

Pursuant to Article 158-j, item 1), and Article 122, item b), in relation to Articles 116, paragraphs (1) and (2), and 104, paragraph (1), items 2) and 3) of the Law on Insurance Supervision – consolidated text (Official Gazette of the Republic of Macedonia No. 30/2012), Decision of the Constitutional Court No. 202/2011 ("Official Gazette of the Republic of Macedonia" no 45/2012), Decision of the Constitutional Court no. 130/2011 ("Official Gazette of the Republic of Macedonia" no. 60/2012), Decision of the Constitutional Court no. 122/2011 ("Official Gazette of the Republic of Macedonia" no. 64/2012), Decision of the Constitutional Court no. 129/2011 ("Official Gazette of the Republic of Macedonia" no. 23/2013), and Law amending and supplementing the Law on Insurance Supervision ("Official Gazette of the Republic of Macedonia" no. 188/2013), the Council of Experts of the Insurance Supervision Agency adopted the:

RULEBOOK

on the detailed content of the certificate of the authorized actuary

General provisions

Article 1

- (1) This Rulebook prescribes the detailed content of the certificate that the authorized actuary (hereinafter: the actuary) of the insurance and/or reinsurance undertaking (hereinafter: the insurance undertaking) submits to the Insurance Supervision Agency (hereinafter: the Agency) as per the Law on Insurance Supervision (hereinafter: the Law).
- (2) The actuary shall prepare the certificate of the form enclosed to this Rulebook as its integral part.

Content of the certificate

Article 2

- (1) The actuarial certificate shall contain the opinion of the actuary on:
 - 1) The information and data used by the actuary;
 - 2) tariff rates;
 - 3) technical provisions;
 - 4) required solvency margin and the guarantee fund;
 - 5) The financial statements and the annual report on the operations;also containing the following information as mandatory:
 - name, address, telephone number and website of the insurance undertaking;
 - name and surname, telephone number and e-mail of the authorised actuary;
 - period for which the certificate is referring;
 - the lines of business insurance for which the certificate is prepared;
 - currency;
 - actuarial models and key assumptions that have been applied;
 - any changes in the actuarial models and key assumptions applied in the previous certificate drawn up by the same person;
 - results;

- uncertainty contained in the results;
- the effect of any known current or planned developments in the operations of the insurance undertaking that would have an impact on the conclusion in the certificate;
- run-off analysis for adequacy verification of the assessment of claims provisions.

(2) If the certificate does not contain all items mentioned above, the certificate should state the reason thereof.

Opinion on the information and data used by the actuary **Article 3**

(1) The certificate must indicate the source of the data used by the actuary, information on whether the insurance undertaking keeps adequate and reliable data for the assessment of the technical provisions, and the extent to which the actuary undertakes responsibility for the accuracy, compliance and completeness of data. The actuary may need to use or refer to the work of other persons. If there is a risk of confusion about the break-down of actuary's and the other persons' or organizations' responsibilities, said responsibilities should be clearly stated in the certificate.

(2) The actuary is obliged to address any significant deficiencies in the available data. More specifically, the actuary should pay attention to the deficiencies of data it has used, which are significantly contributing to the uncertainty in its assessments.

(3) The actuarial certificate must indicate the basis on the break-down of data into groups that are show similar properties. When determining the appropriate subgroups, it is necessary to reach a balance between the homogeneity and statistical corroboration.

(4) The actuary may make modification of the data when using the actuarial methods (based on other qualitative and quantitative information known to the actuary) in order to get more adequate assessment; such as in case of: large damages, changes in the terms of the insurance contracts and the like. Such modifications are permitted only if the actuarial certificate clearly states the nature, causes, principles and impact of the performed modification, as well as statistical analysis on the justification of the applied assumptions.

Currency **Article 4**

(1) All monetary amounts in the certificate must be denominated in the domestic currency.

(2) The certificate must disclose the method and time of conversion of the foreign currencies in the domestic currency.

The actuary's opinion related to tariff rates

Article 5

- (1) The actuary shall be obliged to give an opinion on the proposed tariff rates, whether they are prepared in accordance with the regulations, the standard practice in the actuarial profession and insurance, and whether they are established as to ensure lasting settlement of all liabilities by the insurance undertaking arising from the insurance contracts.
- (2) The actuary shall be obliged to give an opinion on the proposed amendments and supplementations of the existing tariff rates, whether they are prepared in accordance with the regulations, the standard practice in the actuarial profession and insurance, and whether they are established as to ensure lasting settlement of all liabilities by the insurance undertaking arising from the insurance contracts, as well as opinion on the achieved technical results for the last three years by applying the newly proposed tariffs.
- (3) Regarding the proposed tariff rates and the proposed amendments and supplementations to the existing tariff rates, the actuary shall provide information on:
 - 1) the statistical data and methods underlying the calculated premium rates,
 - 2) distribution of premium by lines of business insurance,
 - 3) the expected portfolio of insureds.

Actuary's opinion with regard to technical provisions

Article 6

- (1) The actuary shall be obliged to give a detailed description of the methodology applied for assessment of the gross provisions for unearned paid premiums and the provisions for unearned paid premiums net of reinsurance and/or coinsurance. It should also give an opinion on the adequacy, and whether the assessment methods are in accordance with the Rulebook on the minimum standards for calculation of technical provisions and the actuarial standards.
- (2) The actuary shall be obliged to give a detailed description of the methodology applied for assessment of gross provisions for bonuses and discounts, and provisions for bonuses and discounts net of reinsurance and/or coinsurance, including the terms and manner for payment of bonuses. It should also give an opinion on the adequacy, and whether the assessment methods are in accordance with the Rulebook on the minimum standards for calculation of technical provisions and the actuarial standards.
- (3) The actuary shall be obliged to give a detailed description of the methodology applied for assessment of the gross claims provisions and the claims provisions net of reinsurance and/or coinsurance. It shall be also obliged to give an opinion on the adequacy, and whether the methods for assessment of incurred and reported, and incurred but not reported claims are in accordance with the Rulebook on the minimum standards for calculating the technical provisions, the Rulebook on the minimum content of records and reporting method, reservation and liquidation of claims by the insurance undertakings, and the actuarial standards.
Additionally, the process and the method for allocation of claims provisions by types of insurance should be elaborated in accordance with the break-down in the Rulebook on statistical insurance standards for insurance and/or reinsurance undertakings.

(4) The actuary shall be obliged to give an opinion on the adequacy, and whether the method for assessing the equalisation provision is in accordance with the Rulebook on the minimum standards for calculation of technical provisions and the actuarial standards.

(5) The actuary shall be obliged to give an opinion on the adequacy, and whether the method for assessing the other technical provisions is in accordance with the Rulebook on the minimum standards for calculation of technical provisions and the actuarial standards.

(6) The actuary shall be obliged to provide:

- 1) Detailed description of the general principles and the methodology applied for assessment of the gross mathematical provision, and the mathematical provision net of reinsurance and/or coinsurance, the adequacy of the mathematical provision assessment, and whether the methods for assessing the mathematical provision are in accordance with the Rulebook on the minimum standards for calculating the technical provisions, and the actuarial standards.
- 2) The amounts comprising the mathematical provision.
- 3) Description of the basis for calculation of the mathematical provision for the types of life insurance, as well as the basis applied in the tariff rates.

Data related to reinsurance and coinsurance

Article 7

(1) The actuary shall be obliged to give an opinion as to whether the insurance undertaking has provided reinsurance coverage that is in accordance with the Programme for reinsurance of the insurance undertaking.

(2) The actuary shall be obliged to give data opinion on the gross and net amount of the annual claims ratio (with and without the effect of reinsurance) by lines of business insurance and the total for all lines of business insurance for the current accrual period.

Opinion on the required solvency margin and the guarantee fund

Article 8

(1) The actuary shall be obliged to give an opinion on the calculation of the required solvency margin and the guarantee fund.

(2) The actuary shall be obliged to give an opinion on the coverage of the required solvency margin, that is to say, of the guarantee fund by capital.

Opinion of the actuary in relation to the financial statements and annual operations report

Article 9

(1) The actuary shall give an opinion on the annual financial statements and annual report on operations, and in doing so it should:

- 1) specify whether the premiums and technical provisions have been calculated according to the Law, the Rulebook on the minimum standards for calculation of technical provisions and the actuarial profession, and whether they have been set up as to provide permanent settlement of all liabilities of the insurance undertaking arising from the insurance contracts;
 - 2) to present the schedule for settlement and payment of claims by lines of business insurance;
 - 3) present the average time to claim settlement (from the date of application) and payment of claims (from the date of application and from the date when the claims has been liquidated) by lines of business insurance, except for annuity claims.
- (2) The final opinion of the actuary may be:
- 1) Positive – if the items, for which the actuary should give an opinion, are presented as per the Law and other regulations to be observed by the insurance undertakings, are in compliance with the regulations of the insurance undertaking, economic principles, regular practice of the actuarial profession and insurance operations, ensure maintaining the value of assets, guarantee continuous stability and operational solvency, as well as liquidity for settling the liabilities of the insurance undertaking.
 - 2) Qualified opinion – if there is a suspicion that certain items, for which the actuary should give an opinion, are not presented as per the Law and other regulations to be observed by the insurance undertakings, are not in compliance with the regulations of the insurance undertaking, economic principles, regular practice of the actuarial profession and insurance operations, do not ensure maintaining the value of assets, do not guarantee continuous stability and operational solvency, and do not ensure liquidity for settling the liabilities of the insurance undertaking.
 - 3) Negative – if there are certain items, for which the actuary should give an opinion, that are not presented as per the Law and other regulations to be observed by the insurance undertakings, are not in compliance with the regulations of the insurance undertaking, economic principles, regular practice of the actuarial profession and insurance operations, do not ensure maintaining the value of assets, do not guarantee continuous stability and operational solvency, and do not ensure liquidity for settling the liabilities of the insurance undertaking.
- (3) The opinion must include a rationale of the basis and the reasons on which the assessment was grounded.
- (4) If the actuary, while performing its work, has found that the calculations are jeopardizing the long-term stability of the insurance undertaking for meeting the obligations arising from the insurance contracts, it should explain whether it has informed the management body thereof and what actions have been undertaken to address said issue.

**Manner and deadlines for submission of the actuarial
certificate
Article 10**

(1) The actuary shall prepare a certificate, with the exception of the actuary's opinion regarding the financial statements and the annual report on the operations referred to in Article 9 of this Rulebook, for the following periods:

Between January 1st and March 31st of the current year (first quarter); Between January 1st and June 30th of the current year (second quarter);
Between January 1st and September 30th of the current year (third quarter); Between January 1st and December 31st of the current year (fourth quarter).

(2) The certificate referred to in paragraph (1) of this Article shall be submitted by the actuary to the Agency via electronic means, within 45 days from the end of the quarter to which the certificate refers.

(3) By way of derogation from paragraph (2) of this Article, the actuary shall submit a certificate, which includes the actuary's opinion on the annual financial statements and the annual report on the operations referred to in Article 9 of this Rulebook, and additionally within the prescribed deadlines for submitting the annual financial statements, and the annual report on the operations of the insurance undertaking.

(4) The Agency shall reserve the right to prescribe the electronic form of the certificate of the authorised actuary.

**Final provisions
Article 11**

(1) As soon as this Rulebook enters into force, the Rulebook on the detailed content of the certificate of the authorized actuary ("Official Gazette of the Republic of Macedonia" no. 64/2011) shall cease to apply.

(2) This Rulebook shall enter into force upon its publication in the "Official Gazette of the Republic of Macedonia ", and shall begin to apply to the actuarial certificate drawn up for the period January 1st – March 31st, 2014.

No. _____

President of the Council of Experts

_____, 2014
Skopje

Dr. Klime Poposki

APPENDIX

Actuarial Certificate

(Guidelines for preparing the actuarial certificate: The grey text in this Appendix provides the guidelines for drafting the relevant section of the form. The certificate submitted by the actuary to the Agency should not include the grey text of this Appendix.

At a certain item, if several options are offered, actuary should select the appropriate options.)

1) Undertaking name: _____
Address: _____
Telephone: _____
Web-site: _____
Reporting period: _____

Name and surname of the actuary: _____
Telephone: _____ E-mail: _____

2) The certificate shall be drafted for the following lines of business insurance:

(select the lines of business insurance for which he insurance undertaking has performed insurance activities in the current accrual period)

01 02 03 04 05 06 07 08 09 10 11 12
13 14 15 16 17 18 19 20 21 22 23

3) Information and data used by the actuary:

(please provide a rationale as per Article 3 of this Rulebook)

**4) Curren
cy**

(please describe the manner and time of conversion of foreign currencies into denars)

5) Tariff rates

In the current year, the Undertaking has introduced new tariffs or has amended the existing tariff rates.

a) Yes b) No

(in case of positive reply, please provide a brief description in separate sub-items for each tariff, including an opinion for each tariff as per Article 5 of this Rulebook, while also presenting the methodology for allocation per types of insurance as per the break-down in the Rulebook on statistical insurance standards of insurance and/or reinsurance undertakings)

6) Technical provisions

The data for the gross technical provisions and technical provisions – part of reinsurance and/or coinsurance from the respective statistical forms, which are an integral part of the Rulebook on statistical insurance standards, has been calculated in accordance with the Rulebook on the minimum standards for calculation of technical provisions and actuarial standards, and the insurance undertaking may settle all of its insurance liabilities.

a) Yes b) No

(In case of a negative response, please provide a rationale on the reasons)

Calculation methods for all types of provisions are the same as the methods described in previous actuarial certificate.

a) Yes b) No

(In case of a negative response, please indicate where the change in the methodology occurred and please provide a rationale with the reasons thereof)

6.1. Provisions for unearned paid premiums

The portfolio of the insurance undertaking shall include:

- 1) insurance contracts where the risk is distributed evenly for the duration of the contract,
- 2) insurance contracts where the risk is linearly increasing or decreasing during the contract,
- 3) insurance contracts where the risk is non-linearly increasing or decreasing

during the contract.

Additionally:

- When calculating the provisions for unearned paid premiums under the contracts referred to in item 1) pro rata temporis method has been used as described in the Rulebook on the minimum standards for calculation of technical provisions.

Yes b) No

(In case of a negative response, please provide detailed description of the method used, specify and elaborate on all the reasons and assumptions relevant to the use of said method)

- The number of contracts referred to in item 2) is_____.

When calculating the provisions for unearned paid premiums under the contracts referred to in item 2) the method referred to in item 1/1.2/2) of the Appendix to the Rulebook on the minimum standards for calculation of technical provisions has been used.

Yes b) No

(In case of a negative response, please provide detailed description of the method used, specify and elaborate on all the reasons and assumptions relevant to the use of said method)

- The number of contracts referred to in item 3) is_____.

When calculating the provisions for unearned paid premiums under the contracts referred to in item 3), the following method has been used_____.

(please describe the risk change model and also detailed description of the method used, as well as specify and elaborate on all the reasons and assumptions relevant to the use of said method)

(please describe the principles for assessing the provisions for unearned paid premiums – reinsured and/or coinsured portion)

6.1.1. Additional provisions for unexpired risks

(please give a rationale on the need for allocation of additional provisions for unexpired risks, gross and as part of reinsurance and/or coinsurance)

(In case of positive additional provision for unexpired risks, please describe the methodology for assessment of the gross and net additional provision for unexpired risks)

6.2. Provisions for bonuses and discounts

(to be filled-in only by the actuary who performs the work for the life insurance undertaking)

The provisions for bonuses and discounts are an integral part of the mathematical provision. a) Yes b) No

(please list other opinions, assumptions, conclusions, and the like, concerning the allocation of provisions for bonuses and discounts as per Article 6, paragraph (2))

(to be filled-in only by the actuary who performs the work for the life insurance undertaking)

(please provide a rationale on the need for allocating provisions for bonuses and discounts)

(In case of positive provisions for bonuses and discounts, please describe the methodology for assessment of the gross and net provisions for bonuses and discounts)

6.3. Provisions for claims

6.3.1. Provisions for incurred and reported claims

The provisions for incurred and reported claims have been estimated in accordance with the internal rules of the insurance undertaking related to claims, the Rulebook on the minimum standards for calculation of technical provisions, and the Rulebook on the minimum content of records and the manner of reporting, reservation, and liquidation of claims by the insurance undertakings.

Yes b) No

(In case of a negative response, please provide a rationale on the reasons)

(please describe the principles for estimating the provisions for incurred and reported claims – reinsured and/or coinsured portion)

6.3.1.1. Annuity claims

For non-life insurance contracts, where the fees are paid as annuity, the provisions for incurred and reported claims shall be calculated as follows:

- method _____ *(please state and elaborate on the actuarial method)*
- mortality table used _____
(If such a table is used, please indicate the source)
- interest rate _____ *(please specify the interest rate)*

6.3.2. Provisions for incurred but not reported claims

(Please give a description on the method for estimating the provisions for incurred but not reported claims, by line of business insurance, or by risk within line of business insurance. The description should contain all relevant facts and assumptions used by the actuary, which affect the final amount, including the information referred to in Article 3, paragraph (4).)

(please describe the principles for estimating the provisions for incurred but not reported claims – reinsured and/or coinsured portion)

6.3.3. Provisions for reopened claims

Provisions for reopened claims are registered by the insurance undertaking as: a) new
b) development of the existing ones

Provisions for reopened claims, that is to say, provisions for claims that will be reopened are included in the provisions for incurred and reported claims, or in provisions for incurred but not reported claims.

a) Yes b) No

- (please indicate whether there are reopened claims that require special analysis)

6.3.4. Provisions for claim handling costs

The provisions for direct claim handling costs are an integral part of the provisions for incurred and reported claims, and the provisions for incurred but not reported claims.

a) Yes b) No

- (please elaborate on how provisions for direct claim handling costs are calculated in case their amount is significant compared to the claiming amount or their schedule of occurrence is different from the time of claim processing and settlement; please list these cases)

The amount of provisions for indirect claims handling costs is _____% of the sum of provisions for incurred and reported claims, provisions for incurred but not reported claims, and provisions for direct claim handling costs.

6.4. Equalisation provisions

- (please give an opinion on the need for allocation of an equalisation provision)

6.5. Other technical provisions

- (please give an opinion on the need for allocation of other technical provisions)

6.6. Mathematical provision

The mathematical provision for all insurance contracts has been calculated with the net prospective method.

a) Yes b) No

(in case of positive reply, please state the Zillmerisation rate, the annual interest rate, the source of probability tables, and whether the provision at the calculation date has been calculated with the effective interest rate or with linear interpolation of the mathematical provision calculated at the beginning and at the end of the insurance year of the calculation date)

- (In case of a negative response, please state the method used in standard contracts and all relevant factors for its use, including the factors listed in the previous sentence)

An integral part of the mathematical provision is the additional provision referred to in item 4.3/6) of the Appendix to the Rulebook on the minimum standards for calculation of technical provisions.

a) Yes b) No

- (In case of positive reply, please elaborate on the method, assumptions and relevant parameters for calculation of the additional provision)

The average yield which the Undertaking has achieved from investments of assets covering the mathematical provision in the previous three years is _____%.

(The following table should be filled in with the components comprising the mathematical provision presented in the appropriate form from the Rulebook on the statistical insurance standards of insurance and/or reinsurance undertakings)

Table 1

MATHEMATICAL PROVISION	Gross amount	Net amount
Calculated mathematical provision (incl. Zillmerisation)		
Provision for unearned paid premiums		
Provision for guaranteed bonuses and discounts		
Provision for future bonuses and discounts		
Additional provision (referred to in item 4.3/6) of the Appendix to the Rulebook on the minimum standards for calculation of technical provisions)		
Amount of administrative costs related to contracts where the insurance period is longer than the duration of premium payments		
Other		
Amount of guaranteed surrender values		

(please describe the principles for estimating the mathematical provision – reinsured and/or coinsured portion)

6.7. Run-off analysis

(please present the results of the run-off analysis (absolute and relative amounts) as follows:

- *separately provisions for incurred and reported claims and provisions for incurred but not reported claims, if the actuary has used methodologies projecting only provisions for incurred but not reported claims, or*
- *the total provision for claims, if the actuary has used methodologies the projecting the total provisions for claims.*

The Run-off analysis should be conducted for gross claim provisions, taking into account all claims. If the actuary deems that certain claims are distorting the overall picture, it should specify it accordingly.

The Run-off analysis is conducted for lines of business insurance or subclasses thereof, as stipulated in Table 2 for companies performing non-life insurance activities, or in Table 3 for companies performing life insurance activities.

The Run-off analysis is done from a perspective of the last day of the period, and on the status of claim provisions as at 31.12, for each year lapsed, or up to a full run-off of considered claim provisions, or up to 31.12.2011).

Table 2

		MTPL															
		Accident		Casco – Motor Vehicles		Property, Total		Total		MMTPL		MC		General Liability		Total	
		amount	%	amount	%	amount	%	amount	%	amount	%	amount	%	amount	%	amount	%
		01.1	01.2	03.1	03.2	89.1	89.2	10.1	10.2	1001.1	1001.2	1002.1	1002.2	13.1	13.2	0000.1	0000.
31.12.2011	11																
31.12.2012	12																
31.12.2013	13																
...	...																

Table 3

		Additional Accident		Additional Health		Total	
		amount	%	amount	%	amount	%
		1901.1	1901.2	1902.1	1902.2	0000.1	0000.2
31.12.2011	11						
31.12.2012	12						
31.12.2013	13						
...	...						

(actuary's opinion on the results of the run-off analysis. When analysing the run-off results, the trends of the run-off results in the actuarial certificates for the previous periods should be taken into account.)

7) Reinsurance and coinsurance

7.1. Reinsurance

(opinion on the reinsurance coverage in terms of the Reinsurance Programme)

Table 8

Annual Claims Ratio		Claims ratio with the reinsurance effect	Claims ratio without the reinsurance effect
Accident	01		
Health	02		
...			

(Note: If the insurance undertaking performs active reinsurance activities, it should fill-in analogous tables with regard to the active reinsurance contracts.)

The claims ratio with reinsurance effect is calculated according to the formula for the annual claims ratio given in item 3.1. of the Appendix to the Rulebook on the minimum standards for calculation of technical provisions, also taking into account the additional provisions for unexpired risks. When calculating the gross claims ratios, the parameters related to the reinsured and/or coinsured portion of this formula will not be considered. The claims ratio is expressed as % with one decimal point.

Please give an opinion on the presented claims ratios, as well as an opinion as to whether there are parameters related to the operation of the undertaking that have not been taken into account when calculating the claims ratio, but have a significant effect on the technical functioning of the insurance undertaking.)

8) Required solvency margin and guarantee fund

The calculation of the required solvency margin, guarantee fund and capital has been made in accordance with the Law, the Rulebook on calculating the required solvency margin, and the Rulebook on the types and description of items to be taken into account when calculating the capital.

a) Yes b) No

- (in case of a negative response, please elaborate on the opinion)

- (please give an opinion on the surplus/shortage of capital in terms of the required solvency margin, that is to say, guarantee fund)

9. Financial statements and annual report on the operations

- (specify whether the premiums and technical provisions have been calculated according to the Law, the Rulebook on minimum standards for calculation of technical provisions, and the actuarial

profession, and whether they have been set up as to ensure lasting settlement of all liabilities of the insurance company arising from insurance contracts)

(please present the schedule for settlement and payment of claims by lines of business insurance)

- (present the average time to claim settlement (from the date of application) and payment of claims (from the date of application and from the date when the claims has been liquidated) by lines of business insurance, except for annuity claims)

The final opinion on the state of insurance undertaking, presented in the financial statements, and the annual report on the operations is:

a) positive b) qualified opinion c) negative

(please give an explanation for the selected option under Article 9, paragraphs 2), 3) and 4) of this Rulebook)

10. Other

(please list other opinions, assumptions, conclusions etc., which are not listed in the previous item)

Date: _____

Signature _____