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## METHODOLOGY FOR ASSIGNING RELIABILITY RATINGS TO INSURANCE COMPANIES - SHORT PUBLIC VERSION

**The Methodology presented is a short public version.**

### 1. General definitions

This methodology describes the system of factors and weights used in the process of assigning the reliability ratings to insurance companies, specialized in **non-life insurance**.

Rating-Agentur Expert RA GmbH assigns two type of ratings to insurance companies:

- **Stand alone reliability rating** of an insurance company represents an opinion of the Agency regarding the ability of the insurance company to fulfill its current and future obligations to the policyholders and beneficiaries, *without taking into account external stress and support-factors*;
- **Reliability rating** of an insurance company represents an opinion of the Agency regarding the ability of the insurance company to fulfill its current and future obligations to the policyholders and beneficiaries, *taking into account external stress and support-factors*.

This methodology uses benchmarks and factor weights taking into account the situation on the Russian market. Additional adjustments of the weights, benchmarks and factors are required for assigning ratings in different jurisdictions.

### 2. Sources of information

2.1 The following sources of information are used for assigning a rating score:

- Financial statement forms №1, 2 (according to RAS<sup>1</sup>; including notes 5.xml<sup>2</sup>) for the current year and for the previous two years (on a quarterly basis);
- Financial statement forms № 7, 8, 9 (6), 10, 11, (14) (provided to the regulatory authorities, according to RAS) as of 1 January and 1 July of the current year and two previous years (if any – on a quarterly basis);
- Financial statement form №1-C prepared for the government statistical monitoring for the current year and for two preceding years (on a quarterly basis);
- Current version of the insurance company's statute;

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<sup>1</sup> Russian accounting standards;

<sup>2</sup> Explanatory notes to balance sheet of the insurance company and the statement of income of the insurance company (table form).

<http://www.garant.ru/products/ipo/prime/doc/70464080/#ixzz3RtZIN6e3> (Russian)

- Internal documents which describe insurance, market, credit and operation risk management, as well as liquidity risk management;
- Internal documents which describe the development strategy of the insurance company (long-term, medium-term strategy, business plans for this year and next year, etc.);
- Internal documents which describe the corporate governance (regulation on the board of directors, regulation on the internal audit, corporate governance code, etc.);
- Financial statements according to IFRS for the last two full years and for the current year on a quarterly basis (if available);
- Annual reports for the last three years;
- Standard questionnaire from the Agency filled in by the insurance company, stamped and signed by the head of the company;
- Official statistics;
- Data from the public media sources.

2.2 The Agency is neither responsible for controlling the accuracy of accounting and statistical forms, forms provided by the company to the supervisory authorities, nor for checking the authenticity of information included in these forms.

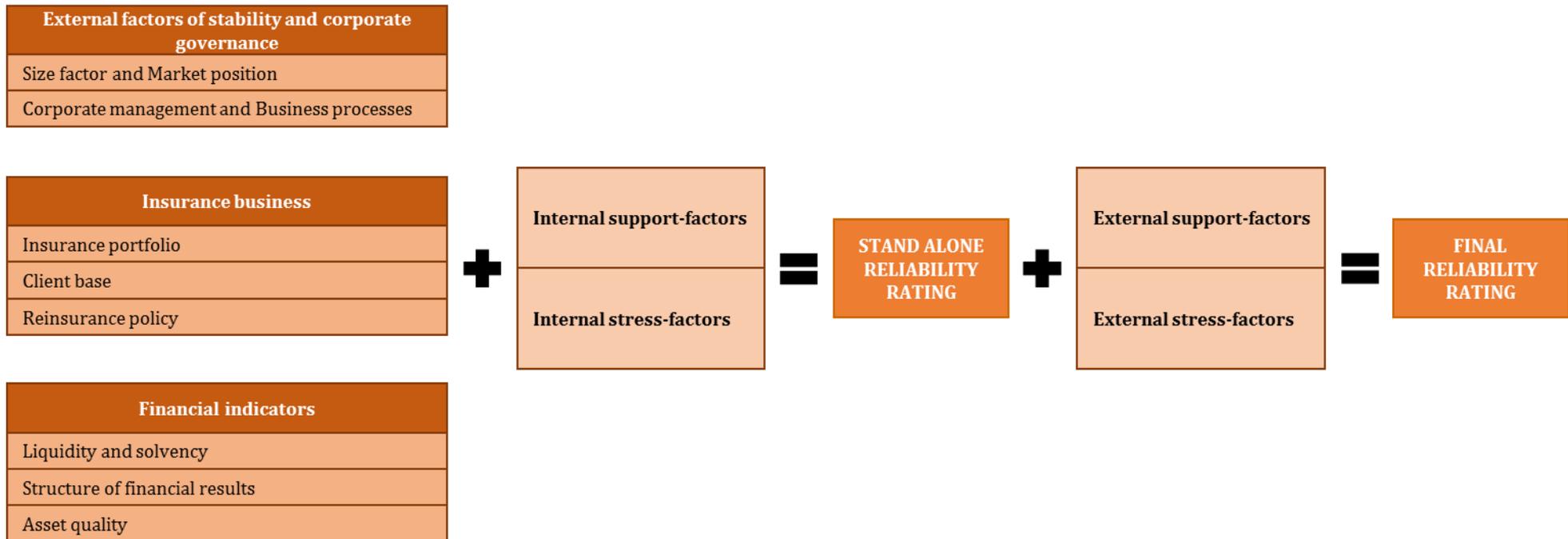
2.3 The Agency shall contact the company for an explanation of the indicators provided in the financial statements and the questionnaire. If differences between internal statements and official reporting forms are found, the Agency shall prioritize an analysis of the statements that reflect the financial stance of the company more correct in accordance to the Agency's opinion. The presence of these differences is considered as an additional risk factor.

2.4 The Agency has the right to use other sources of information in case of data incompleteness.

### **3. Structure of the rating analysis**

3.1 The reliability analysis of insurance companies has several levels. The final **reliability rating** of the insurance company is the assessment of the company's reliability taking into account support- and stress-factors, which have external nature. The **stand alone reliability rating** is based on the analysis of the company's **financial stability** taking into account only support- and stress-factors, which have internal nature.

**Logic scheme:**



3.2. The analysis of the **company's financial stability** includes the analysis of three sections: *external factors of stability and corporate governance (1)*, *insurance business (2)* and *financial indicators (3)*. Each section is divided into several large integral factors.

3.3 The score for each integral factor is determined as a weighted sum of scores for separate indicators within each integral factor.

3.4 The rating score of the insurance company is determined as a weighted sum of scores of all integral factors. These are weighted in a certain manner depending on the type of company (see Annex 1).

3.5 To determine the **stand alone reliability rating** of the company, the rating score must be adjusted taking into account internal support- and stress-factors as well as the total value of negative factors (risk accumulation) (see part 5).

3.6 In order to determine the **reliability rating of the company**, the rating score for stand alone reliability rating must be adjusted taking into account external support- and stress-factors (see part 6).

3.7 The ratings assigned in accordance with the national scale (both stand alone and final) shall be transferred to the international scale through the adjustment for Country credit environment rating (CCE) in foreign currency (according to the "Instruction for transferring ratings from national to international scale"). Rating-Agentur Expert RA GmbH publishes **only the final rating in accordance with the international scale** (the stand alone rating may be published only upon specific request from the rated entity).

#### 4. System of indicators

4.1 Section "*External factors of stability and corporate governance*" includes two integral factors:

##### A. Size factor and market position

##### B. Corporate management and business-processes

4.1.1 Integral factor "*Size factor and market position*" consists of the following indicators:

- "Size factor"<sup>3</sup>
- Equity dynamics
- Dynamics of insurance premiums
- Market position of the company
- Captivity
- Compliance with regulatory prescriptions
- Company's relations with associations of insurers
- Quality of claims settlement
- Reputation
- Characteristics of the market for the company's main type of insurance (only for "specialized companies")

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<sup>3</sup> "Size factor" of an insurance company determines its capabilities to diversify both insurance risks and financial risks. Consequently, high size indicators are considered as a positive factor. The "size-factor" of the company is determined based on three indicators: equity, reserves and insurance contributions. Criteria for size-classes are changed every six months by the results of the insurance market research.

- Investment attractiveness of the region where the company operates (only for regional companies)

4.1.2 Integral factor “*Corporate management and business-processes*” consists of the following indicators:

- Owners’ reputation
- Shareholding structure
- Changes in the shareholding structure for the year
- Strategy of the company
- Level of transparency
- The auditor for RAS reports
- The auditor for IFRS reports
- Human resources and management
- “Reporting”<sup>4</sup>
- Risk management structure
- Insurance risk management
- Credit risk management
- Market risk management
- Liquidity risk management
- Operational risk management
- Quality of IT support (“sleeping” factor<sup>5</sup>)

4.2 Section “*Insurance business*” includes three integral factors:

- A. Insurance portfolio**
- B. Client base**
- C. Reinsurance policy**

4.2.1 Integral factor “*Insurance portfolio*” consists of the following indicators:

- Geographical diversification of the insurance portfolio
- Diversification of the insurance portfolio by types of insurance
- Stability of the insurance portfolio
- Relative value of the risks accepted
- Loss ratio divided by the insurance activity types (for main types of insurance);
- “Technical result”<sup>6</sup> divided by the insurance activity types (for main types of insurance)

4.2.2 Integral factor “*Client base*” consists of different lists of indicators for:

- a) Insurance companies**
- b) Reinsurance companies**

4.2.2.1 *For insurance companies:*

- Size of the client base

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<sup>4</sup> This factor includes the assessment of quality of company’s reports and financial statements.

<sup>5</sup> “Sleeping” factor is the factor excluded from the analysis at the moment, but this factor can be added to the calculations in the future after corresponding decision made by the Methodological committee.

<sup>6</sup> The technical result is defined as the difference between revenues and expenditures related to the specific type of insurance (e.g. technical result of life-insurance).

- Structure of the client base (divided by regions, industries and types of customers (legal entities or individuals))
- Share of revoked contracts
- Distribution channels for insurance products
- The value of commission
- Dependence on the main clients
- The importance of the main client for the Russian economy
- Availability of credit ratings assigned to the main client

4.2.2.2 *For reinsurance companies:*

- Number of the reinsurance policyholders
- Number of signed obligatory reinsurance contracts
- Number of signed optional reinsurance contracts
- Structure of the client base
- Share of international business
- Dependence on the main clients
- Share of revoked contracts

4.2.3 Integral factor “**Reinsurance policy**” consists of the following indicators:

- Reinsurance of big risks (the assessment of the ratio of the average sum insured per one contract to equity)
- The ratio of maximum net insurance claims and benefits to equity
- Reliability of reinsurance coverage (reliability ratings of reinsurance partners)
- Reliability of reinsurance coverage (analysis for the ten largest risks)
- Reinsurance protection diversification
- Reinsurance protection efficiency (analysis of the largest benefits paid) (the assessment of the largest benefits paid, that exceed more than 5% of the equity)

4.3 Section “**Financial indicators**” includes three integral factors:

**A. Liquidity and creditworthiness**

**B. Structure of financial results**

**C. Asset quality**

4.3.1 Integral factor “**Liquidity and creditworthiness**” consists of the following indicators:

- Current liquidity ratio
- Adjusted net insurance liquidity ratio
- Experience of paying large benefits
- Accounts receivable
- Accounts payable
- Existence of loans and credits
- Existence of off-balance liabilities
- Solvency margin (the ratio of the actual solvency margin to the normative value for the same reporting date)
- Equity adequacy

4.3.2 Integral factor “**Structure of financial results**” consists of the following indicators:

- ROA according to RAS
- ROA according to IFRS

- ROE
- Net loss ratio
- Combined loss ratio according to Russian accounting standards
- Combined loss ratio according to IFRS
- Expense ratio<sup>7</sup>
- Return on investments
- Other revenues and expenses

4.3.3 Integral factor “**Asset quality**” consists of the following indicators:

- Investment portfolio liquidity (the assessment of the share of liquid assets in the total investment portfolio)
- Investment portfolio diversification divided by objects of investments
- Reliability of investments (ratings of the main company's investments)
- The share of affiliated counterparties<sup>8</sup> and subsidiaries (in the total investment portfolio)
- Stock market risks (the share of stock market instruments in the total investment portfolio)
- Stability of the investment portfolio
- Presence of signs of manipulations with investment portfolio
- Investments in real estate
- “Not typical assets”
- The quality of receivables (the share of outstanding receivables in the total receivables for the last reporting date)
- Fulfillment of the Prescription 3444-U (Prescription of the Bank of Russia from 16.11.2014 №3444-U “About the order of investing of insurance reserves and the list of assets allowed for investment”) and Prescription №3445-U (Prescription of the Bank of Russia from 16.11.2014 №3445-U “About the order of investing of own funds (capital) and the list of assets allowed for investment”)

## 5. Rating score adjustments for stand alone reliability ratings

5.1 The final rating score is obtained by analyzing the company’s financial stability and shall be adjusted taking into account:

1. **The total value of negative factors (risk accumulation)**
2. **Presence of internal support factors**
3. **Presence of internal stress factors**

5.2 The adjustment for **total value of negative factors** (risk accumulation) is based on two indicators:

- The total number of indicators, which were assessed as “-1”, weighted according to the importance of these indicators in the methodology.
- The total number of indicators, which were assessed as negative (negative scores), weighted according to the importance of these indicators in the methodology.

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<sup>7</sup> Expense ratio is an indicator, which is calculated with the following formula: expense ratio = (loss adjustment expense + insurance operations net expenses + management expenses) / (received insurance premiums net).

<sup>8</sup> Affiliated counterparties (in the broadest sense) – entities related to the insurance company (e.g. they can have the same owner, they can be included in the one holding structure, etc.).

If the total sum of “negative scores” exceeds the threshold values, the presence of the **“risk accumulation”** must be determined by the expert, but the final decision about the presence of the **risk accumulation** must be made by the rating committee.

**5.3 Internal support-factor** includes internal financial resources of the company and other factors. An internal support-factor must be used if funds or other assets actually were received by the company, but they are not yet reflected in the financial statements because the latest available statements have been issued before the company received funds or other assets.

In case of presence of an internal support-factor, half of the rating range<sup>9</sup> (for a moderate support-factor), or full rating range (for a strong support-factor) must be added to the rating score.

“Other support-factor” can be assigned to the company if there are factors, that are not assessed or insufficiently assessed in the rating model because of specific characteristics of the rated company or temporary influence of such factors.

**5.4 Internal stress-factor** includes a high risk of sudden and significant reduction in the company's solvency or the revocation of its license, and depends on the characteristics of the company's activities and management decisions; as well as other risks. The presence of one internal stress-factor can reduce the score for the stand alone reliability rating by one level (for each strong stress-factor) or by half of the level (for each moderate stress-factor). The following factors can be considered as internal stress factors:

- Specialization
- Contributions dynamics
- Equity value
- Size-factor
- Net accepted risks<sup>10</sup>
- Adequacy of provisions (reserves) for unearned premiums
- Asset quality
- Off-balance sheet liabilities
- Financial result
- Timely payment of obligations
- Corporate governance and quality of reporting
- Reputation of the company's management
- Regulatory risks (“scheme”\* character of company's activity, violations of normative values)
- Other stress-factors, reflecting risks that are not assessed or insufficiently assessed in the rating model because of specific characteristics of the rated company or risks having temporary influence

\*“Schemes” - operations of “false insurance”, the main aim of these operations is not to protect against risks, but:

- To withdraw funds from corporate clients (“risk-free” property and liability insurance, as well as part of the “insurance” of financial risks).
- To maintain “Kickback (bribery)” schemes.

<sup>9</sup> Rating range – difference between thresholds of rating classes' score.

<sup>10</sup> The ratio of maximum possible net claim to the equity.

- *To avoid taxes.*

## 6. Rating score adjustments for reliability ratings<sup>11</sup>

6.1 The final rating score obtained by analyzing the **stand alone company's reliability**, must be adjusted depending on:

### A. Presence of external support factors

### B. Presence of external stress factors

The decision for each adjustment must be made on the rating committee.

6.2 **External support-factor** takes into account financial and administrative resources which are external to the company. However, these resources can be used in case of deteriorating financial conditions.

An external support-factor must be added to the rating score as half of the rating range<sup>12</sup> (for a moderate support-factor), and as the full rating range (for a strong support-factor).

External support-factors include:

- Support factor for government
- Support-factor for owners
- Other support-factor (other support-factor (moderate or strong) shall be assigned for factors that are not assessed or insufficiently assessed in the rating model because of specific characteristics of the rated company or for factors having temporary influence).

6.3 **External stress-factor** includes a high risk of sudden and significant reduction in the company's solvency or the revocation of its license, and slightly depends on the characteristics of the company's activity and management decisions, but mostly, it depends on external factors. The following factors can be considered as external stress-factors:

- Owners
- Government relations risks<sup>13</sup>;
- Other stress-factor, for risks that are not assessed or insufficiently assessed in the rating model because of specific characteristics of the rated company or for risks having temporary influence;
- Other factors (including sudden change in market conditions and changes in regulatory requirements).

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<sup>11</sup> Taking into account external support- and stress-factors.

<sup>12</sup> Rating range – difference between thresholds of rating classes' score.

<sup>13</sup> Risks that arise from the firm's relationships with the government. This includes local and national government bodies and all branches of government, including politicians, bureaucrats and judges.

## Annex 1. Range of weights and types of companies

Weights for integral factors are not fixed and depend on the share of reinsurers in the company's contributions for six months, nine months or a year.

External factors of stability and corporate management	
Size factor and market position	$X1 * (1 - X(RE)) / (1-X5)$
Corporate management and business-processes	$X2 * (1 - X(RE)) / (1-X5)$
Insurance business	
Insurance portfolio	$X3 * (1 - X(RE)) / (1-X5)$
Client base	$X4 * (1 - X(RE)) / (1-X5)$
Reinsurance policy	$0,5 * X5 + 0,5 * X5 * \sqrt{(Re/10)}$
Financial indicators	
Liquidity and solvency	$X6 * (1 - X(RE)) / (1-X5)$
Structure of financial results	$X7 * (1 - X(RE)) / (1-X5)$
Asset quality	$X8 * (1 - X(RE)) / (1-X5)$

$X_i$  - fixed weight for section  $i$ ;

$X(RE)$  - weight of section "Reinsurance" =  $0,5 * X5 + 0,5 * X5 * \sqrt{(Re / 10)}$ ,

the weight of  $0,5 * X5$  is distributed between the indicators with fixed weights,

and the weight of  $0,5 * X5 * \sqrt{(Re / 10)}$  - is distributed between indicators with not fixed weights.

$Re$  - reinsurers' share in contributions (for the last six months, nine months or a year according to the profit and loss account).

### Range of weights for different groups of companies\*

	Universal companies on the federal level	Specialized companies	Regional companies	Captive companies	Reinsurance companies
Size factor and market position	0,15	0,15	0,15	0,10	0,13
Corporate management and business-processes	0,08	0,08	0,08	0,08	0,08
Insurance portfolio	0,13	0,13	0,13	0,13	0,13
Client base	0,08	0,08	0,08	0,15	0,1
Reinsurance policy	0,08	0,08	0,08	0,08	0,08
Liquidity and solvency	0,1	0,1	0,1	0,1	0,1
Structure of financial results	0,13	0,13	0,13	0,13	0,13
Asset quality	0,25	0,25	0,25	0,23	0,25

*\*Rated companies are divided into **five groups**, which have different weights for indicators:*

1. **“Universal companies on the federal level”**. Universal companies are those companies which are not included in the other groups listed below;
2. **“Specialized companies”**. The specialized companies are companies where the share of one single type of insurance in the insurance portfolio (other than “car / vehicle insurance”) exceeds 50% (“type of insurance” is considered broadly speaking; for example: aviation risks insurance provides comprehensive insurance for airplanes and liability insurance for airline companies);
3. **“Regional companies”**. The regional insurance companies are companies that operate only in one federal district<sup>14</sup> of the Russian Federation. The company received more than 80% of the total insurance premium from three bordering regions for the last reporting year;
4. **“Captive companies”**. Captive insurance companies are companies with the following characteristics:
  - 1) More than 50% of insurance premiums are received from the owners and their affiliated companies;
  - 2) More than 50% of insurance premiums are received through the sales channel associated with the owners and their affiliated companies;
5. **Reinsurance companies** (professional reinsurance companies).

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<sup>14</sup> The federal districts are groupings of the federal subjects (regions) of the Russian Federation. Federal districts are not provided in the Constitution of Russia and are not the constituent units of the country, but they exist purely for the convenience of operations and governing by federal government agencies. Each district includes several federal subjects. The following are federal districts in Russia: Central, Southern, Northwestern, Far Eastern, Siberian, Ural, Volga and North Caucasian.

## **Annex 2. List of rating classes**

During the process of rating assignment (for both types of ratings), the Rating Agency uses national (only for internal purposes) and international scales. All public documents contain ratings according to the international scale.

The company rating can be assigned from the following rating classes according to the international scale:

### ***AAA - Highest level of reliability***

The level of company's capability to fulfill all its insurance liabilities in the long-run is the highest. The level of risk for insurance liabilities is the lowest.

### ***AA - Very high level of reliability***

The level of the company's capability to fulfill its insurance liabilities in the long-run is very high. The level of risk for insurance liabilities is very low.

### ***A - High level of reliability***

The level of the company's capability to fulfill its insurance liabilities in the long-run is high. The level of risk for insurance liabilities is low.

### ***BBB - Moderately high level of reliability***

The level of the company's capability to fulfill its insurance liabilities in the long-run is moderately high. The level of risk for insurance liabilities is moderately low.

### ***BB - Sufficient level of reliability***

The level of the company's capability to fulfill its insurance liabilities in the long-run is sufficient. The level of risk for insurance liabilities is moderate.

### ***B - Moderately low level of reliability***

The level of the company's capability to fulfill its insurance liabilities in the long-run is moderately low. The level of risk for insurance liabilities is moderately high.

### ***CCC - Low level of reliability***

The level of the company's capability to fulfill its insurance liabilities in the long-run is low. The level of risk for insurance liabilities is significant.

### ***CC - Very low level of reliability (some of insurance liabilities are not fulfilled on time)***

The level of the company's capability to fulfill its insurance liabilities in the long-run is very low, some of insurance liabilities are not fulfilled on time. The level of risk for insurance liabilities is very high.

### ***C - Lowest level of reliability (pre-default level, part of insurance liabilities are not fulfilled)***

The company is not fulfilling some of its insurance liabilities, and it is expected that the company will not be able to meet fully its insurance obligations.

### ***Class D - Default (Bankruptcy)***

The company is in the process of bankruptcy.

### ***Class E - License withdraw or liquidation.***

The company is going through the liquidation procedure or the company's license was revoked.

One of the above rating levels (the company's reliability and company's stand alone reliability) that can be assigned to the company (excluding AAA and ratings below CCC) may be supplemented with (+) or (-) sign depending on the value of the rating score.