



**METHODOLOGY OF RISK ASSESSMENT FRAMEWORK (BION)
FOR INSURANCE AND REINSURANCE UNDERTAKINGS
(ASSESSMENT FOR YEAR 2017)**

Warsaw, 2018

TABLE OF CONTENTS

1. THE CONCEPT OF BION FOR INSURANCE AND REINSURANCE UNDERTAKINGS.....	3
2. SPECIFICATION OF RISK TYPES.....	12
3. RISK ASSESSMENT ACCORDING TO BION	15
3.1 AGGREGATED RISK ASSESSMENT	15
3.1.1 COUNTERPARTY (CREDIT) RISK.....	16
3.1.1.1 EXPOSURE TO COUNTERPARTY (CREDIT) RISK.....	16
3.1.1.2 QUALITY OF COUNTERPARTY (CREDIT) RISK MANAGEMENT	18
3.1.2 MARKET RISK	19
3.1.2.1 EXPOSURE TO MARKET RISK	19
3.1.2.2 QUALITY OF MARKET RISK MANAGEMENT	23
3.1.3 UNDERWRITING RISK	24
3.1.3.1 EXPOSURE TO UNDERWRITING RISK	24
3.1.3.2 QUALITY OF UNDERWRITING RISK MANAGEMENT	27
3.1.4 OPERATIONAL RISK	28
3.1.4.1 QUALITY OF OPERATIONAL RISK MANAGEMENT	32
3.1.4.2 ADJUSTMENT OF OPERATIONAL RISK GRADE	32
3.2 CAPITAL ADEQUACY ASSESSMENT	33
3.2.1 QUANTITATIVE ASSESSMENT OF CAPITAL ADEQUACY	33
3.2.2 QUALITATIVE ASSESSMENT OF THE CAPITAL ADEQUACY	36
3.2.3 ADJUSTMENT OF THE CAPITAL ADEQUACY GRADE.....	38
3.3 GOVERNANCE ASSESSMENT.....	38
3.3.1 ADJUSTMENT OF GOVERNANCE GRADE.....	53
3.4 ADJUSTMENT OF THE RISK SCORE UNDER BION	54
4. IMPACT SCORE UNDER BION	55
4.1 SYSTEMIC RISK.....	55
4.2 ADJUSTMENT OF THE IMPACT SCORE UNDER BION	56
5. PRIORITISATION OF SUPERVISORY ACTIVITIES.....	57
APPENDIX 1. WEIGHTS OF AREAS AND INDICATORS FOR BION	60
APPENDIX 2. ITEMS APPLIED TO RATIO CALCULATION FOR THE PURPOSE OF BION.....	62

1. THE CONCEPT OF BION FOR INSURANCE AND REINSURANCE UNDERTAKINGS

The Risk Assessment Framework (BION) for insurance and reinsurance undertakings is a part of risk-based supervision system, according to standardized approach for supervised entities in all sectors of the financial market. BION is an implementation of legal requirements of Article 341 of the Act on insurance and reinsurance activity of 11 September 2015 (Journal of Laws of 2018, item 999) (hereinafter referred to as the Act) with regard to regular supervisory reviews and assessment of activities of (re)insurance undertakings, as well as a fulfilment of EIOPA guidelines concerning the supervisory review process (EIOPA-BoS-14/179) with regard to Section III - Risk Assessment Framework.

BION is a comprehensive process using all available information held by the supervisory authority about the (re)insurance undertaking, including information obtained as a result of actions related to licensing, off-site analyses and control actions during on-site inspections carried out in the (re)insurance undertaking as well as inquiries/questionnaires sent to the (re)insurance undertaking.

The objective of this process is to perform by the supervisory authority the undermentioned actions:

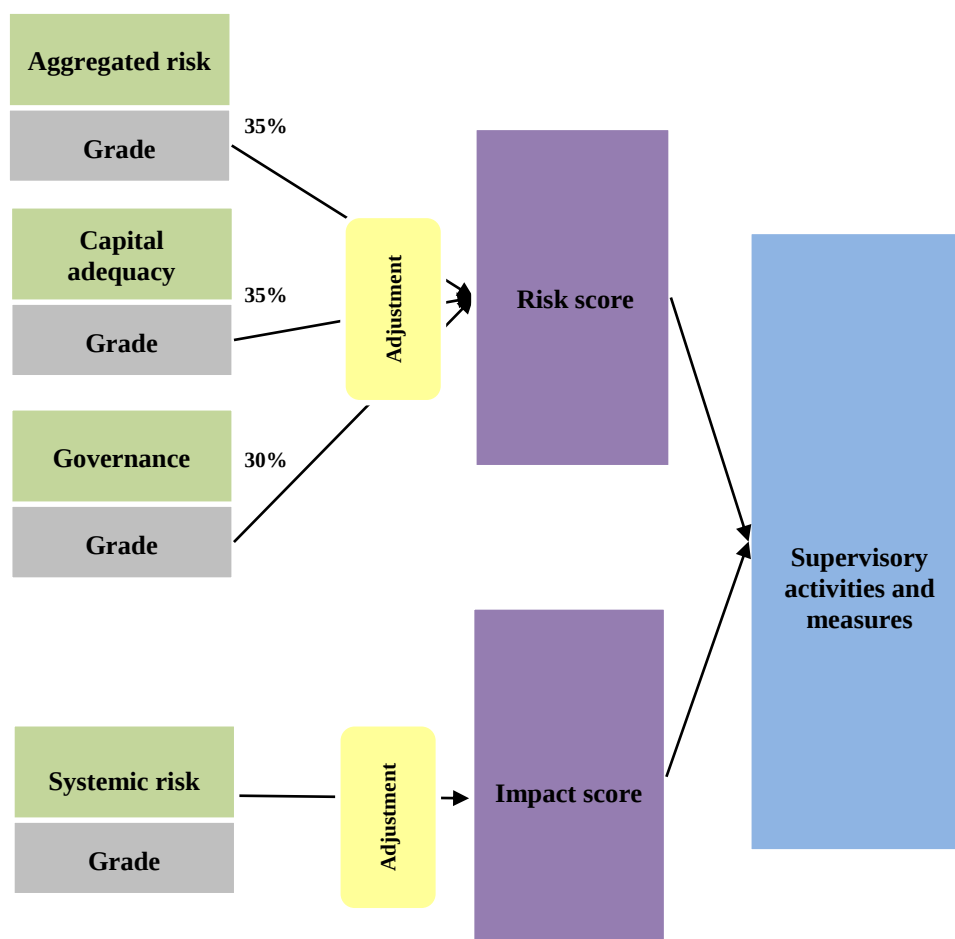
- evaluation of qualitative requirements related to the system of governance,
- evaluation of risk types, to which a given the (re)insurance undertaking can be exposed,
- evaluation of process of management of significant risks by the (re)insurance undertaking, including assessment of the (re)insurance undertaking's ability to assess the risks,
- assessment of compliance of activity of the (re)insurance undertaking with legal provisions and prudential regulations,
- identification of irregularities in the (re)insurance undertaking's activity,
- effective allocation of UKNF resources in order to assign them to areas and entities posing the highest risk,
- determination of frequency of regular supervisory report referred to in Article 312 (2) of the Commission Delegated Regulation (EU) 2015/35 of 10 October 2014 supplementing Directive of the European Parliament and of the Council 2009/138/EC on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II) (hereinafter referred to as Delegated Regulation).

The supervisory assessment focuses on significant risks and areas of operation of (re)insurance undertakings. Each (re)insurance undertaking receives a risk score, based on the average of assessments of the aggregated risk, capital adequacy and governance. Not only quantitative assessment is performed, but also qualitative assessment (expert judgement), which includes the specificity of particular (re)insurance undertakings and their insurance products as well as the risk management system and process. Qualitative assessment (expert judgement) considers such elements as type of activity of particular (re)insurance undertakings (mutual insurance undertaking, joint-stock company), stage of development, business scale and profile, distribution channels, which means individual approach to each (re)insurance undertaking (the same factor can be assessed differently, depending on the specific nature of (re)insurance undertaking).

As a result of conducting BION (re)insurance undertakings are awarded a risk score and an impact score, which determine, based on the proportionality principle, supervisory activities and measures, including on-site inspection.

Supervisory authority notifies individual (re)insurance undertakings about the results of BION, i.e. risk and impact score. The Risk Assessment Framework is conducted once a year.

Diagram 1. BION for (re)insurance undertakings



Individual assessment areas are described in detail in chapters 3 and 4 of this document, while possible supervisory activities and measures related to identified irregularities are presented in chapter 5.

Diagram 2. Assessment of aggregated risk for (re)insurance undertakings other than small mutual insurance undertakings

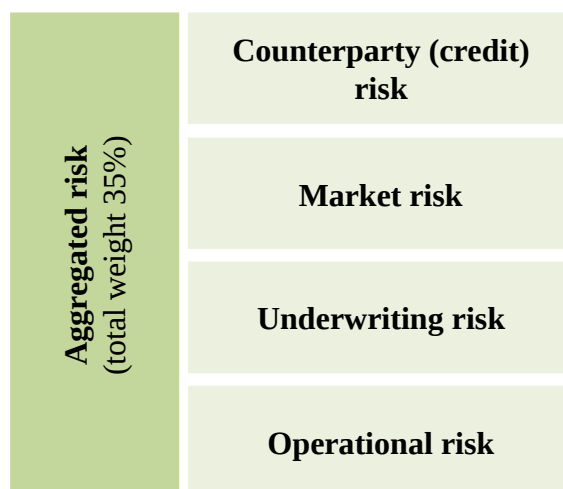


Diagram 3. Assessment of counterparty risk for (re)insurance undertakings other than small mutual insurance undertakings

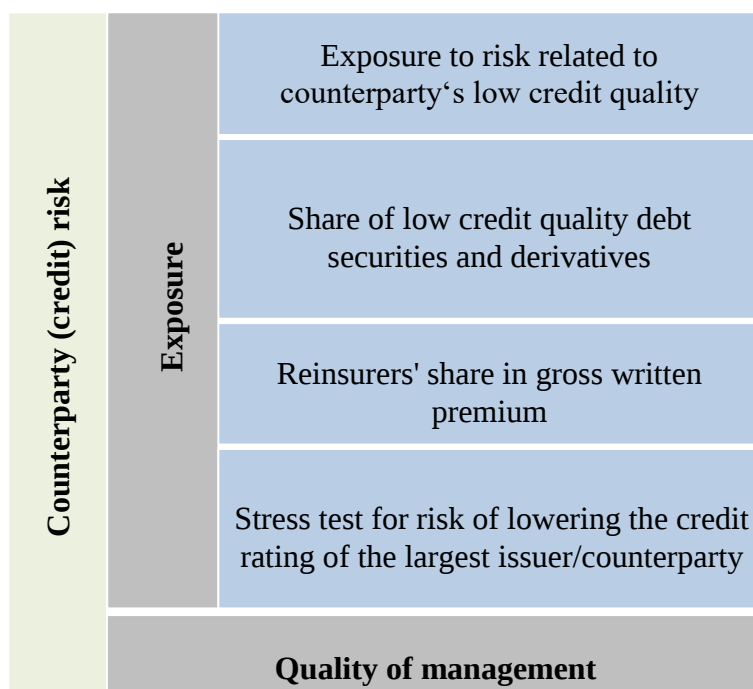


Diagram 4. Assessment of market risk for (re)insurance undertakings other than small mutual insurance undertakings

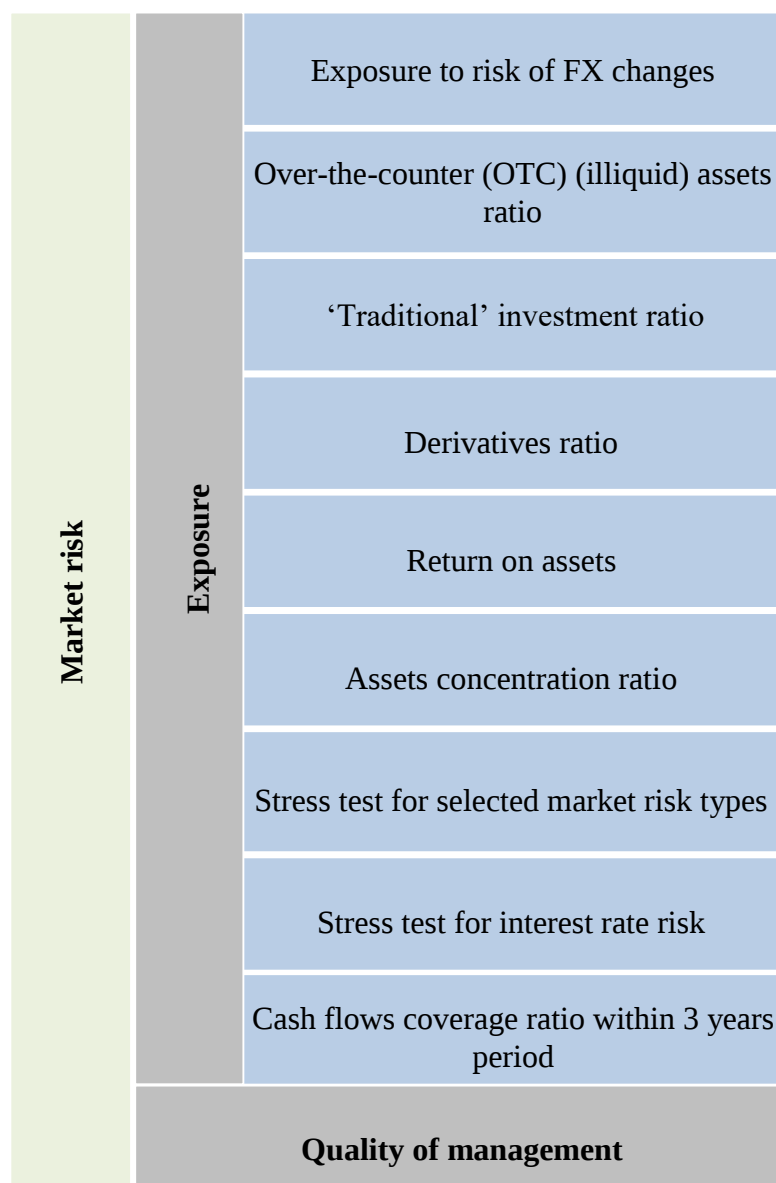


Diagram 5. Assessment of underwriting risk for (re)insurance undertakings other than small mutual insurance undertakings

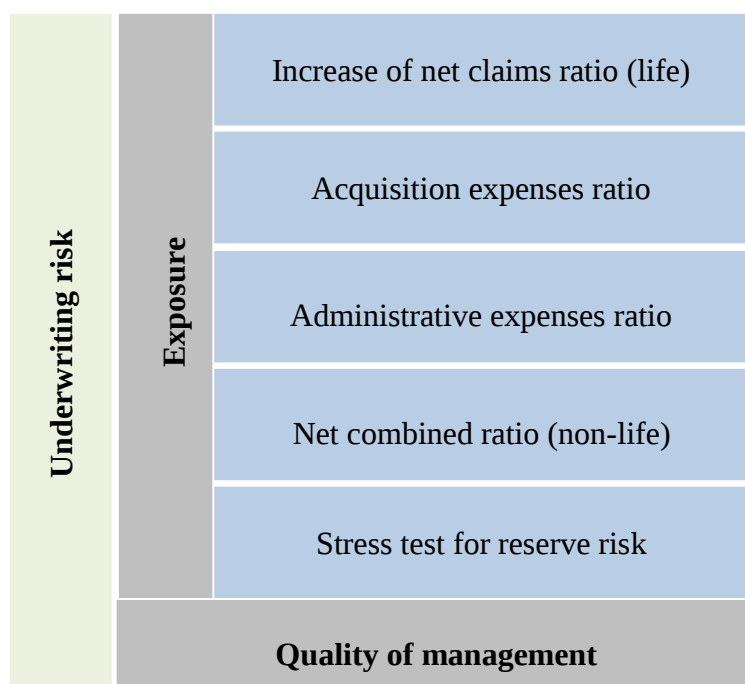


Diagram 6. Assessment of operational risk for (re)insurance undertakings other than small mutual insurance undertakings

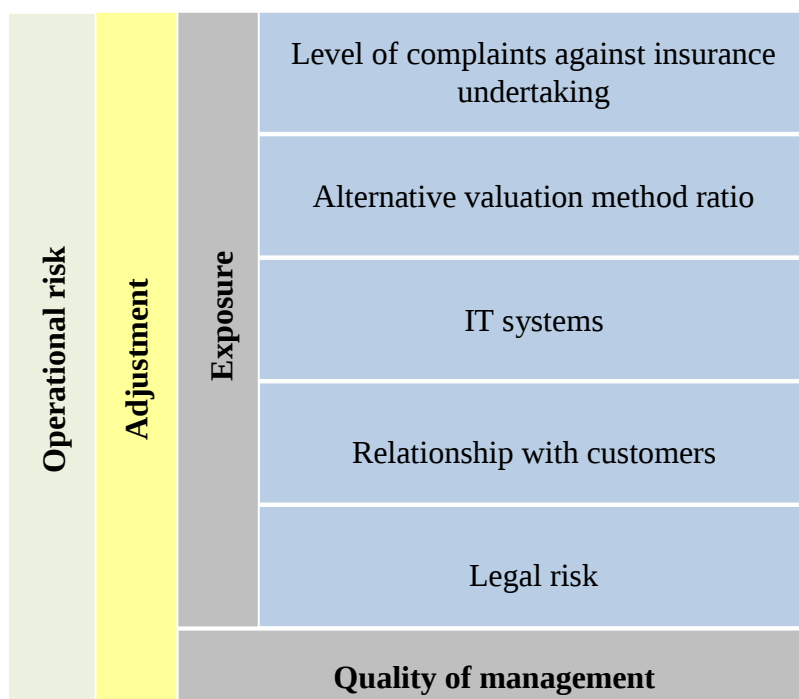


Diagram 7. Assessment of aggregated risk for small mutual insurance undertakings

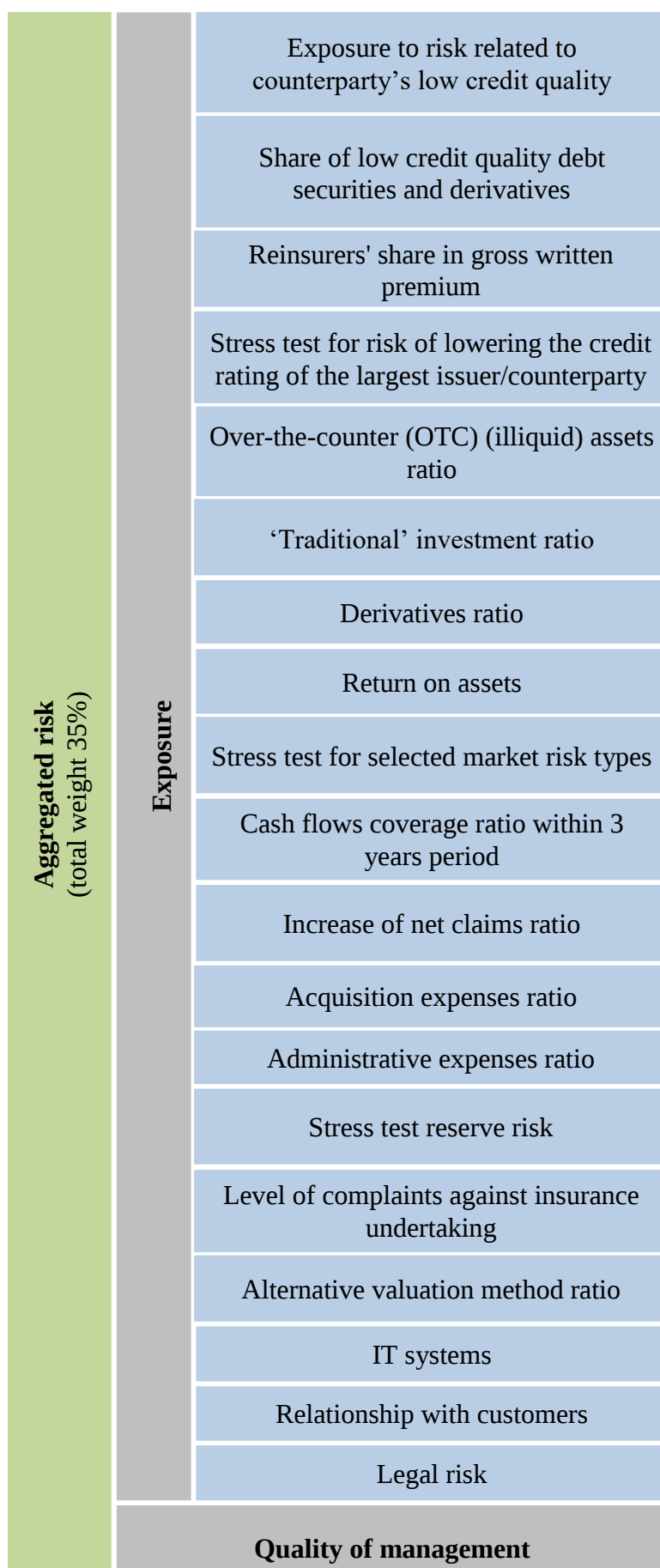


Diagram 8. Assessment of capital adequacy

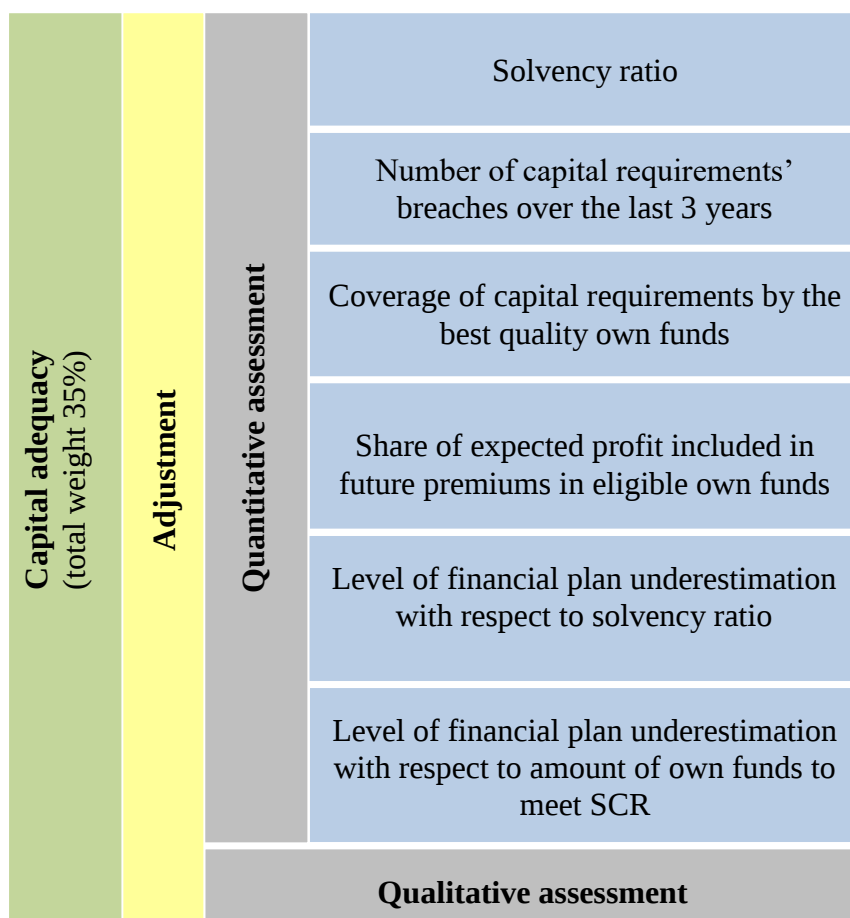


Diagram 9. Assessment of the area of governance

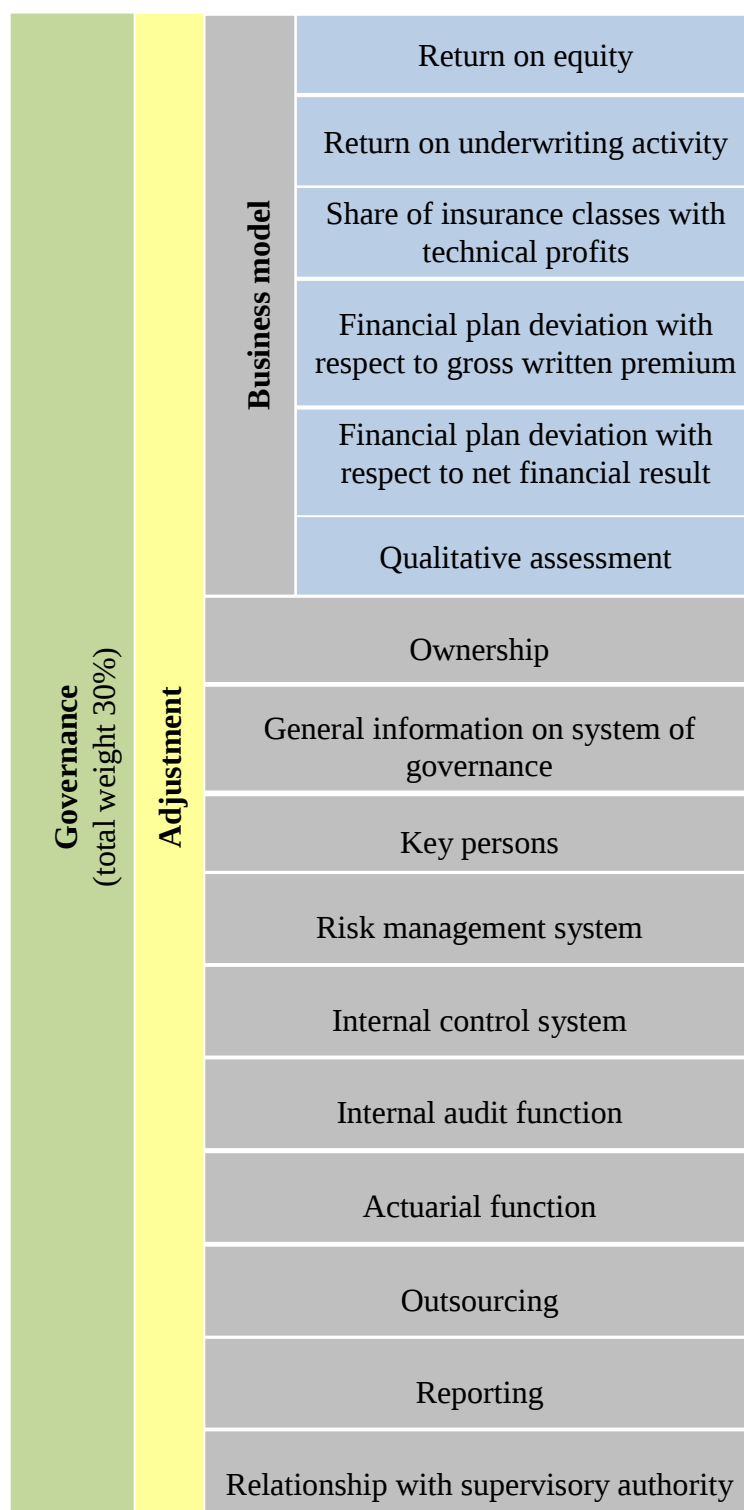


Diagram 10. Systemic risk



2. Specification of risk types

I. Aggregated risk assessment.

1. Counterparty (credit) risk - the possibility of losses or adverse change in the financial situation arising from an unexpected default or fluctuations in the credit standing of issuers of securities, counterparties and debtors, to which (re)insurance undertakings are exposed.
2. Market risk – the possibility of losses or adverse change in the financial situation resulting, directly or indirectly, from fluctuations in the level or in the volatility of market prices of assets, liabilities and financial instruments.
 - Interest rate risk – the possibility of losses or adverse change in the financial situation arising from sensitivity of the value of assets, liabilities and financial instruments to changes in the term structure of interest rates or in the volatility of interest rates.
 - Equity risk – the possibility of losses adverse change in the financial situation arising from sensitivity of the value of assets, liabilities and financial instruments to changes in the level or in volatility of market share prices.
 - Property risk – the possibility of losses or adverse change in the financial situation arising from sensitivity of the value of assets, liabilities and financial instruments to changes in the level or in the volatility of market prices of real estate.
 - Spread risk – the possibility of losses or adverse change in the financial situation arising from sensitivity of the value of assets, liabilities and financial instruments to the changes in the level or in the volatility of credit spreads over the risk-free interest rate term structure.
 - Currency risk – the possibility of losses or adverse change in the financial situation arising from sensitivity of the value of assets, liabilities and financial instruments to changes in the level or in the volatility of currency exchange rates.
 - Market risk concentration - the possibility of losses or adverse change in the financial situation arising from lack of diversification in the assets portfolio or from large exposure to default risk by a single issuer of securities or a group of related issuers.
3. Underwriting risk – the possibility of losses or adverse change in the value of liabilities, which may arise from underwritten insurance contracts and insurance guarantee contracts, due to inadequate pricing and provisioning assumptions.
 - Premium and reserves risk - the possibility of losses or adverse change in the value of liabilities that may arise from fluctuations in the timing, frequency and severity of unforeseeable events covered by the insurance protection or reinsurance contracts and from the fluctuations in the timing and amount of claim settlements and other benefits.
 - Catastrophe risk - the possibility of losses or adverse change in the value of liabilities that may arise from a significant uncertainty of pricing and Solvency II provisioning assumptions, related to extreme or exceptional unforeseeable events.
 - Lapse risk– the possibility of losses or adverse change in the value of liabilities that may arise from changes in the level, trend or volatility of rates of insurance and reinsurance contracts lapses, terminations, renewals and surrenders.

- Mortality risk – the possibility of losses or adverse change in the value of liabilities that may arise from changes in the level, trend or volatility of mortality rates, where an increase in the mortality rate leads to an increase in the value of those liabilities.
 - Longevity risk - the possibility of losses or adverse change in the value of liabilities that may arise from changes in the level, trend or volatility of mortality rates, where a decrease in the mortality rates leads to an increase in the value of those liabilities.
 - Disability – morbidity risk - the possibility of losses or adverse change in the value of liabilities that may arise from changes in the level, trend or volatility of disability, sickness and morbidity rates.
 - Expense risk - the possibility of losses or adverse change in the value of liabilities that may arise from changes in the level, trend or volatility of the expenses incurred in servicing insurance and reinsurance contracts.
 - Revision risk – the possibility of losses or adverse change in the value of liabilities that may arise from changes in the level, trend or volatility of the revision rates applied to annuities, due to changes in the legal environment or in the state of health of the policyholders and beneficiaries.
4. Operational risk – the possibility of loss arising from inadequate or failed internal processes, personnel, systems or external events, whereas it does not include the risk arising from strategic decisions and the reputational risk.
- IT risk – the possibility of loss arising from inadequate management of information technologies and processes.
 - Model risk – the possibility of loss arising from decision-making based on incorrectly developed, implemented or used models.
 - Legal risk – the possibility of losses as a result of failed or belated preparation or implementation of regulations, their instability, changes in judicature, failing in legal relationships, quality of formal-legal documentation or unfavourable court or other authorities' resolutions in legal cases with other entities.
 - Relationship with customers (conduct risk) - risk arising from improper activity of the (re)insurance undertaking or its intermediaries at any stage of the product life cycle.

II. Capital adequacy assessment – risk of failure to ensure capital sufficient to absorb unexpected losses.

- Risk of capital management – the possibility of lack of adequate capital for risk arising from conducted activity and a strategy with regard to planning, structure and sources of capital acquisition, as well as the possibility of improper strategy execution (including not generating adequate financial result).
- Insolvency risk – the possibility of capital falls below the level necessary to cover losses.

III. Governance assessment – risk related to improper management, insufficient identification and mitigation of risk underlying the activity, or the lack of internal control or its insufficient functioning, improper application of internal procedures or failure to comply with them.

- Business risk – the possibility of loss or adverse change in the value of liabilities related to an incorrect business model, including failure to achieve the assumed and necessary business goals due to failure in market competition.
- Strategic risk – the possibility of losses as a result of making unfavourable or wrong strategic decisions, lack of or improper implementation of the adopted strategy and due to the external environment changes and improper response to those changes.
- Financial result risk – the possibility of generating financial result below the requirements of conducting and developing activity.
- Governance risk - the possibility of loss or adverse change in the value of liabilities in connection with improper structure of system of governance, risk management system, internal control system and other elements of system of governance.
- Reputation risk - the possibility of loss due to negative reception of the entity's image by customers, counterparties, investors, shareholders, supervisors, regulators and public.
- Liquidity risk – the possibility of failure to convert by the (re)insurance undertaking investments and other assets in order to meet their financial liabilities at the due date.
- Outsourcing risk - the possibility of loss due to negative impact of an external entity on the continuity, integrity or quality of the entity's activity, its assets or employees.
- Reporting risk – the possibility of loss arising from the lack, improper scope, low reliability and relevance of management information and improperly organized reporting processes (including definition of sources, counterparties and information recipients).

IV. Systemic risk – risk related to possible impact of financial problems and potential bankruptcy of a single (re)insurance undertaking on the insurance market or financial market participants.

3. Risk assessment according to BION¹

$$\text{Risk score} = \max \left(\left(\begin{array}{c} 35\% * \text{Grade}_{\text{aggregated risk}} + \\ 35\% * \text{Grade}_{\text{capital adequacy}} + \\ 30\% * \text{Grade}_{\text{governance}} \end{array} \right); \max\{\text{adjustment}_{\text{risk score}}\} \right)$$

3.1 Aggregated risk assessment

- Small mutual insurance undertaking

Grade_{aggregated risk}

$$= \max \left(1; \min \left(4; \begin{cases} \text{risk exposure} - 0,5 & \text{if quality of management} \in [1.00; 1.75) \\ \text{risk exposure} & \text{if quality of management} \in [1.75; 2.50) \\ \text{risk exposure} + 0,5 & \text{if quality of management} \in [2.50; 3.25) \\ \text{risk exposure} + 1,0 & \text{if quality of management} \in [3.25; 4.00] \end{cases} \right) \right)$$

- Undertakings other than small mutual insurance undertaking:

$$\text{Grade}_{\text{aggregated risk}} = \sum_{i=1}^4 \text{SCR}'_i \cdot \text{Grade_risk}_i$$

where:

SCR'_i - weight respectively for the counterparty (credit), market, underwriting and operational risk, which is attributed individually, depending on the significance of the capital requirement for a given risk in the sum of capital requirements for the risks included in the aggregated risk assessment:

$$\text{SCR}'_i = \frac{\text{SCR}_i}{\sum_{i=1}^4 \text{SCR}_i}$$

SCR_i - capital requirement respectively for the counterparty (credit), market, underwriting and operational risk, whereas capital requirement for the underwriting risk is the aggregated capital requirement for the underwriting risk in life insurance, the underwriting risk in health insurance, the underwriting risk in non-life insurance according to the matrix 1 of the appendix to the Regulation of the Minister of Finance of 23 December 2015 on detailed method of calculating basic capital solvency requirement according to the standard formula.

Grade_risk_i - risk grade for the counterparty (credit) risk, the market risk, the underwriting risk, the operational risk.

¹ Assessment of individual ratios is performed based on the numerical values, rounded up to four decimal places.

3.1.1 Counterparty (credit) risk

$$Grade_{credit\ risk} = \max \left(1; \min \left(4; \begin{cases} risk\ exposure - 0,5 & \text{if quality of management} \in [1.00; 1.75) \\ risk\ exposure & \text{if quality of management} \in [1.75; 2.50) \\ risk\ exposure + 0,5 & \text{if quality of management} \in [2.50; 3.25) \\ risk\ exposure + 1,0 & \text{if quality of management} \in [3.25; 4.00] \end{cases} \right) \right)$$

3.1.1.1 Exposure to counterparty (credit) risk

1. Exposure to risk related to counterparty's low credit quality

$$ECLCQ = 1 - \frac{S + CD + CDGBCIU}{I}$$

where:

S – Solvency II value of governments bonds, corporate bonds, structured notes, collateralised securities, derivatives classified as assets with credit quality step from 0 to 3 and shares in related undertakings which are supervised by KNF and its last BION assessment was 1 (other than assets held for index-linked and unit-linked contracts)

CD - Solvency II value of cash and deposits (other than assets held for index-linked and unit-linked contracts)

CDGBCIU – Solvency II value of cash, deposits and government bonds included in units in collective investment undertakings (other than assets held for index-linked and unit-linked contracts)

I – Solvency II value of investments, including derivatives classified as assets (other than assets held for index-linked and unit-linked contracts)

Grades:

- 1, when ECLCQ ratio $\leq 5.00\%$
- 2, when ECLCQ ratio is within the range (5.00%; 15.00%]
- 3, when ECLCQ ratio is within the range (15.00%; 30.00%]
- 4, when ECLCQ ratio $> 30.00\%$

2. Share of low credit quality debt securities and derivatives

$$CQS = \frac{0,1 * Inv_4 + \sum_{i=5}^7 0,3 * Inv_i}{\sum_{i=0}^7 Inv_i}$$

where:

Inv_i – Solvency II value of governments bonds, corporate bonds structured notes, collateralised securities and derivatives classified as assets with credit quality step i (other than assets held for index-linked and unit-linked contracts), whereas $i = 7$ when no rating is available

Grades:

- 1, when CQS ratio $\leq 1.00\%$
- 2, when CQS ratio is within the range (1.00%; 5.00%]
- 3, when CQS ratio is within the range (5.00%; 15.00%]
- 4, when CQS ratio $> 15.00\%$

3. Reinsurers' share in gross written premium

$$RSP = \frac{RSGWP}{GWP}$$

where:

RSP – reinsurers' share in gross written premium

GWP – gross written premium

Grades for life (re)insurance undertakings:

- 1, when RSP ratio $\leq 1.00\%$
- 2, when RSP ratio is within the range (1.00%; 5.00%]
- 3, when RSP ratio is within the range (5.00%; 20.00%]
- 4, when RSP ratio $> 20.00\%$

Grades for non-life (re)insurance undertakings:

- 1, when RSP ratio $\leq 1.00\%$
- 2, when RSP ratio is within the range (1.00%; 20.00%]
- 3, when RSP ratio is within the range (20.00%; 50.00%]
- 4, when RSP ratio $> 50.00\%$

Moreover, the grade will be revised 0.5 class up in case one of the following conditions is met:

- for each reinsurers with share of positive value of reinsurance recoverables (RR) greater than 10%, credit quality step is not worse than 3,
- for each reinsurers, share of positive value reinsurance recoverables (RR) does not exceed 10%,
- for all reinsurers, value of reinsurance recoverables is negative.

4. Stress test for risk of lowering the credit rating of the largest issuer/counterparty

- Small mutual insurance undertakings:

$$ST_{credit\ rating} = 1 - \frac{EoAoL_{after\ shock}}{EAL_{before\ shock}}$$

- Undertakings other than small mutual insurance undertaking:

$$ST_{credit\ rating} = \min\left(\frac{EOF_{SCR-after\ shock}}{SCR_{after\ shock}}; \frac{EOF_{MCR-after\ shock}}{MCR_{after\ shock}}\right)$$

where:

$EoAoL_{after\ shock}$ – excess of assets over liabilities after shock

$EoAoL_{before\ shock}$ – excess of assets over liabilities before shock

$EOF_{SCR-after\ shock}$ – eligible own funds to meet solvency capital requirement after shock

$EOF_{MCR-after\ shock}$ – eligible own funds to meet minimum capital requirement after shock

$SCR_{after\ shock}$ - solvency capital requirement after shock

$MCR_{\text{after shock}}$ – minimum capital requirement after shock

Grades for small mutual insurance undertakings:

- 1, when $ST_{\text{credit rating}}$ ratio is within the range [0.00%;25.00%)
- 2, when $ST_{\text{credit rating}}$ ratio is within the range [25.00%; 50.00%)
- 3, when $ST_{\text{credit rating}}$ ratio is within the range [50.00%; 100.00%)
- 4, when $ST_{\text{credit rating}}$ ratio $\geq 100.00\%$

Grades for undertakings other than small mutual insurance undertakings:

- 1, when $ST_{\text{credit rating}}$ ratio $\geq 110.00\%$
- 2, when $ST_{\text{credit rating}}$ ratio is within the range [100.00%; 110.00%)
- 3, when $ST_{\text{credit rating}}$ ratio is within the range [0.00%; 100.00%)
- 4, when $ST_{\text{credit rating}}$ ratio $< 0.00\%$

3.1.1.2 Quality of counterparty (credit) risk management

Assessment of quality of a counterparty (credit) risk management is based on findings of the supervisory review process concerning:

- risk management strategy, goals, processes and reporting procedures for counterparty (credit) risk,
- method of implementation by the (re)insurance undertaking an effective identification, measurement, monitoring, management and reporting, on a continuous basis, of counterparty (credit) risk, to which it is or can be exposed,
- measures applied by the (re)insurance undertaking in order to assess counterparty (credit) risk,
- applied counterparty (credit) risk mitigation techniques,
- methods, assumptions and results of stress tests and scenario analysis for counterparty (credit) risk,
- the way of considering counterparty (credit) risk in own risk and solvency assessment or possible justified lack of taking this risk into consideration,
- methods of verification by the (re)insurance undertaking the appropriateness of the external credit assessments from external credit assessment institutions,
- methods of carrying out internal additional assessments of the appropriateness of the external credit assessments for selected investments specified by the (re)insurance undertaking,
- the way how assets have been invested in accordance with the ‘prudent person principle’ regarding the counterparty (credit) risk, especially the way of ensuring an adequate level of security, quality and diversification of the asset portfolio, including the lack of excessive reliance on any particular asset, issuer or group of issuers associated with each other or geographical area,
- determining whether the (re)insurance undertaking has a contingency plan concerning materialisation of counterparty or contagion risk (in the case of an undertaking from a group),

- identified irregularities in counterparty (credit) risk management in the (re)insurance undertaking according to day-to-day supervision, performed on-site inspections or supervisory visits,
- fulfilment of declared by the (re)insurance undertaking activities to improve the quality of counterparty (credit) risk management.

3.1.2 Market risk

Grade_{market risk} =

$$\max \left(1; \min \left(4; \begin{cases} \text{risk exposure} - 0,5 & \text{if quality of management} \in [1.00; 1.75) \\ \text{risk exposure} & \text{if quality of management} \in [1.75; 2.50) \\ \text{risk exposure} + 0,5 & \text{if quality of management} \in [2.50; 3.25) \\ \text{risk exposure} + 1,0 & \text{if quality of management} \in [3.25; 4.00] \end{cases} \right) \right)$$

3.1.2.1 Exposure to market risk

5. Exposure to risk of FX changes

- Undertakings other than small mutual insurance undertaking:

$$RFX = \frac{SCR_{\text{currency}}}{EOF_{SCR}}$$

where:

SCR_{currency} - solvency capital requirement for currency risk

EOF_{SCR} - amount of eligible own funds to meet solvency capital requirement

Grades for undertakings other than small mutual insurance undertakings:

- 1, when RFX ratio $\leq 1.00\%$
- 2, when RFX ratio is within the range (1.00%; 5.00%]
- 3, when RFX ratio is within the range (5.00%; 10.00%]
- 4, when RFX ratio $> 10.00\%$

6. Over-the-counter (OTC) (illiquid) assets ratio

$$OTC = \frac{XT + XL}{I}$$

where:

XT – Solvency II value of assets that are not exchange tradable, excluding the following assets: cash and cash equivalents, deposits, units in collective investment undertakings, shares in related undertakings which are supervised by KNF and its last BION assessment was 1 (other than assets held for index-linked and unit-linked contracts)

XL - Solvency II value of assets that are not listed in a stock exchange, excluding following assets: cash and cash equivalents, deposits, units in collective investment undertakings, shares in related undertakings which are supervised by KNF and its last BION assessment was 1 (other than assets held for index-linked and unit-linked contracts)

I - Solvency II value of investments, including derivatives classified as assets (other than assets held for index-linked and unit-linked contracts)

Grades:

- 1, when OTC ratio $\leq 1.00\%$
- 2, when OTC ratio is within the range (1.00%; 8.00%]
- 3, when OTC ratio is within the range (8.00%; 15.00%]
- 4, when OTC ratio $> 15.00\%$

7. 'Traditional' investment ratio

$$TRI = \frac{TI}{I}$$

where:

TI – Solvency II value of government bonds, corporate bonds, equity, cash and deposits (other than assets held for index-linked and unit-linked contracts)

I - Solvency II value of investments, including derivatives classified as assets (other than assets held for index-linked and unit-linked contracts)

Grades:

- 1, when TRI ratio $\geq 90.00\%$
- 2, when TRI ratio is within the range [85.00%; 90.00%)
- 3, when TRI ratio is within the range [80.00%; 85.00%)
- 4, when TRI ratio $< 80.00\%$

8. Derivatives ratio

- Small mutual insurance undertakings:

$$DR = \frac{ND}{EAL}$$

- Undertakings other than small mutual insurance undertaking:

$$DR = \frac{ND}{EOFS_{SCR}}$$

where:

ND – notional amount of derivatives for effective portfolio management or matching assets and liabilities cash-flows used in the context of matching adjustment portfolio (other than derivatives held in unit linked and index linked contracts)

EOFS_{SCR} – amount of eligible own funds to meet solvency capital requirement

EoAoL – excess of assets over liabilities

Grades:

- 1, when DR ratio = 0.00%
- 2, when DR ratio is within the range (0.00%; 2.00%]
- 3, when DR ratio is within the range (2.00%; 4.00%]
- 4, when DR ratio $> 4.00\%$

Moreover, the grade will be revised:

- 1 class up when the counterparty's credit quality step for all derivatives is not worse than 3,

- 0.5 class up when the counterparty's credit quality step for at least 80% of notional amount of derivatives is not worse than 3.

9. Return of assets

$$ROA = \frac{R}{\sum_{i=1}^5 IA_i \times \frac{1}{5}}$$

where:

R – revenues from the investment, i.e. net gains and losses, unrealized gains and losses, dividends, rents and interest

IA_i – quarter *i* Solvency II value of investments, including derivatives classified as assets

Grades for life (re)insurance undertakings:

- 1, when ROA ratio $\geq 2 \cdot RTB_{10}$
- 2, when ROA ratio is within the range $[RTB_{10}; 2 \cdot RTB_{10})$
- 3, when ROA ratio is within the range $[0,5 \cdot RTB_{10}; RTB_{10})$
- 4, when ROA ratio $< 0,5 \cdot RTB_{10}$

Grades for non-life (re)insurance undertakings:

- 1, when ROA ratio $\geq 2 \cdot RTB_5$
- 2, when ROA ratio is within the range $[RTB_5; 2 \cdot RTB_5)$
- 3, when ROA ratio is within the range $[0,5 \cdot RTB_5; RTB_5)$
- 4, when ROA ratio $< 0,5 \cdot RTB_5$

RTB_n - average return of n-year Treasury bonds on primary market.

10. Assets concentration ratio

- Undertakings other than small mutual insurance undertaking:

$$ACR = \frac{SCR_{concentration}}{EOF_{SCR}}$$

where:

SCR_{concentration} - solvency capital requirement for the market risk concentration

EOF_{SCR} - amount of eligible own funds to meet solvency capital requirement

Grades for undertakings other than small mutual insurance undertakings:

- 1, when ACR ratio $\leq 0.50\%$
- 2, when ACR ratio is within the range $(0.50\%; 2.50\%]$
- 3, when ACR ratio is within the range $(2.50\%; 10.00\%]$
- 4, when ACR ratio $> 10.00\%$

Moreover, the grade will be revised 1 class up when for all related undertaking which are supervised by KNF its last BION assessment was 1.

11. Stress test for selected market risk types

- Small mutual insurance undertakings:

$$ST_{market} = 1 - \frac{EAL_{after\ shock}}{EAL_{before\ shock}}$$

- Undertakings other than small mutual insurance undertaking:

$$ST_{market} = \min\left(\frac{EOF_{SCR-after\ shock}}{SCR_{after\ shock}}; \frac{EOF_{MCR-after\ shock}}{MCR_{after\ shock}}\right)$$

where:

$EoAoL_{after\ shock}$ – excess of assets over liabilities after shock

$EoAoL_{before\ shock}$ – excess of assets over liabilities before shock

$EOF_{SCR-after\ shock}$ – eligible own funds to meet solvency capital requirement after shock

$EOF_{MCR-after\ shock}$ – eligible own funds to meet minimum capital requirement after shock

$SCR_{after\ shock}$ - solvency capital requirement after shock

$MCR_{after\ shock}$ – minimum capital requirement after shock

Grades for small mutual insurance undertakings:

- 1, when ST_{market} ratio is within the range [0.00%; 25.00%)
- 2, when ST_{market} ratio is within the range [25.00%; 50.00%)
- 3, when ST_{market} ratio is within the range [50.00%; 100.00%)
- 4, when ST_{market} ratio $\geq 100.00\%$

Grades for undertakings other than small mutual insurance undertakings

- 1, when ST_{market} ratio $\geq 110.00\%$
- 2, when ST_{market} ratio is within the range [100.00%; 110.00%)
- 3, when ST_{market} ratio is within the range [0.00%; 100.00%)
- 4, when ST_{market} ratio $< 0.00\%$

12. Stress test for interest rate risk

- Undertakings other than small mutual insurance undertaking:

$$ST_{interest\ rate} = \min\left(\frac{EOF_{SCR-after\ shock}}{SCR_{after\ shock}}; \frac{EOF_{MCR-after\ shock}}{MCR_{after\ shock}}\right)$$

where:

$EOF_{SCR-after\ shock}$ – eligible own funds to meet solvency capital requirement after shock

$EOF_{MCR-after\ shock}$ – eligible own funds to meet the minimum capital requirement after shock

$SCR_{after\ shock}$ - solvency capital requirement after shock

$MCR_{after\ shock}$ – minimum capital requirement after shock

Grades for undertakings other than small mutual insurance undertakings:

- 1, when $ST_{\text{interest rate ratio}} \geq 110.00\%$
- 2, when $ST_{\text{interest rate ratio}}$ is within the range $[100.00\%; 110.00\%)$
- 3, when $ST_{\text{interest rate ratio}}$ is within the range $[0.00\%; 100.00\%)$
- 4, when $ST_{\text{interest rate ratio}} < 0.00\%$

13. Cash flows coverage ratio within 3 years period

$$CFR = \min \left(\frac{InvY_1 + L}{CF_1 (1 + r_1)}; \frac{\sum_{i=1}^2 \frac{InvY_i + L}{CF_k}}{\sum_{k=1}^2 \frac{CF_k}{(1 + r_k)^k}}; \frac{\sum_{i=1}^3 \frac{InvY_i + L}{CF_k}}{\sum_{k=1}^3 \frac{CF_k}{(1 + r_k)^k}} \right)$$

where:

$InvY_i$ - Solvency II value of investments for CIC categories $\in \{1, 2, 5, 6, 74, 8\}$ (other than assets held for index-linked and unit-linked contracts) with maturity date in i year after the year of assessment

L - Solvency II value of investments for CIC categories $\in \{71, 72, 73, 75\}$ (other than assets held for index-linked and unit-linked contracts)

r_k – basic risk-free interest rate for PLN for tenor k^2

CF_k – the sum of the expected cash out-flows minus cash in-flows in k -year of projection for insurance other than index-linked and unit-linked contracts, where $CF_k < 0$, k -fraction is not included in calculations

Grades:

- 1, when CFR ratio $\geq 120\%$ or when $CF_1 < 0$ and $CF_2 < 0$ and $CF_3 < 0$
- 2, when CFR ratio is within the range $[80\%; 120\%)$
- 3, when CFR ratio is within the range $[40\%; 80\%)$
- 4, when CFR ratio $< 40\%$

Moreover, the grade will be revised 1 class up when the value of revised ratio is at least 120%, whereas the value of revised ratio is calculated with the assumption that categories $CIC \in \{11, 12, 15, 17, 74\}$ are excluded from components $InvY_i$ and transferred to component L .

3.1.2.2 Quality of market risk management

Assessment of quality of market risk management is based on findings of the supervisory review process concerning:

- risk management strategy, goals, processes and reporting procedures for market risk,
- method of implementation by the (re)insurance undertaking an effective identification, measurement, monitoring, management and reporting, on a continuous basis, of market risk, to which it is or can be exposed,

² Values according to the interest rates term structure published by EIOPA: <https://eiopa.guidelines.europa.eu/regulation-supervision/insurance/solvency-ii-technical-information/risk-free--rate-term-structures>.

- measures applied by the (re)insurance undertaking in order to assess the market risk,
- used market risk mitigation techniques,
- methods, assumptions and results of stress tests and scenario analysis for market risk,
- the way of considering market risk in own risk and solvency assessment or possible justified lack of taking this risk into consideration,
- the way how the (re)insurance undertaking has fulfilled duties resulting from EMIR3,
- the way of investing assets according to the "prudent person principle" with regard to the market risk, in particular:
 - ensuring a relevant level of safety, quality, liquidity, profitability and diversification of the assets portfolio,
 - ensuring that the assets portfolio corresponds to the nature and duration of insurance and reinsurance liabilities,
 - ensuring that the (re)insurance undertaking, on a continuous basis, monitors market risk in assets management,
 - method of risk management related to investment in derivatives,
 - ensuring prudent level of investment in assets not admitted to trading on a regulated financial market,
- identified irregularities in market risk management in the (re)insurance undertaking according to day-to-day supervision, performed on-site inspections or supervisory visits,
- fulfilment of declared by the (re)insurance undertaking activities to improve the quality of counterparty (credit) risk management.

3.1.3 Underwriting risk

Grade_{underwriting risk}

$$= \max \left(1; \min \left(4; \begin{cases} \text{risk exposure} - 0,5 & \text{if quality of management} \in [1.00; 1.75) \\ \text{risk exposure} & \text{if quality of management} \in [1.75; 2.50) \\ \text{risk exposure} + 0,5 & \text{if quality of management} \in [2.50; 3.25) \\ \text{risk exposure} + 1,0 & \text{if quality of management} \in [3.25; 4.00] \end{cases} \right) \right)$$

3.1.3.1 Exposure to underwriting risk

14. Increase of net claims ratio (life (re)insurance undertakings)

$$INCR = \sum_{i=-3}^0 \frac{NCR_i - NCR_{i-1}}{NCR_{i-1}} \cdot w_i$$

³ Regulation (EU) no 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories

$$NCR_i = \frac{C_i - NCOTP_i}{NEP_i}$$

where:

C_i - claims for the year i

NEP_i – net earned premium for the year i

$NCOTP_i$ – net changes in other technical provisions for the year i

$$w_i = \begin{cases} \frac{4}{10} & \text{when } i = 0 \\ \frac{3}{10} & \text{when } i = -1 \\ \frac{2}{10} & \text{when } i = -2 \\ \frac{1}{10} & \text{when } i = -3 \end{cases}, \text{ or}$$

$$w_i = \begin{cases} \frac{3}{6}, & \text{when } i = 0 \\ \frac{2}{6}, & \text{when } i = -1, \text{ if } =NCR_{-4}=0, \text{ or} \\ \frac{1}{6}, & \text{when } i = -2 \end{cases}$$

$$w_i = \begin{cases} \frac{2}{3}, & \text{when } i = 0 \\ \frac{1}{3}, & \text{when } i = -1 \end{cases}, \text{ if } =NCR_{-4}=0 \text{ and } =NCR_{-3}=0, \text{ or}$$

$w_0 = 1$, if $=NCR_{-4}=0$, $NCR_{-3}=0$ and $NCR_{-2}=0$,

If $NCR_{i-1} = 0$, the i -element of the sum is not taken into account.

Grades:

- 1, when INCR ratio $\leq 5.00\%$ or $NCR_{-1} = NCR_{-2} = NCR_{-3} = NCR_{-4} = 0$
- 2, when INCR ratio is within the range (5.00%; 15.00%]
- 3, when INCR ratio is within the range (15.00%; 25.00%]
- 4, when INCR ratio $> 25.00\%$

15. Acquisition expenses ratio

$$ACE = \frac{AC}{GEP}$$

where:

AC – acquisition expenses

GEP - gross earned premium

Grades for life (re)insurance undertakings:

- 1, when ACE ratio $\leq 10.00\%$
- 2, when ACE ratio is within the range (10.00%; 20.00%]
- 3, when ACE ratio is within the range (20.00%; 40.00%]
- 4, when ACE ratio $> 40.00\%$

Grades for non-life (re)insurance undertakings:

- 1, when ACE ratio $\leq 15.00\%$

- 2, when ACE ratio is within the range (15.00%; 25.00%]
- 3, when ACE ratio is within the range (25.00%; 40.00%]
- 4, when ACE ratio > 40.00%

16. Administrative expenses ratio

$$ADE = \frac{AD}{GWP}$$

where:

AD – administrative expenses

GWP - gross written premium

Grades:

- 1, when ADE ratio $\leq 5.00\%$
- 2, when ADE ratio is within the range (5.00%; 10.00%]
- 3, when ADE ratio is within the range (10.00%; 25.00%]
- 4, when ADE ratio > 25.00%

17. Net combined ratio (non-life (re)insurance undertakings)

$$NCR = \frac{C + OE}{NEP}$$

where:

C - claims

OE - operational expenses

NEP – net earned premium

Grades:

- 1, when NCR ratio $\leq 100.00\%$
- 2, when NCR ratio is within the range (100.00%; 105.00%]
- 3, when NCR ratio is within the range (105.00%; 110.00%]
- 4, when NCR ratio > 110.00%

18. Stress test for reserve risk⁴

- Small mutual insurance undertakings:

$$ST_{TP} = 1 - \frac{EOAoL_{after\ shock}}{EOAoL_{before\ shock}}$$

- Undertakings other than small mutual insurance undertaking:

$$ST_{TP} = \min\left(\frac{EOF_{SCR-after\ shock}}{SCR_{after\ shock}}; \frac{EOF_{MCR-after\ shock}}{MCR_{after\ shock}}\right)$$

⁴ For non-life (re)insurance undertakings a scenario considering a payment of claims to close relatives of the victim in a vegetative state is used.

where:

$EoAoL_{\text{after shock}}$ – excess of assets over liabilities after shock

$EoAoL_{\text{before shock}}$ – excess of assets over liabilities before shock

$EOF_{\text{SCR-after shock}}$ – eligible own funds to meet solvency capital requirement after shock

$EOF_{\text{MCR-after shock}}$ – eligible own funds to meet minimum capital requirement after shock

$SCR_{\text{after shock}}$ – solvency capital requirement after shock

$MCR_{\text{after shock}}$ – minimum capital requirement after shock

Grades for small mutual insurance undertakings:

- 1, when ST_{TP} ratio is within the range [0.00%; 25.00%)
- 2, when ST_{TP} ratio is within the range [25.00%; 50.00%)
- 3, when ST_{TP} ratio is within the range [50.00%; 100.00%)
- 4, when ST_{TP} ratio $\geq 100.00\%$

Grades for undertakings other than small mutual insurance undertakings:

- 1, when ST_{TP} ratio $\geq 110.00\%$
- 2, when ST_{TP} ratio is within the range [100.00%; 110.00%)
- 3, when ST_{TP} ratio is within the range [0.00%; 100.00%)
- 4, when ST_{TP} ratio $< 0.00\%$

3.1.3.2 Quality of underwriting risk management

Assessment of quality of underwriting risk management is based on findings of the supervisory review process concerning:

- risk management strategy, goals, processes and reporting procedures for underwriting risk,
- method of implementation by the (re)insurance undertaking an effective identification, measurement, monitoring, management and reporting, on a continuous basis, of underwriting risk, to which it is or can be exposed,
- measures applied by the (re)insurance undertaking in order to assess underwriting risk,
- used risk mitigation techniques,
- methods, assumptions, results of stress tests and scenario analysis for underwriting risk,
- the way of considering underwriting risk in own risk and solvency assessment or possible justified lack of taking this risk into consideration,
- adequacy of Solvency II and statutory technical provisions,
- methods and assumptions used for the calculation of Solvency II and statutory technical provisions,
- premium adequacy,
- identified irregularities in underwriting risk management in the (re)insurance undertaking according to day-to-day supervision, performed on-site inspections or supervisory visits,
- fulfilment of declared by the (re)insurance undertaking activities to improve the quality of underwriting risk management.

3.1.4 Operational risk

Grade_{operational risk} =

$$\max \left(1; \min \left(\max \left(\begin{cases} \text{risk exposure} - 0,5 & \text{if quality of management} \in [1.00; 1.75) \\ \text{risk exposure} & \text{if quality of management} \in [1.75; 2.50) \\ \text{risk exposure} + 0,5 & \text{if quality of management} \in [2.50; 3.25) \\ \text{risk exposure} + 1,0 & \text{if quality of management} \in [3.25; 4.00] \end{cases} ; Adj_{operational risk} \right); 4 \right) \right)$$

19. Level of complaints against insurance undertaking

- Life undertakings

$$LC = \frac{\frac{NC}{NP}}{\frac{NC_{life}}{NP_{life}}}$$

- Non-life insurance undertakings

$$LC = \frac{\frac{NC}{NAR}}{\frac{NC_{non-life}}{NAR_{non-life}}}$$

where:

NC - number of complaints against the insurance undertaking

NC_{life} – number of complaints against all life insurance undertakings

NC_{non-life} – number of complaints against all non-life insurance undertakings

NP - number of policyholders

NP_{life} - number of policyholders insured in all life insurance undertakings

NAR - number of insured risks active during the year

NAR_{non-life} - number of insured risks active during the year in all non-life insurance undertaking

Grades:

- 1, when LC ratio ≤ 25.00%
- 2, when LC ratio is within the range (25.00%; 100.00%]
- 3, when LC ratio is within the range (100.00%; 400.00%]
- 4, when LC ratio > 400.00%

20. Alternative valuation method ratio

$$AVMR = \frac{L3}{IAL}$$

where:

L3 – Solvency II value of investments for which alternative valuation methods are used (in case of derivatives presented as liabilities, absolute Solvency II values are considered), excluding deposits included in category CIC 7

IAL - Solvency II value of investments (in case of derivatives classified as liabilities the absolute Solvency II value are considered)

Grades:

- 1, when AVMR ratio $\leq 2.00\%$
- 2, when AVMR ratio is within the range (2.00%; 15.00%]
- 3, when AVMR ratio is within the range (15.00%; 60.00%]
- 4, when AVMR ratio $> 60.00\%$

21. IT systems

Assessment of IT systems is an expert judgement based on findings of the supervisory review process, and it takes into account at least the following issues:

- Does the (re)insurance undertaking have documentation regarding IT systems, including policies/procedures ensuring continuity acting of IT systems and information security policy?
- Are IT systems compatible, reliable, safe, and adequate to the scale and profile of activity?
- Is availability, integrity and confidentiality of information processed by IT systems ensured?
- Is there an IT environment security management system in the (re)insurance undertaking?
- Does the (re)insurance undertaking keep the register of security incidents in IT environment and if so, is this register subject to appropriate analysis on the basis of which actions are taken in the (re)insurance undertaking to improve areas indicated in the report?
- Have there been any incidents related to the violation of the security of IT environment in the (re)insurance undertaking and if so, how the (re)insurance undertaking react to them?
- Have there been any material errors in functioning of IT systems leading to incorrect data generating, in the assessed period and if so, how many times?
- Have there been any IT systems failures (interruptions) in the assessed period and if so, how many failures have a significant influence on the (re)insurance undertaking activity?
- Does the (re)insurance undertaking classified IT systems and data which are processed by them, taking into account essential security level for those systems and data?
- Is the (re)insurance undertaking currently implementing new IT systems which are essential for the (re)insurance undertaking's activity?
- Does the (re)insurance undertaking use solutions delivered through Cloud Computing model and if so, what IT services are provided in Cloud Computing model and does the (re)insurance undertaking comply with the supervisory authority guidelines regarding this area?
- Does the (re)insurance undertaking manage IT systems changes?
- Are IT systems and software of IT infrastructure components in the (re)insurance undertaking updated on an on-going basis after the updates/corrections have been made available, and are IT systems or IT infrastructure components which are used in the (re)insurance undertaking supported by producers?

- Are the provisions concerning control of quality and safety of received IT services contained in outsourcing contracts?
- Does the (re)insurance undertaking comply with the guidelines/recommendations of the supervisory authority regarding the IT systems or if it does not comply with them, is the justification provided by it, how it intends to achieve the objectives for which the supervisory authority issued recommendations/guidelines, sufficient enough?
- Have there been any reservations about IT systems used in the (re)insurance undertaking according to day-to-day supervision, performed on-site inspections or supervisory visits?
- Has the (re)insurance undertaking fulfilled declared actions intended to mitigate risks related to the assessed area?

22. Relationship with customers

Assessment of relationship with customers is an expert judgement based on findings of the supervisory review process, and it takes into account at least the following issues:

- Does the (re)insurance undertaking have in place a clear specified, up-to-date, complete, applied in practice and compliant with the law documentation regarding relationship with customers?
- Is the number of complaints and claims material taking into account the scale and profile of operations of the (re)insurance undertaking?
- Is there a designated person or organization unit in the (re)insurance undertaking which task is to reliably investigate and deal with claims, as well as identifying and analysing irregularities, in order to take proper action to limit the situations that would cause them in the future?
- Does the (re)insurance undertaking consider the possibility of setting disputes in a conciliatory manner and give customers information regarding this process?
- Has the supervisory authority/Office of Competition and Consumer Protection imposed a fine on the (re)insurance undertaking in the area of relationship with customers e.g. in connection with the untimely claims settlement or too high fees?
- Has the President of Office of Competition and Consumer Protection obliged the (re)insurance undertaking, by a decision during the course of the proceedings of Office of Competition and Consumer Protection, to fulfil the undertaken obligations to begin or abandon specific actions aiming at ending the breach or removing the effects of the breach of general consumer interests?
- Does the (re)insurance undertaking monitor the customer relationship process and the claims handling process?
- Does the (re)insurance undertaking provide clients in the General Insurance Terms and information materials with accurate and transparent information?
- Before the contract is concluded by the client, are all necessary information about the nature and characteristics of the product available to him/her, which are relevant to the client's decision (including provisions of a contract together with contract templates and relevant information about the contract contained in other documents)?

- Does the (re)insurance undertaking ensure adequate control (including legal control) in the scope of publication and conveying of marketing and information materials to clients (including the General Insurance Terms)?
- Does the (re)insurance undertaking ensures control mechanisms regarding secure processing of data acquired from customers (preventing its unauthorized use), including mechanism when it cooperate with insurance agents?
- Have there been any reservations to claim handling process?
- Does the (re)insurance undertaking implemented policies or procedures to meet requirements of Regulation (EU) No 1286/2014 of the European Parliament and of the Council on key information documents for packaged retail and insurance-based investment products (PRIIPs)?
- Does the (re)insurance undertaking comply with the guidelines/recommendations of the supervisory authority regarding the relationship with customers (especially regarding product management system) or if it does not comply with them, is the justification provided by it, how it intends to achieve the objectives for which the supervisory authority issued recommendations/guidelines, sufficient enough?
- Have there been any reservations about customer service according to day-to-day supervision, performed on-site inspections or supervisory visits?
- Has the (re)insurance undertaking fulfilled declared actions intended to mitigate risks related to the assessed area?

23. Legal risk

Assessment of legal risk is an expert judgement, based on findings of the supervisory review process, and it takes into account at least the following issues:

- Does the (re)insurance undertaking prepare its product offer in order to minimize the risk of sustaining losses in case of changes in the law?
- Does the (re)insurance undertaking monitor and analyse changes in legal/market regulations affecting the product offer?
- Does the (re)insurance undertaking ensure proper legal control regarding the General Insurance Terms in the way allowing efficient avoidance of abusive clauses during the process of development product and ensuring that provisions of the General Insurance Terms will be unequivocal, transparent and understandable?
- Has the (re)insurance undertaking implemented procedures ensuring protection against frauds/money laundering?
- Have there been any cases of frauds/money laundering and if so, what actions has been taken by the (re)insurance undertaking?
- Have changes in law/legal regulations (if they have occurred) had negative impact on insurance contracts feasibility and if so, has the (re)insurance undertaking taken adequate actions to minimize such risk in the future?
- Have there been cases of late preparation or adoption of internal regulations?
- Is the (re)insurance undertaking a party in court case and if so, how many lawsuits ended with an adjudgement of a whole or a part of a claim from the insurance undertaking , or of a court or out-of-court settlement for the (re)insurance undertaking?

- Are there any reservations about quality of formal - legal documentation?
- Has the (re)insurance undertaking fulfilled declared actions intended to mitigate risks related to the assessed area?
- Have there been any reservations about legal risk according to day-to-day supervision, performed on-site inspections or supervisory visits?

3.1.4.1 Quality of operational risk management

Assessment of quality of operational risk management is based on findings of the supervisory review process concerning:

- risk management strategy, goals, processes and reporting procedures for operational risk, including possessing of proper database of operational events (the register of operational incidents),
- method of implementation by the (re)insurance undertaking an effective identification, measurement, monitoring, management and reporting, on a continuous basis, of operational risk, to which it is or can be exposed,
- measures applied by the (re)insurance undertaking in order to assess the risk,
- used operational risk mitigation techniques,
- methods, assumptions and results of stress tests and scenario analysis for operational risk,
- application of adequate models of valuation assets and liabilities, including technical provisions,
- application of adequate models in premiums calculation,
- application by the (re)insurance undertaking models for risk management (e.g. in respect of own risk and solvency assessment)
- assessment of quality of models risk management for models used for valuation assets and liabilities, own risk and solvency assessment, premiums calculation, as well as the capital requirements (when the (re)insurance undertaking uses internal model),
- the way of considering operational risk in own risk and solvency assessment or possible justified lack of taking this risk into consideration.
- identified irregularities in operational risk management in the (re)insurance undertaking according to day-to-day supervision, performed on-site inspections or supervisory visits,
- fulfilment of declared by the (re)insurance undertaking activities to improve the quality of operational risk management.

3.1.4.2 Adjustment of operational risk grade

1. If a fine has been imposed on a (re)insurance undertaking by a supervisory authority or Office of Competition and Consumer Protection concerning relationship with customers, operational risk grade cannot be better than 1.75.
2. If the (re)insurance undertaking has not fulfilled actions intended to mitigate risks resulting from significant areas of operational risk, operational risk grade cannot be better than 2.50.
3. If the relationship with customers' grade is at least 3.00, operational risk grade cannot be better than this grade.

3.2 Capital adequacy assessment

$$Grade_{capital\ adequacy} = \max \left(\left(0.7 * Assessment_{quantitative} + 0.3 * Assessment_{qualitative} \right); \max\{adjustment_{capital\ adequacy\ grade}\} \right)$$

3.2.1 Quantitative assessment of capital adequacy

24. Solvency ratio

- Small mutual insurance undertakings:

SR=excess of assets over liabilities

- Undertakings other than small mutual insurance undertakings:

$$SR = \min\left(\frac{EOF_{SCR}}{SCR}; \frac{EOF_{MCR}}{MCR}\right)$$

where:

SCR - solvency capital requirement

EOF_{SCR} - eligible own funds to meet solvency capital requirement

MCR - minimum capital requirement

EOF_{MCR} - eligible own funds to meet the minimum capital requirement

Grades for small mutual insurance undertakings:

- 1, when SR ratio ≥ 0.00
- 4, when SR ratio < 0.00

Grades for undertakings other than small mutual (re)insurance undertakings (life):

- 1, when SR ratio $\geq 175.00\%$
- 2, when SR ratio is within the range [110.00%; 175.00%)
- 3, when SR ratio is within the range [100.00%; 110.00%)
- 4, when SR ratio $< 100.00\%$

Grades for undertakings other than small mutual (re)insurance undertakings (non-life):

- 1, when SR ratio $\geq 150.00\%$
- 2, when SR ratio is within the range [110.00%; 150.00%)
- 3, when SR ratio is within the range [100.00%; 110.00%)
- 4, when SR ratio $< 100.00\%$

25. Number of capital requirements breaches over the last 3 years

Results from 11 last quarters (without the reporting period under the assessment) are subject to the assessment, whereas in case of data for the 4th quarter, data from the annual statement is considered.

$$CRB = \sum_{t=-11}^{-1} m_t \cdot \omega_t$$

$$\omega_t = \begin{cases} 1, & \text{when } t \in [-11; -8] \\ 2, & \text{when } t \in [-7; -4] \\ 3, & \text{when } t \in [-3; -1] \end{cases}$$

- Small mutual insurance undertakings:

$$m_t = \begin{cases} 1 & SR_t < 0 \\ 0 & \text{otherwise} \end{cases}$$

$$SR_t = \begin{cases} \text{Excess of assets over liabilities, when } t \in [-7; -1] \\ \text{Equity, when } t \in [-11; -8] \end{cases}$$

- Undertakings other than small mutual insurance undertaking:

$$m_t = \begin{cases} 1 & \text{when } SR_t < 100,00\% \\ 0 & \text{when } SR_t \geq 100,00\% \end{cases}$$

$$SR_t = \begin{cases} \min\left(\frac{EOF_{SCR}}{SCR}, \frac{EOF_{MCR}}{MCR}\right) & \text{when } t \in [-7; -1] \\ \min\left(\frac{\text{Own funds}}{\text{Solvency margin}}, \frac{\text{Own funds}}{\text{Guarantee fund}}\right) & \text{when } t \in [-11; -8] \end{cases}$$

where:

SCR - capital solvency requirement

EOF_{SCR} - eligible own funds to meet solvency capital requirement

MCR - minimum capital requirement

EOF_{MCR} - eligible own funds to meet the minimum capital requirement

Grades:

- 1, when CRB ratio = 0
- 2, when CRB ratio = 1 or 2
- 3, when CRB ratio = 3 or 4
- 4, when CRB ratio ≥ 5

26. Coverage of capital requirements by the best quality own funds

- Undertakings other than small mutual insurance undertaking:

$$CCR_{tier1} = \frac{EOF_{tier1}}{\max(SCR; MCR)}$$

where:

EOF_{tier1} - eligible basic own funds tier 1

SCR – solvency capital requirement

MCR – minimum capital requirement

Grades for undertakings other than small mutual insurance undertakings:

- when max(SCR, MCR)=SCR:
 - 1, when CCR_{tier1} ratio ≥ 100.00%
 - 2, when CCR_{tier1} ratio is within the range [75%; 100%)
 - 3, when CCR_{tier1} ratio is within the range [60%; 75%)
 - 4, when CCR_{tier1} ratio < 60%

- when $\max(\text{SCR}, \text{MCR}) = \text{MCR}$:
 - 1, when $\text{CCR}_{\text{tier1}}$ ratio $\geq 120.00\%$
 - 2, when $\text{CCR}_{\text{tier1}}$ ratio is within the range $[100\%; 120\%)$
 - 3, when $\text{CCR}_{\text{tier1}}$ ratio is within the range $[90\%; 100\%)$
 - 4, when $\text{CCR}_{\text{tier1}}$ ratio $< 90\%$

27. Share of expected profits included in future premiums in eligible own funds

- Undertakings other than small mutual insurance undertaking:

$$EPiFP = \frac{EPiFP' \cdot (1 - RTP)}{EOF_{SCR}}$$

$$RTP = \max\left(\frac{\max(0; RR)}{BE + TPW}; 0\right)$$

where:

$EPiFP'$ – expected profits included in future premiums – total

RR - reinsurance recoverables

BE - best estimate

TPW - technical provisions calculated as a whole

EOF_{SCR} – eligible own funds to meet solvency capital requirement

Grades for undertakings other than small mutual insurance undertakings:

- 1, when $EPiFP$ ratio $\leq 5.00\%$
- 2, when $EPiFP$ ratio is within the range $(5.00\%; 15.00\%]$
- 3, when $EPiFP$ ratio is within the range $(15.00\%; 60.00\%]$
- 4, when $EPiFP$ ratio $> 60.00\%$

Moreover, the grade will be revised 1 class up in the case when solvency ratio without expected profits included in future premiums (SR_{EPiFP}) is at least 175% in the case of the life (re)insurance undertaking or is at least 150% in the case of the non-life (re)insurance undertaking:

$$SR_{EPiFP} = \min\left(\frac{EOF_{SCR} - EPiFP'}{SCR}; \frac{EOF_{MCR} - EPiFP'}{MCR}\right)$$

28. Level of financial plan underestimation⁵ with respect to solvency ratio

- Undertakings other than small mutual insurance undertaking:

$$PSR = \frac{SR}{SR_{plan}}$$

⁵Data from the first financial plan submitted by the (re)insurance undertaking to the supervisory authority indicated as a plan to be executed is taken into account. In case of merger of (re)insurance undertakings, financial plans of merged undertakings are taken into account respectively.

where:

SR - solvency ratio

SR_{plan} – forecasted solvency ratio reported in the financial plan

Grades for undertakings other than small mutual insurance undertakings:

- 1, when PSR ratio $\geq 95.00\%$
- 2, when PSR ratio is within the range [80%; 95%)
- 3, when PSR ratio is within the range [60%; 80%)
- 4, when PSR ratio $< 60.00\%$

29. Level of financial plan underestimation³ with respect to the amount of own funds to meet SCR

- Undertakings other than small mutual insurance undertaking:

$$POF = \frac{AOF}{AOF_{plan}}$$

where:

AOF – available own funds

AOF_{plan} – forecasted available own funds reported in the financial plan

Grades for undertakings other than small mutual insurance undertakings:

- 1, when POF $\geq 95.00\%$
- 2, when POF ratio is within the range [80%; 95%)
- 3, when POF ratio is within the range [60%; 80%)
- 4, when POF $< 60.00\%$

3.2.2 Qualitative assessment of the capital adequacy

The qualitative assessment of the capital adequacy is based on findings of the supervisory review process concerning:

- goals, principles and processes applied by the (re)insurance undertakings to manage their own funds,
- structure, level and quality of own funds,
- quality of calculations of the minimum capital requirement and solvency capital requirement,
- identification of any significant risks which have not been fully included in calibration of the solvency capital requirement according to Article 249 (6) of the Act, but should be taken into account according to this requirement, as well as the method of their management by the (re)insurance undertakings,
- capital management and medium-term capital management plan,
- fulfilment of information obligations referred to in Article 312 of the Act,
- the risk of non-compliance with solvency capital requirement or minimum capital requirement,

- results of own risk and solvency assessment, taking into account whether own risk and solvency assessment:
 - is prospective,
 - takes into account strategy, business model, risk appetite and tolerance limits,
 - considers all significant risks to which the (re)insurance undertaking is exposed (including risks not included in the solvency capital requirement and the emerging risks)
 - considers internal and external factors,
 - considers impact of risk mitigation techniques,
- assessment of overall solvency needs, in particular:
 - use of adequate methods designed by the (re)insurance undertaking,
 - appropriate connection with applied own risks identification,
 - conducting stress tests and scenarios appropriate for risk profile of the (re)insurance undertaking,
 - defining the needed capital for identified risks in the business planning time horizon or other methods for their management,
 - possession by the (re)insurance undertaking of own funds to meet own solvency needs,
- assessment of continuous compliance with solvency capital requirement, minimum capital requirement and the requirements related to technical provisions, in particular:
 - methods and activities taken to ensure continuous compliance,
 - using real, severe, prospective scenarios and stress tests,
 - forecasts of capital requirements in the basic scenario and at least one adverse alternative scenario,
 - forecasts of technical provisions and activities taken to ensure their adequacy,
 - possible actions undertaken in adverse scenarios, their effectiveness and feasibility,
 - taking reverse stress tests into consideration,
- assessment of risk profile deviation from the assumptions underlying the solvency capital requirement, in particular:
 - the scope of analysis and applied methods,
 - identification of risks not covered by capital requirement,
 - estimating impact of deviations from assumptions and taking possible further actions.
- identified irregularities in capital adequacy in the (re)insurance undertaking according to day-to-day supervision, performed on-site inspections or supervisory visits,
- fulfilment of declared by the (re)insurance undertaking activities to improve the quality of capital adequacy.

3.2.3 Adjustment of the capital adequacy grade

1. If the (re)insurance undertaking has incorrectly calculated own funds, then the capital adequacy grade cannot be better than 2.00.
2. If capital adequacy qualitative grade is 4.00, then the capital adequacy grade cannot be better than 3.00.
3. If the (re)insurance undertaking has not fulfilled recovery plan referred to in Article 312 (2) of the Act, then the capital adequacy grade cannot be better than 3.50.
4. If the (re)insurance undertaking has not fulfilled short-term finance scheme referred to in Article 313 (2) of the Act, then the capital adequacy grade is 4.00.
5. If the (re)insurance undertaking fails to fulfil at least once a year the requirement regarding own funds to meet capital requirements, then the capital adequacy grade is 4.00.

3.3 Governance assessment

$$Grade_{governance} = \max \left(\sum_i w_i * Grade_i; \max\{adjustment_{governance\ grade}\} \right)$$

where:

i – area of governance assessment, i.e. business model, ownership, general information on the system of governance, key persons, risk management system, internal control system, internal audit function, actuarial function, outsourcing, reporting, relationship with supervisory authority

w_i – weight of governance assessment area determined in Appendix 1

$Grade_i$ – grade for a particular area within governance assessment

30.	Business model
-----	----------------

30.1.	Return on equity
-------	------------------

$$ROE = \frac{NFR}{EQ_{average\ value\ for\ the\ last\ 5\ quarters}}$$

where:

NFR - net financial result

$EQ_{average\ value\ from\ the\ last\ 5\ quarters}$ – average value of the equity for the last 5 quarters

Grades for joint-stock companies:

- 1, when ROE ratio $\geq 12.00\%$
- 2, when ROE ratio is within the range $[5.00\%; 12.00\%)$
- 3, when ROE ratio is within the range $[0.00\%; 5.00\%)$
- 4, when ROE ratio $< 0.00\%$

Grades for mutual insurance undertakings:

- 1, when ROE ratio $\geq 4.00\%$
- 2, when ROE ratio is within the range $[1.50\%; 4.00\%)$
- 3, when ROE ratio is within the range $[0.00\%; 1.50\%)$
- 4, when ROE ratio $< 0.00\%$

30.2. Return on underwriting activity

$$RUA = \frac{TR}{NEP}$$

where:

TR - technical result

NEP – net earned premium

Grades for life (joint-stock companies):

- 1, when RUA ratio $\geq 10.00\%$
- 2, when RUA ratio is within the range $[4.00\%; 10.00\%)$
- 3, when ratio RUA ratio is within the range $[0.00\%; 4.00\%)$
- 4, when RUA ratio $< 0.00\%$ or NEP < 0

Grades for life (mutual insurance undertakings):

- 1, when RUA ratio $\geq 4.00\%$
- 2, when RUA ratio is within the range $[2.00\%; 4.00\%)$
- 3, when RUA ratio is within the range $[0.00\%; 2.00\%)$
- 4, when RUA ratio $< 0.00\%$ or NEP < 0

Grades for non-life (joint-stock companies):

- 1, when RUA ratio $\geq 8.00\%$
- 2, when RUA ratio is within the range $[0.00\%; 8.00\%)$
- 3, when RUA ratio is within the range $[-2.00\%; 0.00\%)$
- 4, when RUA ratio $< -2.00\%$ or NEP < 0

Grades for non-life (mutual insurance undertakings):

- 1, when RUA ratio $\geq 3.00\%$
- 2, when RUA ratio is within the range $[0.00\%; 3.00\%)$
- 3, when RUA ratio is within the range $[-2.00\%; 0.00\%)$
- 4, when RUA ratio $< -2.00\%$ or NEP < 0

30.3. Share of insurance classes with technical profits

- Life (re)insurance undertakings

$$CTP = \sum_{i=1}^6 \frac{GTP_i}{GTP} PTR_i$$

- Non-life insurance undertakings

$$CTP = \sum_{i=1}^{19} \frac{GWP_i}{GWP} PTR_i$$

- Non-life reinsurance undertakings

$$CTP = \sum_{i=1}^{10} \frac{GWP_i}{GWP} PTR_i$$

where:

GTP_i – gross technical provisions in the insurance group/accounting class i . In case of accepted reinsurance all classes are considered as one group.

GWP_i – gross written premium in the insurance group/accounting class i . In case of accepted reinsurance all classes are considered as one group.

GTP – gross technical provisions

GWP – gross written premium

$$PTR_i = \begin{cases} 1, & \text{when } TR_i > 0,00 \\ 0, & \text{when } TR_i \leq 0,00 \end{cases}$$

TR_i – technical result from i insurance group/accounting class

Grades:

- 1, when CTP ratio $\geq 90.00\%$
- 2, when CTP ratio is within the range $[30.00\%; 90.00\%)$
- 3, when CTP ratio is within the range $[10.00\%; 30.00\%)$
- 4, when CTP ratio $< 10.00\%$

30.4. Financial plan deviation with respect to gross written premium⁶

$$FPGWP = \frac{GWP}{GWP_{plan}}$$

where:

GWP – gross written premium

GWP_{plan} – forecasted gross written premium reported in the financial plan

Grades:

- 1, when $90.00\% \leq FPGWP \leq 110.00\%$
- 2, when $80.00\% \leq FPGWP < 90.00\%$ or when $110.00\% < FPGWP \leq 120.00\%$
- 3, when $60.00\% \leq FPGWP < 80.00\%$ or when $120.00\% < FPGWP \leq 180.00\%$
- 4, in other case

⁶ Data from the first financial plan submitted by the (re)insurance to the supervision authority indicated as a plan to be executed is taken into account. In case of merger of (re)insurance undertakings, financial plans of merged undertakings are taken into account respectively.

30.5. Financial plan deviation with respect to net financial result⁴

$$FPNFR = \frac{NFR - NFR_{plan}}{|NFR_{plan}|}$$

where:

NFR – net financial result

NFR_{plan} – forecasted net financial result reported in the financial plan

Grades:

- 1, when FPNFR ratio is within the range [-10.00%; 20.00%]
- 2, when FPNFR ratio is within the range (20.00%; 100.00%) or
FPNFR ratio is within the range [-50.00%; -10.00%]
- 3, when FPNFR ratio is within the range (100.00%; 500.00%) or
FPNFR ratio is within the range [-250.00%; -50.00%]
- 4, when FPNFR ratio > 500.00% or FPNFR ratio < -250%

30.6. Qualitative assessment of business model

The qualitative assessment of the business model is an expert judgement based on the findings of the supervisory review process, and it takes into account at least the following issues:

- Is the current business model of the (re)insurance undertaking stable?
 - Which type of activity brings profits to the (re)insurance undertaking and why?
 - Is the product portfolio properly diversified?
 - Does the product portfolio ensure profitability of operations?
 - Does the (re)insurance undertaking offer complex, complicated, and risk-bearing insurance products?
 - What are the product distribution channels and are they properly diversified (internet, banking, telephone, agency, brokerage)?
 - Can the (re)insurance undertaking's activity be profitable, taking into account the market competition, economic factors and market trends?
 - What are key internal and external factors and risks that have or may have influence on stability of operation of the (re)insurance undertaking?
- Is the strategy of the (re)insurance undertaking in the business planning time horizon adequate and achievable?
 - Has the strategy been documented and developed in consultation with shareholders and approved by the Supervisory Board or General Meeting?
 - Is the strategy clearly defined and consistent and does it cover strategic goals for material areas of operations of the (re)insurance undertaking?
 - What changes to the activities does the (re)insurance undertaking plan?
 - Are the strategy and financial plans realistic, taking into account external and internal factors?

- Does the strategy and financial plans take into account possible risks that may have influence on stability of operation of the (re)insurance undertaking?
 - Are the strategy and financial plans consistently executed with the knowledge and support of shareholders, in a way ensuring financial stability of the (re)insurance undertaking?
- Does the (re)insurance undertaking perform technical analyses of the structure and sales profitability of the products and if so, how often?
- Does the (re)insurance undertaking perform analyses of the profitability of the products for individual distribution channels?
- Has the (re)insurance undertaking cooperate with entities including in the KNF's public warnings list?
- What is the quality of products offered (General Terms and Conditions of Insurance)?
- What is the quality of cooperation with insurance agents, including:
 - does the (re)insurance undertaking have remuneration policies of insurance agents and procedures regarding the continuity fulfilling legal requirements by insurance agents and persons performing agency activities including proper requirements?
 - does the (re)insurance undertaking oversee a duty of being informed by insurance agents within the period determined by the law about changes concerning their business activity as well as about data concerning persons performing agency activities?
 - is the remuneration of the insurance agent determined in accordance with the law and the requirements of the distribution guidelines?
 - does the (re)insurance undertaking conduct training for agents and persons providing agency activities?
 - does the (re)insurance undertaking comply with the provisions prohibiting payment to the entity who insures?
- Does the (re)insurance undertaking comply with the guidelines/recommendations of the supervisory authority regarding the business model or if it does not comply with them, is the justification provided by it, how it intends to achieve the objectives for which the supervisory authority issued recommendations/guidelines, sufficient enough?
- Have there been any reservations about the business model (including strategy) of the (re)insurance undertaking resulting from the day-to-day supervision, performed on-site inspections or supervisory visits?
- Has the (re)insurance undertaking fulfilled declared actions intended to mitigate risks related to the assessed area?

31. Ownership

Assessment of the ownership is an expert judgement based on the findings of the supervisory review process, and it takes into account at least the following issues:

- Is the owner of the (re)insurance undertaking financially stable (e.g. taking into account rating) and does the owner provide substantive and capital support?

- Does the owner monitor operations of the (re)insurance undertaking on an on-going basis and in a proper way?
- Does the (re)insurance undertaking have in place a system of on-going reporting to the owner?
- Does the (re)insurance undertaking ensure that its shareholders have equal and adequate access to information?
- Does the owner properly react to capital needs of the (re)insurance undertaking?
- Are the investors commitments fulfilled and if so, how?
- Does the shareholding structure make it possible to effectively manage the (re)insurance undertaking?
- Has the (re)insurance undertaking concluded any significant transactions with shareholders, persons having a substantial influence on the (re)insurance undertaking and the Supervisory Board or the Management Board members and if so, what kind of transactions have they been?
- Does the (re)insurance undertaking have in place rules on the flow of information within the group?
- Does the composition of the Audit Committee comply with the requirements of article 129 of the Act of 11th May 2017 on statutory auditors, audit firms and public oversight?
- Have there been any reservations about the Audit Committee resulting from the day-to-day supervision, performed on-site inspections or supervisory visits?
- Has the supervisory authority had reservations about the group or financial conglomerate whereto the (re)insurance undertaking belongs?
- Does the (re)insurance undertaking comply with the guidelines/recommendations of the supervisory authority or if it does not comply with them, is the justification provided by it, how it intends to achieve the objectives for which the supervisory authority issued recommendations/guidelines, sufficient enough?
- Have there been any reservations about ownership resulting from the day-to-day supervision, performed on-site inspections or supervisory visits?
- Has the (re)insurance undertaking fulfilled declared actions intended to mitigate risks related to the assessed area?

32. General information on system of governance

Assessment of general information on system of governance is an expert judgement based on the findings of the supervisory review process, and it takes into account at least the following issues:

- Is the system of governance adequate in terms of the nature, scale and complexity of the risks specific to the activity of a (re)insurance undertaking and regarding its business strategy?
- Is the organizational structure clear and adequate to the scale and profile of operations and, in particular whether:
 - is the adequate allocation of key functions provided?

- does the delegation of responsibilities ensure appropriate flow of information and sound management of the (re)insurance undertaking?
 - are there proper internal units or committees dedicated to material areas of operations established in the (re)insurance undertaking?
- Are the distribution of duties between the Management Board members adequate?
- Do the Management Board or the Supervisory Board members combine performing its functions with other key functions?
- Does the (re)insurance undertaking ensure the actual management of the (re)insurance undertaking by at least two persons?
- Is the person responsible for a key function subordinated to the person responsible for other key function?
- Do the persons responsible for other key functions perform more than one key function at the same time or combine performing it with the operational activities?
- Are the operational functions separated from the control ones?
- Are the sales functions separated from the claims handling?
- Does the (re)insurance undertaking ensure that the assignment of multiple tasks to individuals and organisational units does not or is not likely to prevent the persons concerned from carrying out any particular function in a sound, honest and objective manner?
- Do the employees of the (re)insurance undertaking have the scope of rights and duties assigned to them?
- Does the (re)insurance undertaking provide adequate way of reporting?
- Does the (re)insurance undertaking carry out internal review of system of governance?
- Does the remuneration policies and practices provide adequate and prudent risk management, including no incentives regarding excessive exposure to risk?
- Are the policies and practices concerning remuneration of the Supervisory Board and the Management Board members, as well as persons responsible for other key functions, comply with the law and KNF guidelines?
- Does the (re)insurance undertaking have contingency plans adequate to its scale and profile of operations, ensuring continuity of operations and, are the contingency plans systematically tested?
- Does the (re)insurance undertaking have documentation on identifying, preventing and combating insurance fraud and on counteracting money laundering and terrorism financing (in the case of life (re)insurance undertakings)?
- Does the (re)insurance undertaking comply with the "Principles of Corporate Governance" and in the case of withdrawal from the application of specific rules, is it justified by the scale and profile of operations of the (re)insurance undertaking?
- Have there been any reservations about the structure of the management system or its functioning resulting from the day-to-day supervision, performed on-site inspections or supervisory visits?

- Has the (re)insurance undertaking fulfilled declared actions intended to mitigate risks related to the assessed area?

33. Key persons

Assessment of key persons is an expert judgement based on the findings of the supervisory review process, and it takes into account at least the following issues:

- Does the (re)insurance undertaking have proper policies regarding fit and proper requirements?
- Are the requirements of the (re)insurance undertaking regarding the skills, qualifications and professional knowledge of persons responsible for key functions, as well as the policies, processes and procedures concerning fulfilment of requirements relating to fitness and propriety of these persons adequate to the scale and profile of operations?
- Are the qualifications, experience and propriety of individual persons responsible for key functions adequate to ensure sound and prudent management of the (re)insurance undertaking?
- Does the (re)insurance undertaking fulfil regulatory and statutory requirements regarding the proper Management Board and the Supervisory Board composition, including requirements for these bodies altogether?
- Are the policies and practices concerning remuneration of the Supervisory Board and the Management Board members, as well as persons responsible for other key functions, adequate?
- Are the changes in the composition of the Management Board or the Supervisory Board frequent and material?
- Has the supervisory authority refused to accept candidates for the Management Board members?
- Has the supervisory authority requested the dismissal of the Management Board member or commercial proxy?
- Does the (re)insurance undertaking appointed persons responsible for all of the other key functions?
- Are there frequent changes in the (re)insurance undertaking of persons responsible for key functions?
- Has the supervisory authority observed that a given person did not fulfil the requirements concerning key functions?
- Does the (re)insurance undertaking comply with the recommendations/guidelines of the supervisory authority or if it does not comply with them, is the justification provided by it, how it intends to achieve the objectives for which the supervisory authority issued recommendations/guidelines, sufficient enough?
- Have there been any reservations about the key persons resulting from the day-to-day supervision, authorization process, performed on-site inspections or supervisory visits?
- Has the (re)insurance undertaking fulfilled any declared actions to mitigate risks related to the assessed area?

34. Risk management system

Assessment of the risk management system is an expert judgement based on the findings of the supervisory review process, and it takes into account at least the following issues:

- Are the implemented strategies, policies, processes and reporting procedures relating to the risk management system adequate to the scale and profile of operations, and in particular does the method of implementation by the (re)insurance undertaking of risk management system ensure that it is able to, in an effective and continuous manner, identify, measure, monitor, manage and report, at the individual and at an aggregated level, the risks, to which the (re)insurance undertaking, is or may be exposed?
- Is the risk appetite defined by the (re)insurance undertaking adequate to the scale and profile of operations and has it been approved by the Supervisory Board?
- Are the overall risk tolerance limits for specific risks defined by the (re)insurance undertaking consistent with the risk appetite and have they been approved by the Management Board?
- Does the (re)insurance undertaking regularly review the operational effectiveness of the risk management system?
- Is the risk management system in the (re)insurance undertaking integrated with the internal control system?
- Is the method of implementation of the risk management function adequate to the scale and profile of operations and does it ensure integration with the organizational structure and decision-making processes of (re)insurance undertaking, and in particular:
 - is the risk management function provided with the necessary resources?
 - does the risk management function have the appropriate powers and is it provided with operational independence when performing activities?
 - does the risk management function report and advise the Management Board or the Supervisory Board and if so, how often?
- Does the (re)insurance undertaking provide the appropriate level and type of reinsurance/retrocession or other risk mitigation techniques and does it provide the appropriate risk management for reinsurance and other risk mitigation techniques, and in particular:
 - does the (re)insurance undertaking adequately monitor the reinsurance process and does it systematically review reinsured portfolio, settlements, financial standing of reinsurers, reinsurance needs of its portfolio?
 - does the (re)insurance undertaking have a relevant reinsurance programme for catastrophe reinsurance?
 - does the (re)insurance undertaking have reinsurance agreements with limited risk transfer (finite reinsurance)?
- Have there been any reservations about reinsurance in the (re)insurance undertaking resulting from the day-to-day supervision, performed on-site inspections or supervisory visits?

- Does the undertaking's own risk and solvency assessment include all three assessments required by law and are they properly distinguished in the report of own risk and solvency assessment?
- Are the results of the undertaking's own risk and solvency assessment used by the (re)insurance undertaking in the decision-making process, business strategy, capital management, planning, designing products?
- How was the process of the undertaking's own risk and solvency assessment implemented, and in particular:
 - does the (re)insurance undertaking have adequate documentation on the process?
 - is the undertaking's own risk and solvency assessment report consistent with other documents and, in particular, with the regular supervisory report and solvency and financial condition report?
 - is the implementation process and the review of the undertaking's own risk and solvency assessment appropriate and documented?
 - is the undertaking's own risk and solvency assessment appropriately integrated with the organizational structure, management process and decision-making processes of (re)insurance undertaking?
 - does the Management Board actively participate in own risk and solvency assessment?
 - is the involvement of the key functions in the process of the undertaking's own risk and solvency assessment adequate?
- Does the (re)insurance undertaking comply with the supervisory authority's recommendations/guidances regarding the risk management system or if it does not comply with them, is the justification provided by it, how it intends to achieve the objectives for which the supervisory authority issued recommendations/guidelines, sufficient enough?
- Have there been any reservations about the risk management system in the (re)insurance undertaking resulting from the day-to-day supervision, performed on-site inspections or supervisory visits?
- Has the (re)insurance undertaking fulfilled declared actions intended to mitigate risks related to the assessed area?

35. Internal control system

Assessment of the internal control system is an expert judgement based on the findings of the supervisory review process, and it takes into account at least the following issues:

- Does the (re)insurance undertaking have in place an effective internal control system adequate to the scale and profile of operations, and in particular:
 - what key procedures have been implemented in the internal control system?
 - is the internal control system adjusted to the identified risks ?
- Is the internal control system monitored and assessed in terms of efficiency and changes in the (re)insurance undertaking?

- Has the chartered auditor positively assessed the internal control system during the last audit of the financial statement?
- Is the method of implementation of the compliance function adequate to the scale and profile of operations and does it ensure integration with the organizational structure and decision-making processes of (re)insurance undertaking, and in particular:
 - is the compliance function provided with the necessary resources?
 - does the compliance function have the appropriate powers and is provided with operational independence when performing activities?
 - does the compliance function report and advise the Management Board or the Supervisory Board and if so, how often?
- Has the (re)insurance undertaking implemented appropriate compliance policies and does it review and change these policies frequently enough?
- Have there been any reservations about the internal control system including the compliance function resulting from the day-to-day supervision, performed on-site inspections or supervisory visits?
- Has the (re)insurance undertaking fulfilled declared actions intended to mitigate of risks related to the assessed area?

36. Internal audit function

Assessment of the internal audit function is an expert judgement based on the findings of the supervisory review process, and it takes into account at least the following issues:

- Is the method of implementation of the internal audit in the (re)insurance undertaking adequate to the scale and profile of operations and does it ensure its effectiveness, and in particular:
 - is the internal audit function provided with the necessary resources?
 - does the internal audit function have the appropriate powers when performing activities?
 - does the internal audit function report to the Management Board, the Supervisory Board or the Audit Committee and if so, how often?
 - is the internal audit function within the organisational structure directly responsible to the Chairman of the Management Board?
 - is the person responsible for the internal audit function also responsible for other key function?
- Does the internal audit function act in the condition ensuring objectivity and independence of its operation concerning the audited activities?
- In case that persons performing the internal audit function undertake actions within other key functions in accordance with Article 271(2) of the Delegated Regulation, are the criteria for such an approach met?
- Does the (re)insurance undertaking have written internal audit policies and does the (re)insurance undertaking review and revise them with appropriate frequency?

- Are the internal audit monitored and assessed in terms of effectiveness and efficiency of operations and changes within the (re)insurance undertaking?
- Have the internal audits conducted in the reporting period covered important areas/processes of the (re)insurance undertaking operations and were they consistent with the audit plans indicated in the regular supervisory report for the previous year?
- Have the internal audits conducted in the reporting period indicated any irregularities and if so, what actions have been taken?
- Has the (re)insurance undertaking implemented relevant policies regarding the internal audit of (re)insurance undertaking and does it review and change policies with the appropriate frequency?
- Has the (re)insurance undertaking's internal audit plan been based on the risk assessment and cover important areas/processes of the (re)insurance undertaking operations?
- Have there been any reservations about the way of carrying out internal audit function or its operations resulting from the day-to-day supervision, performed on-site inspections or supervisory visits?
- Has the (re)insurance undertaking fulfilled declared actions intended to mitigate risks related to the assessed area?

37. Actuarial function

Assessment of the actuarial function is an expert judgement based on the findings of the supervisory review process, and takes account of at least the following issues:

- Is the method of implementation of the actuarial function in the (re)insurance undertaking adequate to the scale and profile of operations, and does it ensure integration with the organizational structure and decision-making processes of the (re)insurance undertaking, in particular:
 - Is the actuarial function provided with relevant resources?
 - Does the actuarial function have appropriate powers and is provided with operational independence when performing operations?
 - Does the actuarial function report and advise to the Management Board or the Supervisory Board and if so, how often?
- Has the actuarial function fulfilled the tasks defined in legal provisions during the reporting period?
- Does the actuarial function contribute to the effective implementation of the risk management system of the (re)insurance undertaking?
- Does the (re)insurance undertaking prepare proper documentation regarding technical provisions for statutory purposes and technical provisions for solvency purposes?
- Does the (re)insurance undertaking comply with the supervisory authority's recommendations/guidances regarding the actuarial function scope or if it does not comply with them, is the justification provided by it, how it intends to achieve the objectives for which the supervisory authority issued recommendations/guidelines, sufficient enough?

- Have there been any reservations about the actuarial functions or its operations resulting from the day-to-day supervision, performed on-site inspections or supervisory visits?
- Has the (re)insurance undertaking fulfilled declared actions intended to mitigate risks related to the assessed area?

38. Outsourcing

Assessment of the outsourcing is an expert judgement based on the findings of the supervisory review process, and it takes into account at least the following issues:

- Does the (re)insurance undertaking outsource critical or important activities to external entities?
- What key functions and/or critical or important activities have been outsourced?
- Are the implemented policies of outsourcing adequate and do they include all elements required by the law?
- Does the (re)insurance undertaking review and change the policies of outsourcing with the appropriate frequency?
- Has the (re)insurance undertaking designated persons with overall responsibility for the functions outsourced to external entities?
- Has the (re)insurance undertaking introduced appropriate supervision concerning the process of outsourcing?
- Has the (re)insurance undertaking implemented control mechanisms ensuring that the supervisory authority is notified of the outsourcing of key functions and critical or important activities at least 30 days prior to the implementation of outsourcing of these functions and activities as well as of any material changes with respect to those functions or activities?
- Does the (re)insurance undertaking ensure that outsourcing of important operational activities does not lead to material deterioration in quality of the (re)insurance undertaking management system, excessive increase in operational risk or deterioration in provision of on-going and satisfactory services to the insurance policyholders (e.g. procedures determining the rules of co-operation and control over the companies providing outsourcing services) and if so, how?
- Is the supervisory authority provided with:
 - the access to service providers?
 - the actual access to data related to the functions or activities that are being outsourced?
 - the actual access to the premises of the service provider?
- Does the (re)insurance undertaking ensure that the service provider has the skills and capabilities as well as possible permits required by the law allowing him to perform its functions or activities in an appropriate way, taking into account the objectives and needs of the (re)insurance undertaking?

- Does the outsourcing agreement include provisions to properly protect any claims of the (re)insurance undertaking for non-performance or defective performance of the outsourcing agreement?
- Have there been any reservations about the outsourcing or service providers resulting from the day-to-day supervision, performed on-site inspections or supervisory visits?
- Has the (re)insurance undertaking fulfilled declared actions intended to mitigate risks related to the assessed area?

39. Reporting

Assessment of the reporting is an expert judgement based on the findings of the supervisory review process, and it takes into account at least the following issues:

- Does the (re)insurance undertaking have clear, up-to-date, complete, used in practice and lawful:
 - accounting policy for statutory reporting purposes,
 - policies ensuring continuous adequacy of disclosed information (public disclosure policy),
 - policies ensuring continuous adequacy of the provided information (Reporting policy for the supervisory authority),
 - policies considering the valuation of assets and liabilities?
- Has the (re)insurance undertaking implemented data quality control procedures for data which are used to prepare reports for the supervisory authority, including data which are used during the valuation of assets and liabilities?
- Does the (re)insurance undertaking report to the supervisory authority, in a reliable, complete and timely manner, all information, including annual and quarterly reporting templates, solvency and financial condition report, regular supervisory report, own risk and solvency assessment supervisory report, additional annual and quarterly financial and statistical statement, unit-linked/index-linked funds and Individual Retirement Account statements?
- Do reports to the supervisory authority meet the formal requirements (form, signatures, completeness)?
- Have there been any reservations about the way in which the (re)insurance undertaking fulfils its reporting obligations towards the Insurance Guarantee Fund?
- Have there been any reservations about the way in which the (re)insurance undertaking fulfils its obligations under EMIR⁷?
- Are there any material differences between the report for the fourth quarter and the annual report and if so, what are the reasons thereof?
- Are there frequent reporting errors?

⁷Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories

- In the case of assets and liabilities which are valued using alternative methods, does the (re)insurance undertaking ensure independent review and verification on a regular basis of the information, data and assumptions which are used in the valuation approach, its results and the suitability of the valuation method?
- Does the Audit Committee adequately oversee the financial reporting process?
- Does the (re)insurance undertaking obey regulations regarding the rotation of the auditing company or chartered auditor?
- Has the chartered auditor issued an unqualified opinion on the solvency and financial condition report for the year subject to assessment?
- Has the chartered auditor issued an unqualified opinion on the financial statement for the year subject to assessment?
- Has the supervisory authority identified the cases of “aggressive” accounting?
- Has the supervisory authority identified the cases of preparing statements incompliant with law?
- Do the persons responsible for preparing statements have relevant qualifications?
- Have there been any reservations about reporting resulting from the day-to-day supervision, performed on-site inspections or the supervisory visits?
- Has the (re)insurance undertaking fulfilled declared actions intended to mitigate risks related to the assessed area?

40. Relationship with supervisory authority

Assessment of the relationships with supervision authority is an expert judgement based on the findings of the supervisory review process, and it takes into account at least the following issues:

- Does the (re)insurance undertaking properly cooperate with the supervisory authority, including whether there are proper relations with the indicated contact person and whether those relations enable efficient obtaining of necessary information?
- Are relations during the on-site inspection or the supervisory visit correct and allow to efficient carrying it out?
- Does the (re)insurance undertaking monitor the way of completing information duties towards the supervisory authority?
- Does the (re)insurance undertaking provide on time complete and correctly prepared information, explanations, documents?
- Does the (re)insurance undertaking fulfil the recommendations of the supervisory authority in a timely manner?
- Does the (re)insurance undertaking monitor the way of the fulfilment of the supervisory authority's recommendations?
- Does the (re)insurance undertaking initiate meetings to communicate important decisions to the supervisory authority?

- Is the cooperation with the (re)insurance undertaking regarding the reporting of information and applications to the register of insurance agents (RAU) without any reservations?
- Does the (re)insurance undertaking monitor the way of implementation of the guidelines and recommendations of the supervisory authority?
- Has the (re)insurance undertaking fulfilled any declared actions to mitigate risks related to the assessed area?

3.3.1 Adjustment of governance grade

1. If the (re)insurance undertaking paid dividend infringing the capital requirements, the grade of the "ownership" area and the governance grade is 4.00.
2. If the investors' commitments has been not fulfilled, the grade of the "ownership" area and the governance grade cannot be better than 2.50.
3. If there is no proper separation of duties in the (re)insurance undertaking between individual members of the Management Board, the grade of the "general information on system of governance " and the governance grade cannot be better than 2.50.
4. If the Chairman of the Management Board or the Management Board member responsible for the risk management has not been approved by the KNF and the shareholders are not applying for approval of a new candidate within the statutory period, the grade of the "key persons" and the governance grade cannot be better than 3.50.
5. If the office of the Chairman of the Management Board or the Management Board member responsible for the risk management has been vacant for longer than 6 months, the grade of the "key persons" and the governance grade cannot be better than 2.50.
6. If there have been deficiencies in the composition of the Management Board (legal or statutory), other than the ones regarding the Chairman of the Management Board or the Management Board member responsible for the risk management, sustaining for at least 6 months, the grade of the "key persons" and the governance grade cannot be better than 2.00.
7. If the office of the other key functions has been vacant for longer than 6 months in the (re)insurance undertaking, the grade of the "key persons" and the governance grade cannot be better than 2.50.
8. If the (re)insurance undertaking does not obey regulations regarding rotation of the auditing company or chartered auditor, the grade of the "Reporting" area and the governance grade cannot be better than 4.00.
9. If any events of applying "aggressive accounting" are detected, the grade of the "Reporting" area and the governance assessment grade cannot be better than 3.50.
10. If events are detected showing that the financial statements are not drawn up in compliance with the law, the grade of the "Reporting" area and the governance grade cannot be better than 2.00.
11. If the chartered auditor issued a qualified opinion on the financial statement or the solvency and financial condition report for the year subject to assessment, the grade of the "Reporting" area and governance grade cannot be better than 2.50.
12. If the chartered auditor issued an opinion on the financial statement or the solvency and financial condition report for the year subject to assessment that contained an

- explanation/comment which, in the assessment of the supervisory authority, has a negative impact on the quality of the financial statement, the grade of the "Reporting" area and the governance grade cannot be better than 2.00.
13. If the chartered auditor issued a negative opinion on the financial statement or the solvency and financial condition report for the year subject to assessment, the grade of the "Reporting" area and the governance grade is 4.00.
 14. If there are interpersonal links among the persons involved in the decision-making process in the (re)insurance undertaking, which may lead to potential conflict of interests, the grade of the "General information on system of governance" area, the "Risk management system" area and the governance grade cannot be better than 2.50.
 15. If the (re)insurance undertaking has not fulfilled the recovery plan specified under Article 312 (2) of the Act, the grade of the "Risk management system" area and the governance grade cannot be better than 3.50.
 16. If the (re)insurance undertaking has not fulfilled short-term finance scheme specified under Article 313 (2) of the Act, the grade of the "Risk management system" area and the governance grade is 4.00.
 17. If the (re)insurance undertaking has not fulfilled activities to mitigate risk in significant areas of the assessment, the assessment of a particular area and the governance grade cannot be better than 2.50.
 18. If the supervisory authority issued a decision which obligates the (re)insurance undertaking to fulfil recommendations, the governance grade cannot be better than 2.00.
 19. If a fine has been imposed on the (re)insurance undertaking, the governance grade cannot be better than 1.75.
 20. If at least one of the grades in the following areas: business model, ownership, key persons, reporting, risk management system is at least 3.00, the governance grade cannot be better than the worst of the above-mentioned grades.

3.4 Adjustment of the risk score under BION

1. If the investors' commitments are not fulfilled, the risk score cannot be better than 2.50.
2. If the (re)insurance undertaking does not fulfil, at least once year, the requirement of having own funds to meet the capital requirements, the risk score cannot be better than 3.00.
3. If the (re)insurance undertaking has not fulfilled short-term finance scheme specified under Article 313 (2) of the Act, the risk score is 4.00.
4. If the chartered auditor issued a negative opinion on the financial statement or the solvency and financial condition report for the year subject to assessment, the risk score is 4.00.
5. If any of the following areas of the expert judgement: relationship with the customers, business model, ownership, key persons, reporting, risk management system has been given grade 4.00, the risk score cannot be better than 3.00.

4. Impact score under BION

$$\text{Impact score} = \max(\text{Score}_{\text{systemic risk}}; \max\{\text{adjustment}_{\text{impact score}}\})$$

4.1 Systemic risk

$$\text{Grade}_{\text{systemic risk}} = \max(\text{MS}_{\text{L_GAAP}}, \text{MS}_{\text{SII}})$$

1. Market share according to local GAAP

- Life (re)insurance undertakings

$$\text{MS}_{\text{L_GAAP}} = \frac{\text{GTP}}{\sum_{\text{life}} \text{GTP}}$$

- Non-life (re)insurance undertakings

$$\text{MS}_{\text{L_GAAP}} = \frac{\text{GWP}}{\sum_{\text{non-life}} \text{GWP}}$$

where:

GTP – gross technical provisions

GWP - gross written premium

Grades:

1. when $\text{MS}_{\text{L_GAAP}}$ ratio < 1.00%
2. when $\text{MS}_{\text{L_GAAP}}$ ratio is within the range [1.00%; 2.50%)
3. when $\text{MS}_{\text{L_GAAP}}$ ratio is within the range [2.50%; 10.00%)
4. when $\text{MS}_{\text{L_GAAP}}$ ratio $\geq 10.00\%$

2. Market share according to SII

$$\text{MS}_{\text{SII}} = \max\left(\frac{\text{GTP}_{\text{LoB Life}}}{\sum_{\text{LoB Life-market}} \text{GTP}_{\text{LoB Life}}}; \frac{\text{GWP}_{\text{LoB Non-life}}}{\sum_{\text{LoB Non-Life-market}} \text{GWP}_{\text{LoB Non-life}}}\right)$$

where:

$\text{GTP}_{\text{LoB Life}}$ – gross technical provisions for obligations relating to life insurance and reinsurance lines of business

$\text{GWP}_{\text{LoB Non-Life}}$ – gross written premium for obligations relating to non-life insurance and proportional and non-proportional reinsurance lines of business

Grades:

1. when MS_{SII} ratio < 1.00%
2. when MS_{SII} ratio is within the range [1.00%; 2.50%)
3. when MS_{SII} ratio is within the range [2.50%; 10.00%)
4. when MS_{SII} ratio $\geq 10.00\%$

4.2 Adjustment of the impact score under BION

1. If the number of policyholders in case of life (re)insurance undertakings or the number of insured risks during the year in case of non-life (re)insurance undertakings is at least 10.00% of all policyholders in case of life (re)insurance undertakings or all insured risks during the year in case of non-life (re)insurance undertakings, the impact score under Risk Assessment Framework is revised 1 class down.
2. If the (re)insurance undertaking received the impact score 1 or 2, while its market share according to SII calculated for any line of business is higher than 25%, the impact score is revised 1 class down.
3. If in opinion of the supervisory authority the impact score does not entirely reflect possible influence of financial problems and potential bankruptcy of the (re)insurance undertaking on insurance market or institutions operating on financial market, impact score under Risk Assessment Framework is revised down.

5. Prioritisation of supervisory activities

The intensity of supervisory activities and measures is dependent on the risk score and the impact score.

Scheme 11. The intensity of supervisory activities and measures

Impact score	INTENSITY OF SUPERVISORY ACTIVITIES AND MEASURES				Risk score
	medium-high	medium-high	high	high	
high 4.00	medium-high	medium-high	high	high	
medium-high 3.00	medium-low	medium-high	medium-high	high	
medium-low 2.00	low	medium-low	medium-high	medium-high	
low 1.00	low	low	medium-low	medium-high	
	Good score low risk 1,00 1,00 – 1,74	Satisfactory score medium-low risk 2,00 1,75 - 2,49	Reservations-raising score medium-high risk 3,00 2,50 – 3,24	Unsatisfactory score high risk 4,00 3,25 – 4,00	

Supervisory activities and measures are based on the risk score and the impact score obtained by the (re)insurance undertaking. They are determined individually for each (re)insurance undertaking, taking into account other circumstances and the supervisory activities.

Below there are enumerated the supervisory activities that may be initiated by the supervisory authority if the (re)insurance undertaking in given specific risk score and impact score under Risk Assessment Framework. The above does not exclude the possibility of applying other ad hoc means of supervision if, in a specific case, the need for their application is identified.

Low intensity of supervisory activities and measures:

- Monitoring, under on-going supervision, of the reporting data and other information that may have influence on the risk level, capital adequacy and management assessment.
- Committing the (re)insurance undertaking to carry out tests of the (re)insurance undertaking to incur adverse effects of the events or future changes to economic conditions (stress tests) once a year according to the KNF guidelines.

Medium-low intensity of supervisory activities and measures:

- Supervisory activities and measures specified for the low intensity of supervisory activities and measures.

- Demand for the additional explanations or periodical provision of the specified data reporting by the (re)insurance undertaking within the scopes identified as endangered risk areas.
- Demand for the chartered auditor auditing the financial statements of the (re)insurance undertaking, the actuary responsible for the actuarial function to provide information and explanations necessary for supervisory goals.
- Review of selected strategies, procedures, policies or other internal regulations of the (re)insurance undertaking (review of the risk areas identified as endangered regarding the system of governance or solvency requirements).

Medium-high intensity of supervisory activities and measures:

- Supervisory activities and measures specified for the medium-low intensity of supervisory activities.
- Committing the (re)insurance undertaking to specify the short- and long-term risk mitigating actions in the risk areas identified as endangered ones.
- Issuing recommendations to the (re)insurance undertaking.
- Committing the (re)insurance undertaking to implement the recommendations by a decision.
- Conducting a supervisory visit in the (re)insurance undertaking (visit in the risk areas identified as endangered ones regarding the system of governance or solvency requirements).
- Performing on-site inspection of the activity and property of the (re)insurance undertaking (inspection in the risk areas identified as endangered ones).
- Committing the (re)insurance undertaking to carry out tests on the capacity of the (re)insurance undertaking to incur adverse consequences of the events or future changes to economic conditions (stress tests) twice a year (additional stress tests for the endangered risk areas).
- Demand for convening or convening the general meeting of the (re)insurance undertaking and placing on the agenda specific matters or delegation of representative of the supervisory authority to the general meeting of the (re)insurance undertaking.
- Determining in case of person performing a key function a failure to meet the legal requirements.

High intensity of supervisory activities and measures:

- Supervisory activities and measures specified for the medium-high intensity of supervisory activities.
- Performing complex on-site inspection of the activity of the (re)insurance undertaking.
- Committing the (re)insurance undertaking by way of recommendation to increase the value of technical provisions for solvency purposes.
- Committing the (re)insurance undertaking to calculate the capital requirement using specific parameters or internal model.
- Imposing capital add-on.
- Committing the (re)insurance undertaking to take measures to achieve the re-establishment of the required level of eligible own funds or the reduction of risk profile within a specified timeframe.
- Appointing a receiver in the (re)insurance undertaking.
- Appointing a receivership in the (re)insurance undertaking.

- Imposing fines on the (re)insurance undertaking, Management Board members, proxies, suspending them from performance of their tasks, requesting their dismissal.
- Committing the (re)insurance undertaking to commit chartered auditors to examine the correctness and reliability of all financial statements drawn up by the (re)insurance undertaking, and to examine its accounting books.
- Prohibiting the (re)insurance undertaking from free disposal of its assets, making profits distribution or incurring liabilities, or appointing a person to manage its property.
- Ordering compulsory liquidation of the (re)insurance undertaking.
- Withdrawal of the authorisation to pursue (re)insurance activity in one or more groups.

Appendix 1. Weights of areas and indicators for BION

		Life	Non-life	Non-life (reinsurance undertaking)	Life (small mutual insurance undertakings)
I.	Aggregated risk	35%	35%	35%	35%
1.	Counterparty (credit) risk				
1.	Exposure to risk related to counterparty's low credit quality	20%	20%	20%	7.5%
2.	Share of low credit quality debt securities and derivatives	20%	20%	20%	7.5%
3.	Reinsurers' share in gross written premium	40%	40%	40%	2.5%
4.	Stress test for risk of lowering the credit rating of the largest issuer/counterparty	20%	20%	20%	5%
2.	Market risk				
5.	Exposure to risk of FX changes	5%	5%	5%	N/A
6.	Over the counter (OTC) (illiquid) assets ratio	15%	15%	15%	7.5%
7.	'Traditional' investment ratio	10%	10%	10%	5%
8.	Derivatives ratio	10%	10%	10%	2.5%
9.	Return on assets	15%	15%	15%	7.5%
10.	Assets concentration ratio	5%	5%	5%	N/A
11.	Stress test for selected market risk types	15%	15%	15%	5%
12.	Stress test for interest rate risk	15%	15%	15%	N/A
13.	Cash flow coverage ratio within 3 years period	10%	10%	10%	5%
3.	Underwriting risk				
14.	Increase of net claims ratio (life)	40%	N/A	N/A	7.5%
15.	Acquisition expenses ratio	15%	15%	15%	5%
16.	Administrative expenses ratio	15%	15%	15%	5%
17.	Net combined ratio (non-life)	N/A	40%	40%	N/A
18.	Stress test for reserve risk	30%	30%	30%	5%
4.	Operational risk				
19.	Level of complaints against insurance undertaking	10%	10%	N/A	5%
20.	Alternative valuation method ratio	10%	10%	20%	2.5%
21.	IT systems	35%	35%	35%	7.5%
22.	Relationship with customers	35%	35%	20%	5%
23.	Legal risk	10%	10%	25%	5%
II.	Capital adequacy	35%	35%	35%	35%
24.	Solvency ratio	40%	40%	40%	70%
25.	Number of capital requirements breaches over the last 3 years	15%	15%	15%	30%
26.	Coverage of capital requirements by the best quality own funds	15%	15%	15%	N/A
27.	Share of expected profits included in future premiums in eligible own funds	10%	10%	10%	N/A
28.	Level of financial plan underestimation with respect to solvency ratio	10%	10%	10%	N/A

29.	Level of financial plan underestimation with respect to amount of own funds to meet SCR	10%	10%	10%	N/A
III.	Governance	30%	30%	30%	30%
30.	Business model	25%	25%	25%	25%
	Return on equity	3%	3%	3%	3%
	Return on underwriting activity	3%	3%	3%	3%
	Share of insurance classes with technical earnings	2%	2%	2%	2%
	Financial plan deviation with respect to gross written premium	1%	1%	1%	1%
	Financial plan deviation with respect to net financial result	1%	1%	1%	1%
	Qualitative assessment	15%	15%	15%	15%
31.	Ownership	7%	7%	7%	7%
32.	General information on system of governance	5%	5%	5%	5%
33.	Key persons	10%	10%	10%	10%
34.	Risk management system	12%	12%	12%	12%
35.	Internal control system	7%	7%	7%	7%
36.	Internal audit function	7%	7%	7%	7%
37.	Actuarial function	7%	7%	7%	7%
38.	Outsourcing	5%	5%	5%	5%
39.	Reporting	10%	10%	10%	10%
40.	Relationship with supervisory authority	5%	5%	5%	5%

Appendix 2. Items applied to ratio calculation for the purpose of BION

The values to calculate the ratios related to the stress tests are calculated on the basis of the stress test results provided by the (re)insurance undertakings based on the *Methodology of stress tests in the (re)insurance undertakings*:

https://www.knf.gov.pl/knf/pl/komponenty/img/Metodyka_przeprowadzania_testow_warunkow_skrainych_17.pdf

Parameter	Type of statement	Template	Item	Filter
BE	QRT ⁸	S.02.01	R0540/C0010+R0580/C0010+R0630/C0010+R0670/C0010+R0710/C0010	
CF _k	QRT	S.13.01/ S.18.01	S.13.01.01_((C0010+C0020-C0030-C0040)+(C0090+C0100-C0110-C0120)+(C0130+C0140-C0150-C0160)+(C0170+C0180-C0190-C0200)+(C0210+C0220-C0230-C0240)+(C0250+C0260-C0270-C0280)-C0290)+S.18.01.01_((C0010+C0020-C0030-C0040)+(C0050+C0060-C0070-C0080)-C0090)	k={S.13.01.01_R0010; S.13.01.01_R0020; S.13.01.01_R0030}; k={S.18.01.01_R0010; S.18.01.01_R0020; S.18.01.01_R0030}
EPiFP'	QRT	S.23.01	R0790/C0060	
I	QRT	S.06.02; S.08.01	S.06.02_C0170+S.08.01_C0240	S.06.02_C0090<>1; S.06.02_C0290<>##93; S.06.02_C0290<>##95; S.06.02_C0290<>##96; S.08.01_C0080<>1; S.08.01_C0240>0

⁸QRT – templates for submission of information to the supervisory authorities according to Directive 2009/138/EC of the European Parliament and of the Council

Parameter	Type of statement	Template	Item	Filter
IA _i	QRT	S.06.02	S.06.02_C0170+S.08.01_C0240	S.06.02_C0290<>##93; S.06.02_C0290<>##95; S.06.02_C0290<>##96 S.08.01_C0240>0
IAL	QRT	S.06.02	S.06.02_C0170+ S.08.01_C0240	S.06.02_C0290<>##93; S.06.02_C0290<>##95; S.06.02_C0290<>##96
ND	QRT	S.08.01	S.08.01_C0130	S.08.01_C0080 <> 1 OR(S.08.01_C0110=3; S.08.01_C0110=4)
AD	Additional annual/quarterly financial and statistical statement	4. Life insurance technical account/4. Non-life insurance technical account	VIII.2./VII.2. Administrative expenses	
AC	Additional annual/quarterly financial and statistical statement	4. Life insurance technical account/4. Non-life insurance technical account	VIII.1./VII.1. Acquisition expenses	
OE	Additional annual/quarterly financial and statistical statement	4. Life insurance technical account/4. Non-life insurance technical account	VIII./VII. Operational expenses	
RR	QRT	S.02.01	R0270/C0010	
RR _r	QRT	S.31.0	C0100	
EQ _{average value from the last 5 quarters}	Additional annual/quarterly financial and statistical statement	1.2. Liabilities of the insurance undertaking	A. Equity	

Parameter	Type of statement	Template	Item	Filter
L	QRT	S.06.02	S.06.02_C0170	S.06.02_C0090 <> 1; OR(S.06.02_C0290=##71; S.06.02_C0290=##72; S.06.02_C0290=##73; S.06.02_C0290=##75)
L3	QRT	S.06.02/S.08.01	S.06.02_C0170+ S.08.01_C0240	S.06.02_C0150 = 3; S.06.02_C0290 <>##7#; S.06.02_C0290<>##93; S.06.02_C0290<>##95; S.06.02_C0290<>##96 S.08.01_C0250 = 3
NP	Statistical statement on insurance activity of the (re)insurance undertaking	Section 1a. Additional information on insurance – life insurance – premiums	Col. Number of policyholders in group insurance + The method of concluding the contract – individual, item Total number of active contracts	
Inv _i	QRT	S.06.02/S.08.01	S.06.02_C0170+S.08.01_C0240	S.06.02_C0090 <> 1; OR(S.06.02_C0290=##1#; S.06.02_C0290=##2#; S.06.02_C0290=##5#; S.06.02_C0290=##6#); OR(S.06.02_C0340=4; S.06.02_C0340=5; S.06.02_C0340=6; S.06.02_C0340=9); S.08.01_C0080<>1; S.08.01_C0240>0; OR(S.08.01_C0310=4; S.08.01_C0310 = 5; S.08.01_C0310=6; S.08.01_C0310 = 9)

Parameter	Type of statement	Template	Item	Filter
InvY _i	QRT	S.06.02	C0170	S.06.02_C0090 <> 1; OR(S.06.02_C0290=##1#; S.06.02_C0290=##2#; S.06.02_C0290=##5#; S.06.02_C0290=##6#; S.06.02_C0290=##74; S.06.02_C0290=##8#); Year(S.06.02_C0390)=i
NAR	Statistical statement on insurance activity of the (re)insurance undertaking	Section 2a. Additional information on insurance – Non-life insurance – statistics on the number of insurance policies and claim settlements from direct business	Col. Number of insured risks in the reporting period TOTAL	
NC	Additional annual/quarterly financial and statistical statement	11./10. Complaints about the operations of the insurance undertaking	Number of investigated complaints in the reporting period which were submitted in the reporting period (col. H) + Number of investigated complaints in the reporting period which were submitted in previous reporting periods (col. I) + Number of complaints in progress at the end of reporting period – total (col. L) position TOTAL	
MCR	QRT	S.23.01	R0600/C0010	
EoAoL	QRT	S.02.01	R1000/C0010	

Parameter	Type of statement	Template	Item	Filter
C	Additional annual/quarterly financial and statistical statement	4. Life insurance technical account/4. Non-life insurance technical account	V./IV. Claims	
R	QRT	S.09.01	C0070+C0080+C0090+C0100+C0110	
S	QRT, data concerning BION's grades	S.06.02/S.08.01	S.06.02_C0170+S.08.01_C0240	S.06.02_C0090 <> 1; OR(S.06.02_C0290=##1#; S.06.02_C0290=##2#; S.06.02_C0290=##5#; S.06.02_C0290=##6#); OR(S.06.02_C0340=0; S.06.02_C0340=1; S.06.02_C0340=2; S.06.02_C0340=3); S.06.02_C0090<>1; S.06.02_C0310=2; BION's grade for S.06.02_C0200=1 S.08.01_C0080<>1; S.08.01_C0240>0; OR(S.08.01_C0310=0; S.08.01_C0310 =1; S.08.01_C0310=2; S.08.01_C0310=3)

Parameter	Type of statement	Template	Item	Filter
SR _{plan}	Financial Plans	5.1. Selected items concerning solvency_1	$\text{MIN}\left(\frac{5. \text{ Amount of eligible own funds to meet SCR}}{1. \text{ Solvency Capital Requirement (SCR)}}; \frac{6. \text{ Amount of eligible own funds to meet MCR}}{2. \text{ Minimum Capital Requirement (MCR)}}\right)$	
TPW	QRT	S.02.01	R0530/C0010+R0570/C0010+R0620/C0010+R0660/C0010+R0700/C0010	
GTP	Additional annual/quarterly financial and statistical statement	1.2. Liabilities of the insurance undertaking	C. Gross technical provisions	
GTP _i	Additional annual/quarterly financial and statistical statement	13. Maturity of technical provisions of life undertakings and the value of life technical provisions	Gross technical provisions according to the due date, item Total for the group <i>i</i>	
GTP _{LoB Life}	QRT	S.12.01	S.12.01.01_R0200/C0150+S.12.01.01_R0200/C0210	
SCR	QRT	S.23.01	R0580/C0010	
SCR _{underwriting}	QRT	S.25.01	R0030/C0030, R0040/C0030, R0050/C0030	
SCR _{concentration}	QRT	S.26.01	R0500/C0060	
SCR _{credit}	QRT	S.25.01	R0020/C0030	
SCR _{operational}	QRT	S.25.01	R0130/C0100	
SCR _{market}	QRT	S.25.01	R0010/C0030	
SCR _{currency}	QRT	S.26.01	R0600/C0060	

Parameter	Type of statement	Template	Item	Filter
GWP	Additional annual/quarterly financial and statistical statement	4. Life insurance technical account/4. Non-life insurance technical account	I.1. Gross written premium	
GWP _i	Additional annual/quarterly financial and statistical statement	6. Non-life insurance technical accounts - direct business and accepted reinsurance	I.1. Gross written premium	
GWP _{LoB Non-Life}	QRT	S.05.01	R0110/C0200+R0120/C0200+R0130/C0200	
GWP _{plan}	Financial Plans	2.1. Selected items of technical account of insurance and general profit and loss account_1	1. Gross written premium	
NEP	Additional annual/quarterly financial and statistical statement	4. Life insurance technical account/4. Non-life insurance technical account	I. Premiums	
GEP	Additional annual/quarterly financial and statistical statement	4. Life insurance technical account/4. Non-life insurance technical account	I.1. Gross written premium-I.3. Change in gross unearned premium reserve and unexpired risk reserve	
CD	QRT	S.06.02	S.06.02_C0170	S.06.02_C0090 <> 1;

Parameter	Type of statement	Template	Item	Filter
				OR(S.06.02_C0290=##71; S.06.02_C0290=##72; S.06.02_C0290=##73; S.06.02_C0290=##74)
CDGBCIU	QRT	S.06.03	S.06.03_C0060	S.06.03_C0010 ∈ {S.06.02_C0040 where S.06.02_C0090 <> 1}; OR(S.06.03_C0030=1; S.06.03_C0030=7)
AOF	QRT	S.23.01	R0500/C0010	
EOF _{tier1}	QRT	S.23.01	R0540/C0020+R0540/C0030	
EOF _{MCR}	QRT	S.23.01	R0550/C0010	
AOF _{plan}	Financial Plans	5.1. Selected items concerning solvency_1	3. Total basic own funds+ 4. Total ancillary own funds	
EOF _{SCR}	QRT	S.23.01	R0540/C0010	
TI	QRT	S.06.02	S.06.02_C0170	S.06.02_C0090 <> 1; OR(S.06.02_C0290=##1#; S.06.02_C0290=##2#; S.06.02_C0290=##3#; S.06.02_C0290=##7#)
RSGWP	Additional annual/quarterly financial and statistical statement	4. Life insurance technical account/4. Non-life insurance technical account	I.2. Reinsurers' share in gross written premium	

Parameter	Type of statement	Template	Item	Filter
NFR	Additional annual/quarterly financial and statistical statement	3.Total profit and loss account	XIII./XVI. Net profit (loss)	
NFR _{plan}	Financial Plans	2.1. Selected items of technical account and total profit and loss account_1	13./18. Net profit (loss)	
TR	Additional annual/quarterly financial and statistical statement	3.Total profit and loss account	I. Non-life insurance technical result or life insurance technical result	
TR _i	Additional annual/quarterly financial and statistical statement	6. Life insurance technical – direct business and accepted reinsurance/6. Non-life insurance technical accounts – direct business and accepted reinsurance	XIII. Life insurance technical result/X. Non-life insurance technical result	
XL	QRT, data concerning BION's grades	S.06.02/S.08.01	S.06.02_C0170+S.08.01_C0240	S.06.02_C0090<>1; S.06.02_C0290=XL##; AND(S.06.02_C0290<>##7#; S.06.02_C0290<>##4#); S.06.02_C0290<>##93; S.06.02_C0290<>##95; S.06.02_C0290<>##96); S.06.02_C0090<>1;

Parameter	Type of statement	Template	Item	Filter
				S.06.02_C0290=XL##; S.06.02_C0310=2; BION's grade for S.06.02_C0200=1 S.08.01_C0080<>1; S.08.01_C0380=XL##; S.08.01_C0240>0
XT	QRT, data concerning BION's grades	S.06.02/S.08.01	S.06.02_C0170+S.08.01_C0240	S.06.02_C0090 <> 1; S.06.02_C0290=XT##; AND(S.06.02_C0290<>##7#; S.06.02_C0290<>##4#); S.06.02_C0290<>##93; S.06.02_C0290<>##95; S.06.02_C0290<>##96); S.06.02_C0090<>1; S.06.02_C0290=XL##; S.06.02_C0310=2; BION's grade for S.06.02_C0200=1 S.08.01_C0080<>1; S.08.01_C0380=XT##; S.08.01_C0240>0
NCOTP	Additional annual/quarterly financial and statistical statement	6. Life insurance technical – direct business and accepted reinsurance	VI. Net changes in other technical provisions	

KNF

KOMISJA
NADZORU
FINANSOWEGO

THE KNF
Plac Powstańców Warszawy 1
00-030 Warsaw

phone (+48 22) 262 50 00
fax: (+48 22) 262 51 11 (95)
e-mail: knf@knf.gov.pl

www.knf.gov.pl