shall provide his opinion on whether premium charged on new insurance

products, based on reasonable actuarial assumptions, will be sufficient for fulfilment of all liabilities stemming from the contract, and shall give a description of the method of calculating the premium to be charged on new insurance products, with information on statistical data based on which such premium was calculated.

21. With regard to the proposed technical basis of insurance, a certified actuary shall provide his opinion on whether relevant actuarial and statistical methods and real assumptions have been applied.

In his opinion on the proposed technical basis of insurance, a certified actuary shall accordingly apply the provisions of Section 20 and Section 24, paragraph 2, indents 5) and 6) of this Decision.

- 22. With regard to the proposed decision on the establishing criteria, methods of establishing and the table of maximum retention, as well as the total amount of self-retention, a certified actuary shall provide his opinion on the adequacy of a company's self-retention, at least by class of insurance and in total, as well as information on expected maximum possible claims, at least by class of insurance.
- 23. With regard to the proposed rules on the conditions and methods of coinsurance and reinsurance, a certified actuary shall provide his opinion on the adequacy of the method of determining the risk of companies from which risks are accepted and to which risks are ceded for coinsurance and reinsurance and on the impact of acceptance and ceding of risks for coinsurance and reinsurance on the company's capital adequacy.
- 24. With regard to the proposed rules on the formation and methods of calculating technical provisions referred to in Section 11, paragraph 1, items 1) to 6) and item 8) of this Decision, a certified actuary shall provide a description of the method of calculating individual technical provisions, as well as an opinion on whether the method applied in calculating individual technical provisions is adequate, with an explanation of the reasons for applying this method and information on the assumptions used in the calculation.

The opinion referred to in paragraph 1 of this Section shall contain:

- 1) for unearned premium reserves information on the reserve calculation base;
- 2) for unexpired risk reserves description of the method of estimating expected amounts of claims, expenses and premium receivables to be applied in the calculation;

- 3) for reserves for bonuses and rebates description of rights of insured persons and insurance beneficiaries with regard to bonuses and rebates:
- 4) for outstanding claims opinion on the justification of reducing settled claims applied in the calculation of outstanding claims by the amount of collected recourse claims, opinion on the justification of discounting outstanding claims and adequacy of the annual interest rate to be applied, as well as a description of the method of calculating reserves for reported but unpaid claims, reserves for annuity claims, reserves for incurred but unreported claims and reserves for expenses relating to settlement and payment of claims;
- 5) for mathematical reserve opinion on the adequacy of the applied interest rate, probability tables, approximation of gender and age of the insured, rate of zillmerisation, statistical methods and approximations and other significant factors, and a description of the method of calculating mathematical reserves, including in particular mathematical reserves for group insurances, for share in profit, for future expenses and for capitalized insurances:
- 6) for reserves for insurance where the investment risk is borne by the insured opinion on whether the calculation of such reserves is determined so that their value corresponds to the value of investment units, and opinion on whether the calculation of special mathematical reserves for guaranteed rights of insured persons and insurance beneficiaries has been determined in such a way that the above rights are secured, together with a description of such rights, and whether the calculation of technical reserves for covering liabilities to insured persons and tontines beneficiaries has been determined in such a way that it ensures the fulfilment of these liabilities;
- 7) for other technical reserves description of the expected future liability and risks in respect of which these reserves are formed.
- 25. In his opinion on proposed amendments and/or supplements to business policy acts, a certified actuary shall accordingly apply the provisions of Sections 18 to 24 of this Decision, and shall also provide an opinion on the justification of the proposed amendments and/or supplements.

In his opinion on proposed amendments and/or supplements to scales of premium, a certified actuary shall also include information on the expected impact of the proposed amendments on the loss ratio and the combined ratio, at least by class of insurance, in total and in self-retention.

In his opinion on proposed amendments and/or supplements to business policy acts from Section 18, paragraph 2, item 6) of this Decision, a certified actuary shall also specify information on the effect of such amendments and/or supplements on the amount of individual technical provisions.

V. CERTIFIED ACTUARY'S OPINION ON FINANCIAL STATEMENTS AND ANNUAL BUSINESS REPORT OF THE COMPANY

- 26. A certified actuary shall provide his opinion on financial statements and annual business report of the company, and in particular, on:
- 1) whether premium has been calculated in line with actuarial principles and regulations and whether it will be sufficient for continuous fulfilment of all liabilities of the company stemming from contracts;
- 2) whether technical provisions have been constituted in line with actuarial principles and regulations and whether they will be sufficient for continuous fulfilment of all liabilities of the company arising from contracts.

The opinion referred to in paragraph 1 of this Section shall contain a specific section referred to Section 27 of this Decision and a general section referred to in Sections 28 to 36 of this Decision.

The final assessment of the opinion referred to in paragraph 1 of this Section may be a positive opinion, opinion with reservation and negative opinion.

- 27. A certified actuary shall provide data on the name and head office of the company, final assessment of the opinion, and reasons for such assessment.
- 28. A certified actuary shall provide information on the most significant risks underwritten by the company, opinion on the implementation of business policy acts referred to in Section 18, paragraph 2 of this Decision, adequacy of scales of premium with regard to company's readiness to underwrite risks, impact of changes in insurance products during the year and changes planned for the next year on the company's readiness to underwrite risks and on the structure of the portfolio, as well as information on the structure of the portfolio and changes to that structure.

A certified actuary shall give a description of actuarial methods and assumptions underlying his opinion on the sufficiency of premiums.

A certified actuary shall list the recommendations and measures he suggested to company management in case premium insufficiency was established, as well as information on the implementation of such recommendations and measures by company management.

- 29. A certified actuary shall provide his opinion on whether the company has adequate data necessary for calculating technical provisions at portfolio level and at least by class of insurance, as well as on the adequacy, completeness and accuracy of the data used for calculating technical provisions, and the consistency of data (internal and external) used in this calculation.
- 30. A certified actuary shall provide his opinion on whether individual technical provisions referred to in Section 11, paragraph 1 of this Decision are calculated in line with actuarial principles and regulations and on the adequacy of methods applied when calculating individual technical provisions referred to in Section 11, paragraph 1, indents 1) to 6) and indent 8) of this Decision, with an explanation of reasons for the application of such methods and information on the assumptions used in such calculations, as well as on changes to the applied methods and assumptions.
- 31. With regard to the calculation of unearned premium reserves, a certified actuary shall also provide information on the expected average number of months of duration of insurance coverage after the calculation of unearned premium reserves, at least by class of insurance.
- 32. With regard to the calculation of outstanding claims, a certified actuary shall provide his opinion on the calculation of reserves for reported but unpaid claims, reserves for annuity claims, reserves for incurred but unreported claims and reserves for expenses relating to the settlement and payment of claims, in the manner referred to in Section 30 of this Decision.

A certified actuary shall also provide his opinion on the justification of reducing settled claims used in the calculation of outstanding claims by the amount of collected recourse claims, as well as on whether the applied method of reduction is adequate, with an explanation of the reasons for applying the above method and information on the assumptions applied in the calculation and any changes to such method and such assumptions.

A certified actuary shall provide his opinion on the justification of discounting outstanding claims, adequacy of the applied discounting method and of the annual interest rate to be applied, with information on:

- 1) expected average number of years for the settlement of claims after the calculation of outstanding claims, at least by class of insurance;
- 2) factors that could lead to an increase in expenses relating to the settlement and payment of claims;
 - 3) applied model of claim settlement frequency;

- 4) average rate of return on outstanding claim balances in the previous five years and in the prior year, and the interest rate applied.
- 33. With regard to the calculation of mathematical reserve, a certified actuary shall also provide his opinion on the calculation of mathematical reserve for group insurances, for share in profit, for future expenses and for capitalized insurances, as well as on the calculation of additional mathematical reserve for risks relating to a group of insured persons or all insured persons (general risks which are not individualized), in the manner referred to in Section 30 of this Decision.

A certified actuary shall also provide his opinion on whether statistical methods and approximations are applied in the calculation of mathematical reserve and whether the results thus obtained are approximately the same as when individual calculations are made for each contract.

A certified actuary shall provide his opinion on whether mathematical reserve for group insurances is covered by sources of funding and funds originating from these group insurances only, as well as an opinion on the justification of application and adequacy of approximation of the gender and age of the insured persons.

A certified actuary shall also provide his opinion on whether the amount of mathematical reserve is at least equal to the amount of the guaranteed cash surrender value.

A certified actuary shall also give his opinion on the adequacy of the interest rate used in the calculation of mathematical reserve, as well as information on:

- 1) whether the interest rate applied in calculating the mathematical reserve is not higher than the highest interest rate determined by the Decision on Technical Provisions:
- 2) whether a company constitutes additional mathematical reserve or it is expected that such reserve will be necessary to cover liabilities arising from the contractual guaranteed interest rate;
- 3) the amount of contractual guaranteed interest rates by insurance product, tariff and currency, with the amount of mathematical reserve for each of these interest rates, as well as on the level of mathematical reserve-weighted, contractually guaranteed interest rate at portfolio level by currency;
- 4) the interest rate of return on mathematical reserve funds in the prior year by currency, with the amount of mathematical reserve funds by currency.

A certified actuary shall also provide his opinion on whether interest rates and probability tables applied in the calculation of mathematical reserve are equal to the interest rate and probability tables from the tariff system of the company, as well as an opinion on the adequacy of probability tables which are applied for calculating mathematical reserve, with information on all applied probability tables.

A certified actuary shall also provide his opinion on whether the rate of zillmerisation for the calculation of mathematical reserve is not higher than 3.5% of the contractual sum insured and whether mathematical reserve constituted in this way is not lower than the amount which secures the payment of the sum insured.

A certified actuary shall also provide his opinion on the maturity matching of mathematical reserve and mathematical reserve funds by applying the modified duration method with information on modified duration expressed as years of mathematical reserve and modified duration of mathematical reserve funds, specifying the amount of mathematical reserve funds for which modified duration has been determined.

34. With regard to the calculation of reserves for insurance where the investment risk is borne by the insured, a certified actuary shall also provide his opinion on the calculation of special mathematical reserve for guaranteed rights of insured persons and insurance beneficiaries and technical reserves for covering liabilities to tontine beneficiaries, in the manner referred to in Section 30 of this Decision.

A certified actuary shall also provide his opinion on whether funds were invested taking into account the interests of the insureds bearing the investment risk, with due consideration of liquidity factors relating to the investment of such funds.

35. A certified actuary shall provide his opinion on the results of comparing the amounts of individual technical provisions and assumptions and data used in their calculation with liabilities arising from the contract and/or with prior experience, at least by class of insurance.

A certified actuary shall also provide information on whether any systematic departures were detected during comparison of individual technical provisions, at least by class of insurance, as well as on any actions taken by the company in case of a detected systematic departure.

A certified actuary shall list recommendations and measures he suggested to company management in case systematic departures were

established, as well as information on the implementation of such recommendations and measures by company management.

36. A certified actuary shall provide his opinion on the results of control of sufficiency and/or adequacy of the amounts of individual technical provisions, at least by class of insurance.

A certified actuary shall provide information on whether during his control of sufficiency and/or adequacy of individual technical provisions, at least by class of insurance, he established insufficiency and/or inadequacy of technical reserves, as well as on the actions taken by the company in the event such insufficiency and/or inadequacy were established.

A certified actuary shall list the recommendations and measures he suggested to company management in case insufficiency and/or inadequacy of technical provisions were established, as well as information on the implementation of suggested recommendations and measures by company management.

VI. CERTIFIED ACTUARY'S OPINION ON THE REPORT ON IMPLEMENTATION OF COINSURANCE AND REINSURANCE POLICIES

37. On a quarterly basis, a certified actuary shall provide his opinion on whether a company engaged in coinsurance and reinsurance in line with its decision on the criteria for determining, manner of determining and the table of maximum self-insured retention, as well as the total amount of self-retention, and its rules on conditions and manner of performing coinsurance and reinsurance activities.

A certified actuary shall provide his opinion on the effect of coinsurance and reinsurance on the loss ratio and combined ratio, at least by class of insurance.

A certified actuary shall provide information on all concluded coinsurance and reinsurance contracts and, in particular, on contracts concluded in that quarter, with opinion on their justification, as well as on expired and terminated contracts.

38. With regard to the report on implementation of coinsurance and reinsurance policies, a certified actuary shall provide his opinion on whether such policies are adequate in view of the risks to which the company is exposed.

A certified actuary shall provide his opinion on the adequacy of selfretention of a company, with information on the amount of self-retention at least by class of insurance, and changes in self-retention during the year, with information on expected maximum possible claims at least by class of insurance.

A certified actuary shall provide his opinion on the effect of selfretention on the company's readiness to accept risks, on the effect of ceding of risks for coinsurance and reinsurance on the calculation of technical provisions of a company in self-retention and the effect of acceptance and/or ceding of risks for coinsurance and reinsurance on a company's capital adequacy.

A certified actuary shall provide his opinion on the risk of the companies from which risks are accepted and of the companies to which risks are ceded for coinsurance and reinsurance, with information on the concentration of exposures to individual companies (as measured by the amount of premium and/or claims accepted and/or ceded for coinsurance and reinsurance), the country where the head office is located, inter-relatedness and creditworthiness of such companies, and changes in their creditworthiness during the year.

A certified actuary shall also specify information on a timing mismatch between payment of claims and collection of receivables from coinsurers and reinsurers, exposure to catastrophic risks, accumulation of risk exposures and possibility of exhausting coinsurance and reinsurance coverage, with opinion on their effect on the adequacy of coinsurance and reinsurance policies.

VII. CERTIFIED ACTUARY'S OPINION ON PORTFOLIO TRANSFER

39. For contracts that are the subject of portfolio transfer, a certified actuary of a company which transfers its portfolio shall provide his opinion on whether technical provisions have been constituted in line with actuarial principles and regulations and whether they secure continuous fulfilment of all liabilities, with a projection of technical provisions as at the day of portfolio transfer.

A certified actuary of a company transferring the portfolio shall provide his opinion on the impact of such portfolio transfer on such company's operations.

For contracts remaining in the portfolio, a certified actuary shall provide his opinion on whether technical provisions of the company effecting

portfolio transfer secure continuous settlement of all remaining liabilities even after such portfolio transfer.

40. For contracts that are the subject of portfolio transfer, a certified actuary of a company accepting the portfolio shall provide his opinion on whether technical provisions have been constituted in line with actuarial principles and regulations and whether they secure continuous fulfilment of all liabilities, with a projection of technical provisions as at the day of portfolio transfer.

A certified actuary of a company accepting the portfolio shall provide his opinion on the effect of such portfolio transfer on such company's operations, with a projection of potential liability as at the day of portfolio transfer for the part of collected premium which corresponds to the remaining duration of the insurance and the mathematical reserve, for insured persons who terminate the contract.

A certified actuary shall provide his opinion on whether technical provisions of the company accepting the portfolio secure continuous fulfilment of all liabilities arising from all contracts, even after such portfolio transfer.

VIII. CERTIFIED ACTUARY'S OPINION ON THE STUDY ON PROJECTED BUSINESS RESULTS OF THE COMPANY

- 41. With regard to the study on projected business results of the company for a three-year period, a certified actuary shall provide his opinion on whether scales of premium have been determined in line with actuarial principles and regulations and whether the expected premium, based on reasonable actuarial assumptions, secures continuous fulfilment of all company liabilities arising from contracts.
- 42. A certified actuary shall give a projection of expected income from premiums and expenses for claims for a three-year period, at least by class of insurance.
- 43. A certified actuary shall specify information and assumptions underlying his opinion, containing at least a description of the method of premium calculation with information on statistical data based on which the premium was calculated.

IX. CLOSING PROVISIONS

44. This decision repeals the Decision on the Contents of the Opinion of a Certified Actuary ("RS Official Gazette", No. 19/2005).

45. This Decision shall be published in the "RS Official Gazette" and shall enter into force on 27 June 2015.

EB NBS No. 28 27 April 2015 B e I g r a d e Chairperson of the Executive Board of the National Bank of Serbia
Governor
of the National Bank of Serbia

Jorgovanka Tabaković, PhD