Pursuant to Article 107, paragraph 5 of the Law on Insurance (RS Official Gazette, Nos 55/2004, 61/2005, 101/2007 and 107/2009), Governor of the National Bank of Serbia hereby issues

DECISION ON DETAILED CRITERIA AND MANNER OF CALCULATING MATHEMATICAL AND PROFIT SHARE RESERVES

- 1. This Decision sets forth detailed criteria and manner of calculating mathematical and profit share reserves.
- 2. An insurance company (hereinafter: company) shall establish and calculate mathematical reserves for the settlement of any future liabilities arising from long-term life insurance contracts, most notably contracts of:
 - life insurance.
 - annuity insurance,
 - supplemental health insurance with life insurance,
 - voluntary pension insurance,
 - other types of life insurance.

When calculating mathematical reserves, the company shall take into account the client's age at the time of insurance contract conclusion, while in case of joint life insurance policies the age of both insureds may be taken into account.

- 3. In addition to mathematical reserves, the company shall establish profit share reserves if the insureds have accepted to share in the risk of technical reserves depositing and investment.
- 4. Mathematical reserves and profit share reserves shall be established in the amount that ensures full settlement of all company liabilities arising from insurance contracts.
- 5. Mathematical and profit share reserves shall be calculated for each insurance contract and/or insured on an individual basis on the last day of the current accounting period, as follows:
 - on 31 December of the current year (annual calculation),
 - on 31 March, 30 June and 30 September of the current year (periodic calculations during the year),

- on the day of insurance portfolio transfer.
- 6. As a rule, mathematical reserves shall be calculated by applying a well thought out prospective method recognized by the actuarial profession: either net or gross (Zillmer) method as the difference between the present value of insurer's future liabilities determined by the insurance contract and the present value of future premium payments.

The premium used in the calculation of mathematical reserves shall not exceed the technical premium agreed on conclusion of the insurance contract and paid by the policyholder, and shall be sufficient for the settlement of liabilities by the company, and/or establishment of the amount of mathematical reserves sufficient for the settlement of those liabilities.

Mathematical reserves may comprise additional amounts to ensure settlement of liabilities under insurance contract in the event of increased risks (major changes in mortality rates, changes in interest rates caused by the change in yield on government securities, etc.). These risks, however, shall not be determined arbitrarily, but shall be based on actuarial assessment of future liabilities.

7. The Zillmer method shall be used for calculating the amount of reduction of mathematical reserves by the non-amortized real expenses of insurance contract commission. The rate of zillmerisation shall not exceed 3.5% of the sum assured.

If the commission from paragraph 1 hereof is for longer than a year, the mathematical reserves calculated by the Zillmer method may not be lower than the amount securing the payout of the sum assured.

The zillmerisation rate from paragraph 1 hereof shall be applied to each individual insurance contract, and for the duration of insurance cover.

- 8. The method of calculating mathematical reserves cannot be changed arbitrarily or in the way that would result in the establishment of lower mathematical reserves.
- 9. If the mathematical reserve calculation yields a negative result, the mathematical reserve shall be equal to zero (0).

Mathematical reserves shall be linearly interpolated from the mathematical reserves calculated at the start and at the end of the current insurance year. The amount obtained shall not be adjusted by the amount of premium prepayment or arrears as at the calculation date.

If the surrender value of insurance is guaranteed, the amount of mathematical reserves must at least equal the surrender value.

- 10. Mathematical reserves for foreign currency-denominated insurance contracts shall be calculated for each currency on an individual basis and shown in both foreign currency and in dinars, applying the middle rate of exchange of the National Bank of Serbia as at the date of mathematical reserve calculation.
- 11. The interest rate and probability tables applied in the calculation of mathematical reserves shall be the same as the interest rate and probability tables specified in the tariff system based on which the insurance contract was concluded (hereinafter: tariff system).
- 12. The company shall set the interest rate to be applied in the calculation of mathematical reserves with caution and in the amount that ensures the security of payment of the contracted insurance sum. In doing so, the company shall take into account the security of depositing and investing such reserve assets, as well as the yield earned in that respect.

The interest rate applied in the calculation of mathematical reserves shall not exceed the maximum interest rate specified by this Decision.

By way of exception, in the event of increased risk (a major decrease in yields on government securities, etc.), the company may apply an interest rate other than the one determined by the tariff system if the application of that rate ensures the protection of interests of the insureds and insurance beneficiaries, the settlement of liabilities under insurance contract, as well as a higher amount of mathematical reserves for each period until the expiry of insurance cover.

- 13. If the interest rate from Section 11 and Section 12, paragraphs 1 and 3 hereof is higher than the maximum interest rate envisaged by this Decision, an interest rate not higher than the said maximum rate shall be applied in the calculation of mathematical reserves.
- 14. The probability tables applied in the calculation of mathematical reserves mortality tables, morbidity tables and other probability tables shall be chosen

prudently and cautiously. They shall be produced based on tables and other statistical data published by the competent authority of the Republic of Serbia.

Probability tables from paragraph 1 hereof shall be the most recently published tables. Until morbidity tables are published, the morbidity tables of a reinsurer may be used if the certified actuary establishes that the amount of mathematical reserves calculated based on those tables ensures full settlement of liabilities under insurance contracts.

In the event of increased risk (major changes in mortality rates, decrease in mortality rates – for annuity insurance, etc.), the company may use probability tables other than those envisaged by Section 11 and this Section, provided that the application of those tables ensures the protection of interests of the insureds and insurance beneficiaries, full settlement of liabilities under insurance contracts (including the surrender value), as well as a higher amount of mathematical reserves for each period until the expiry of insurance cover.

15. The company shall calculate mathematical reserves for each insurance contract and/or each insured on an individual basis in the manner that ensures transparency of all data necessary for the calculation of mathematical reserves, the reserve amount before and after the change of calculation method, interest rates and probability tables applied in the calculation, as well as the amount of surrender value. If the Zillmer method is applied, the company shall calculate mathematical reserves in the manner that also ensures transparency of data on the amount of mathematical reserves that would have been obtained by the net method, as well as the zillmerisation rate.

The company which calculates mathematical reserves by the Zillmer method shall disclose in its quarterly reports and notes to financial statements the amount of reserves calculated by the Zillmer method and by the net method, and the amount of difference between the two - by type of insurance product.

The company shall deliver to interested persons data on important elements of the grounds and methods used to calculate mathematical and profit share reserves.

16. A life insurance company shall calculate mathematical reserves in retention by reducing the sum of mathematical reserves of own insurance portfolio and mathematical reserves against accepted coinsurance by the sum of mathematical reserves transferred to coinsurance and reinsurance.

A reinsurance company shall calculate mathematical reserves in retention as the difference between mathematical reserves from accepted reinsurance activity (on the basis of risks accepted from insurers or other reinsurers) and mathematical reserves from ceded reinsurance activity (on the basis of risks ceded to other reinsurers).

17. Mathematical reserves adjusted by the amount of prepayments and arrears shall be used for the calculation of profit share reserves.

In case of insurance where the insured shares in the investment risk, profit share reserves shall be calculated proportionately to the number of units awarded to the insurance contract and the respective value of such units.

In case of life insurance where the policyholder shares in the risk of investing and depositing assets that cover technical reserves, profit share reserves shall be calculated in direct correlation to the investment risk.

18. The interest rate applied in the calculation of mathematical reserves for foreign currency-denominated and foreign currency clause-indexed insurance contracts shall not exceed 3% p.a.

In the event of a significant drop in yields on government securities, the National Bank of Serbia shall be free to set the maximum interest rate at a level other than the one envisaged hereunder.

19. Provisions of Section 2, paragraph 1, indent three, Section 7, paragraph 3 and Section 14, paragraph 2 hereof may be applied to insurance contracts concluded after the entry into force of this Decision, whereas they shall apply mandatorily to insurance contracts concluded from 30 September 2010 onwards.

Provisions of Section 12, paragraph 2, Section 13, and Section 18 hereof may be applied to the calculation of mathematical reserves as of the date of entry into force of this Decision, whereas they shall apply mandatorily to contracts concluded as of 31 December 2013.

The provision of Section 15, paragraph 2 hereof shall apply to the calculation of mathematical reserves as of 31 December 2011.

20. This Decision shall supersede the Decision on Specific Criteria and Manner of Calculating Mathematical Reserves and Profit Share Reserves (RS Official Gazette, No 19/2005).

21. This Decision shall enter into force on the eighth day following its publication in the RS Official Gazette.

D. No. 11 12 February 2010 Belgrade Governor National Bank of Serbia

Radovan Jelašić