

# **Cerved Rating Agency**

# Rating methodology for Italian nonfinancial companies

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## 1. Rating definition

The rating of Cerved Rating Agency is an opinion, issued by Cerved Rating Agency, on the creditworthiness of a company; it therefore assesses the capability of the company to generate sufficient cash flows for a prompt debt repayment in a given time horizon.

The rating is assigned by specialised rating analysts whose assessments, supported by data and qualitative / quantitative information as well as statistical scores, are the key factors for the rating issuance.

The rating of Cerved Rating Agency:

- is issued on the Italian non-financial companies;
- relies on the measurement of the probability that within 12 months from rating issuance a default event may occur, namely that the rated company may not be able to face its financial obligations;
- is elaborated on the basis of all the data and public / proprietary information which are available about the rated company and up to date at the time of rating issuance;
- is expressed on 13 grades rating scale;
- can be both required by the rated company (*solicited rating*) and external parties, as for instance financial institutions, investors or business partners (unsolicited rating).



# 2. The rating scale

The rating of Cerved Rating Agency is expressed on an alphanumeric scale of 13 degrees, sorted by 4 macro areas (safety, solvency, vulnerability and risk). The rating classes denomination allows to clearly identify risk homogeneous macro areas.

Table 1 - CRA rating scale

AREA	CLASS	DESCRIPTION
	A1.1	Large company, with excellent business and financial risk profile. Extremely strong capacity to meet financial commitments. Minimal credit risk.
	A1.2	Large / medium-sized company, with excellent business and financial risk profile. Very strong capacity to meet financial commitments. Very low credit risk.
SAFETY	A1.3	Very good business and financial risk profile. Very good capacity to meet financial commitments. Very low credit risk.
SAF	A2.1	Very good fundamentals and high capacity to meet financial commitments. Low credit risk.
	A2.2	Very good fundamentals and good capacity to meet financial commitments. Low credit risk.
	A3.1	Good fundamentals and good capacity to meet financial commitments. Low credit risk.
SOLVENCY	B1.1	Adequate capacity to meet financial commitments. Potentially vulnerable to serious and unexpected changes in business, financial and economic conditions. Moderate credit risk.
SOLV	B1.2	Adequate capacity to meet financial commitments. Vulnerable to serious and unexpected changes in business, financial and economic conditions. Moderate credit risk.
ABILITY	B2.1	Overall good fundamentals. Vulnerable to unexpected changes in business, financial and economic conditions. Credit risk is below average.
VULNERABILITY	B2.2	Evidence of weaknesses in business and / or financial profile. Vulnerable to changes in business, financial and economic conditions. Credit risk is substantial but not far from the average.
	C1.1	Serious weaknesses in business and / or financial profile. The company could not meet financial commitments. High credit risk.
RISK	C1.2	Very serious weaknesses in business and / or financial profile. The company could not meet financial commitments. Very high credit risk.
	C2.1	Very serious problems in economic and / or financial profile. The company could not meet financial commitments even in the short term. Maximum credit risk.

In case of occurrence of default events the company migrates to a non performing stage and the rating is withdrawn.



### 3. Default definition

The default definition adopted by Cerved Rating Agency for the evaluation of the creditworthiness of the counterparties relies on the bankruptcy proceedings, protective measures and other negative events, as hereinafter detailed<sup>1</sup>:

- 1. judicial liquidation (already called bankruptcy);
- 2. compulsory administrative liquidation;
- 3. supervised administration;
- 4. arrangement with creditors;
- 5. debts restructuring agreements;
- 6. fraudulent bankruptcy;
- 7. non-fraudulent bankruptcy;
- 8. court-supervised administration;
- 9. extraordinary supervised administration;
- 10. judicial abduction;
- 11. insolvencies status;
- 12. conservative shares abduction;
- 13. protests and relevant prejudicial events;
- 14. missed reimbursement of principal and / or interest payments on issued debt instruments;
- 15. application for arrangement with creditors;
- 16. appeal for admission to arrangement with creditors;
- 17. judicial liquidation.

For the cases from 1 to 11 the default events is identified by the registration of the disclosed insolvency status among the responsible public institutions. For the cases from 12 to 17 the default events is identified by the analytical team on the basis of the assessment of the impact of the insolvency event on the possibility of the rated counterparty to grant business continuity.

All the information contributing to the definition of the default event can be inferred from the informative sources of Cerved Rating Agency.

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<sup>&</sup>lt;sup>1</sup> The considered default categories are defined consistently with the current regulation on this subject.



### 4. The rating model

The methodology of rating assignment and the statistical models adopted for the calculation of the intermediate scores are differentiated by size and legal form of the rated entity. This specialisation allows to take properly into account the different risk profiles of the rated entities, as bigger companies generally show, on average, lower risk levels.

The macro specialisation of the rating system is depicted in the chart below:

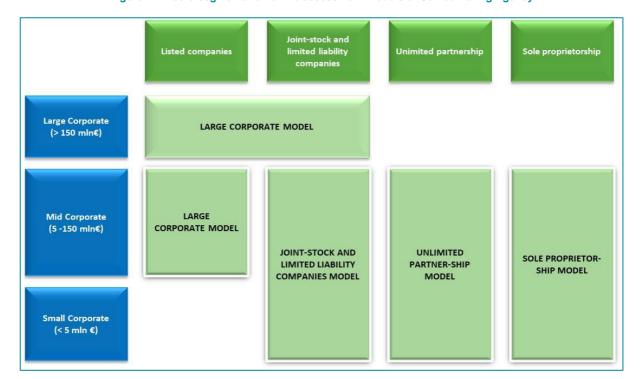


Figure 1 - Macro segmentation of the assessment models of Cerved Rating Agency

Starting from this first segmentation level, the rating models are further specialised in terms of:

- analysed risk factors, which vary by nature, type and relevance;
- presence / absence of some information and related economic sense;
- further peculiarities for each company type, according to other specific factors of the rated company.

The rating system is composed by two distinct areas of analysis:

- the quantitative analysis, based on quantitative statistical models, constantly updated at the occurrence of each relevant event (e.g. issuance of a new financial statement, declaration of prejudicial acts, cancelled or withdrawn protest), measures, through automatic grading, the economic / financial and behavioural risk profiles of the company;
- the qualitative analysis expressed by the analyst after the examination of all the data and the fundamental and behavioural assessments elaborated by the statistical model, beside the additional qualitative information directly gathered by Cerved Rating Agency.

The above mentioned areas of analysis flow, following the logical flux hereinafter described, onto **two distinct steps** of attribution of the final rating:

3. an **integrated rating** proposed by the system, combining through statistical procedures the qualitative and quantitative information and suggesting a rating to the analyst;



4. a final rating, starting from the latter and integrating further risk factors and the reasons for a possible notch.

The conceptual scheme of Cerved Rating Agency rating, as depicted in the chart, presents a modular structure, in which the grading, which are the partial automatic evaluations referred to the individual factors, are examined jointly to the purpose of defining and integrated score, representing a preliminary synthetic evaluation of the creditworthiness, optimised on the basis of statistical models developed on wide and representative sample of the Italian economy.

Such evaluation is at disposal of the rating analyst who, relying on their experience and on other available information not considered within the score, autonomously expresses their opinion on the creditworthiness of the rated company. The analyst's evaluation can differ even significantly from what elaborated by the statistical model.

The modular structure permits to better evidence the assessment of each individual factor and facilitates the understanding of the impact of each area of analysis.

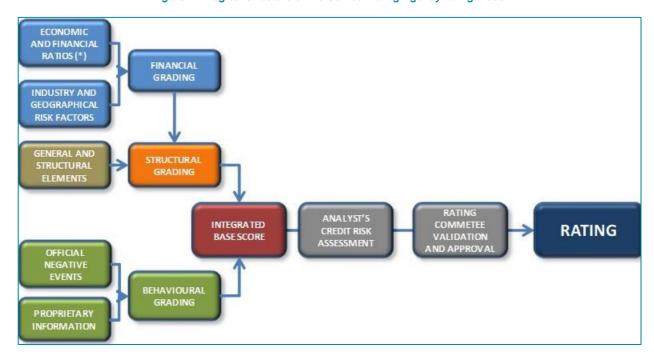


Figure 2 - Logical structure of the Cerved Rating Agency rating model



### 5. The informative set

The Cerved Rating Agency methodology envisages the adoption of all the information available in the Cerved Group IT system, related to the rated company and the juridical or physical persons connected, whether retrievable from official sources (e.g. Corporate Bureau, courts Bureau), from the rated company or other sources deemed in any case trustworthy by Cerved Rating Agency.

In particular, main elementary information considered in the rating system is:

- personal and company data of the rated entity (legal form, corporate governance, aging, sector, geographical area, members, management);
- financial statements, being the main source for the analysis of the economic and financial risk, but also as informative set for the corporate activities and strategy. Consolidated and infra-annual financial statements are also analysed where available:
- negative events on the rated company and on the connected subjects (official insolvencies, prejudicial events, CIGS<sup>2</sup>);
- regularity of the payments related to commercial transactions and relationships with financial institutions, measured by means a proprietary system of data gathering and mining (Payline) and / or through data and information collected by specific interviews to the rated company and / or its business partner; historical and prospective sectorial scenarios;
- news collected by 100 national, regional and local providers, as well as the information taken from internet;
- other information, mainly qualitative, gathered by other reliable sources and / or direct contacts with the rated entity and / or its business partner.

For the credit ratings requested by the rated company, the informative set is enriched with additional data and informative material gathered by the analysts directly from the rated company (for instance business plan and Credit Bureau report) and through interviews to the top management. All the public information (chamber of commerce searches, financial reports, insolvencies) is monitored and updated on a continuous basis and provided to the analysts for the issuance and the revision of the credit ratings.

The table below summarises the information adopted for rating issuance purposes detailing the minimum necessary contribution:

Table 2 - Minimum informative set for rating issuance

Data	Data source	Nature of the data <sup>3</sup>	Legal form of the rated entity <sup>4</sup>	Compulsoriness	Automatic rating issuance block
Company registration	Chamber of Commerce	0	SC, SP/DI	Yes	Yes
Financial statement <sup>5</sup>	Chamber of Commerce	0	SC	Yes	Yes
Consolidated financial statement	Chamber of Commerce	0	SC	No	No
Financial data in case of lack of up to date financial statement <sup>6</sup>	Rated company	Р	SC	Yes	No

Unemployment insurance (i.e. Cassa Integrazione Guadagni Straordinaria).

<sup>&</sup>lt;sup>3</sup> Caption: O = official, P = proprietary. For the official data, the reliance of the data is ensured by the related responsible body, whereas the proprietary data are subject to ordinary data quality checks of the Cerved Group.

<sup>&</sup>lt;sup>4</sup> Caption: SC = Società di Capitali (i.e. joint stock companies or limited liability companies), SP = Società di Persone (i.e. unlimited partnerships), DI = Ditte Individuali (i.e. sole proprietorships).

Financial statements having a closure date not older than 24 months are considered valid.

<sup>&</sup>lt;sup>6</sup> Recently established companies that prosecute an existing activity or entities that have changed their legal form.



Data	Data source	Nature of the data <sup>3</sup>	Legal form of the rated entity <sup>4</sup>	Compulsoriness	Automatic rating issuance block
Financial data	Rated company	Р	SP/DI	Yes	No
Protests checks	Chamber of Commerce	0	SC, SP/DI	Yes	Yes
Prejudicial events checks	Central registries, courts	0	SC, SP/DI	Yes	Yes
Corporate groups	Cerved Database	Р	SC	No	No
Payline payments experience	Cerved Database	Р	SC, SP/DI	No	No
Payments experience	Business partners of the rated entity or rated entity or official sources	Р	SC, SP/DI	No	No
Unemployment insurance	Cerved Database	Р	SC, SP/DI	No	No
Press release	Cerved Database, Press release	Р	SC, SP/DI	No	No
Web-site of the rated entity	Internet	Р	SC, SP/DI	No	No
Business plan	Rated company	Р	SC, SP/DI	No	No
Credit Bureau report	Rated company	Р	SC, SP/DI	No	No
Amortisation plan of existing loans	Rated company	Р	SC, SP/DI	No	No
Client portfolio with exposures / suppliers	Rated company	Р	SC, SP/DI	No	No
Organisational structure / Corporate organisational chart	Rated company	Р	SC, SP/DI	No	No
Statistics / Macroeconomic scenarios	Specialised sources	Р	SC, SP/DI	No	No
Statistics / Sectorial scenarios	Specialised sources, Cerved	Р	SC, SP/DI	No	No

The rating can be assigned only in presence of sufficient information. If the analyst in charge deems the available information not sufficient and / or not updated, they shall abstain from the elaboration of rating proposal.

As far as the mandatory information is concerned, in case of lack of data coming from public sources, Cerved Rating Agency gathers the information from the rated company and / or related business partners.

In case the analyst deems to be able to proceed with rating issuance or update despite the absence of one compulsory information according to the methodology, by not filling if this is the case one of the parameters envisaged by the methodology, they shall state in the analytical report that the rating has been issued notwithstanding the lack of this information and adequately explain the factors mitigating the risk connected with the scarcity of such data.



### 6. The layers of the analysis

#### 6.1 Quantitative analysis

#### 6.1.1 Structural grading

#### Financial grading

The quantitative evaluation of the economic / financial situation of the rated entity is based on the CeBi Score 4, which provides a predictive measure of the current and prospective economic / financial risk profile of the rated entity in comparison with its native economic financial system (sector and geographical area). The CeBi Score 4 is a suite of more than 200 models specialised by:

- sector of activity of the rated entity;
- aging of the rated entity;
- number of available financial statements: the models use a set up to three financial years.

#### The main areas of analysis are:

- cash flow, profitability and quality of the revenues;
- weight of the financial obligations and debt structure;
- financial structure and timing composition of the debt;
- financial balance and liquidity;
- growth;
- income and cash flow volatility;
- operational structure and general efficiency.

Each of these indicators is analysed on a time basis, namely assessing the trend through time by the comparison between subsequent financial years and benchmarked with average sectorial parameters.

#### Structural and individual data

Individual and qualitative characteristics of the rated company are analysed, namely the structure of the property and the organisation, the possible group membership, the size, the aging, the sector and the geographical area, the structure and the composition of the governance bodies with the inclusion of the assessment of the quality of the management, the commercial and marketing strategies.

#### 6.1.2 Behavioural grading

#### **Negative events**

The scope is the analysis of the presence and relevance of negative events related to bankruptcies, insolvency proceedings, protests and prejudicial events towards the rated entity and the connected parts. The effect induced by each individual negative event on the evaluation of the firm depends on several factors as the event type, the involved party, (rated entity and the connected parts), the magnitude of the event (if measurable) and the date in which the event has occurred.

#### Other information

The scope is the analysis of a set of information, both public and proprietary, which may contribute to the overall evaluation of the firm. This informative set encompasses the analysis of the real estate properties, payments experience (gathered for example through the proprietary system Payline), press releases, CIGS queries and possible critical events arising from the market.



#### 6.2 Qualitative analysis

The role of the analyst is crucial in the rating assignment process. As previously described the analyst verifies the adequacy of the input variables and, relying on available data and information, expresses, following a guided process, an appraisal of the capability of the rated company to fulfil its debt obligations. The intervention of the analyst focuses on the assessment of the prospective corporate risk, evidencing the increasing trends of the rated company in economic and financial terms. In particular, the intervention of the analyst is structured into three parameters expressing the main risk factors, namely the:

- financial situation (i.e. situazione finanziaria);
- payments (i.e. pagamenti);
- trend (i.e. andamento).

The three parameters, whose analysis procedures are better detailed in the following paragraphs, rely on the information available in the Cerved Rating Agency database and on the possible additional information picked up by the analyst during the interview or coming from other sources.

#### 6.2.1 Financial situation (Situazione finanziaria)

The aim of the qualitative analysis about financial situation of the rated company is the examination of its patrimonial structure, the short and medium-long term financial balances, as well as the capability to generate revenues, to the purpose of including in the comprehensive rating appraisal the prospective proficiency to create cash flows in a sufficient measure to cover the financial requirements of the rated entity.

The appraisal of the analyst about the financial situation of the rated company relies on the analysis of the historical and prospective financial statements (in complete or short form) for the joint stock companies or limited liability companies. For the unlimited partnerships and the sole proprietorships, in absence of deposited financial statements, the evaluation relies on significant economic / patrimonial information gathered during interviews or on estimated data taking into account the property framework, the reference sector and the operative geographical area.

The analysis of the financial situation mainly articulates in the definition of a set of specific indicators by sector and legal form, namely:

- profitability indicator: EBIT Interest Coverage;
- debt indicator:
  - Net Financial Debt on Equity;
  - Net Financial Debt on EBITDA:
  - Debt index.

As corollaries to the judgement expressed adopting these primary indicators, the analyst can take into account further elements supporting their assessment, namely:

- · economic indicator: revenues;
- debt indicators: Financial Debts / Total Debts;
- economic / patrimonial indicators:
  - Equity / Total Liabilities;
  - Net Operative Working Capital / Value of the production;
  - II level structure ratio;
- · cash flows indicators:



- Free Cash Flow / Gross Financial Debt;
- Operative Net Cash Flow.

in particular, such information interprets the resilience of the rated company with respect to the underwritten financial obligations and its capacity to fulfil the incurred debts, based on its own economic and patrimonial possibilities and debt structure.

#### 6.2.2 Payments (Pagamenti)

The aim of the qualitative analysis is the assessment of the payment profile of the rated entity, in order to consider in the overall rating appraisal the additional information at analyst's disposal not gathered by the elements already taken into account by the quantitative credit score.

The appraisal of the analyst about the payments relies on proprietary information (e.g. *Payline*) and / or the Credit Bureau reports and / or empirical experience retrieved during interviews and / or the evaluation of the future financial flows inferred in the business plan.

The analysis of the payments articulates for each company type also on the presence of possible negative events.

The evidence regarding the payment attitudes of the rated company is also compared with the average values of the reference sector.

As far as the "Payments" parameter is concerned, it is worth to highlight the following specific cases for which the absence of the parameter can be allowed, in light of the peculiarities of the sector for which the evaluations of the payment profiles may be missing or scarcely significant:

- holding companies: due to the parent company nature, the analysis of the payment experience directly linked to the holding company can be omitted as these elements are not relevant;
- real estate companies: for this company type, including the real estate renting companies, the payment experience is mostly absent or not available.

#### 6.2.3 Trend (Andamento)

The aim of the qualitative analysis is the assessment of the prospective trend of the rated entity, in order to consider in the overall rating appraisal the additional information at analyst's disposal not gathered by the elements already taken into account by the quantitative credit score.

The appraisal of the analyst about the trend relies on the historical and prospective analysis of the financial reports of the rated entity, in terms of trend of the value of the production and profitability.

The analysis of the trend articulates for the joint stock companies or limited liability companies (i.e. *Società di Capitali*) in the analysis of the financial statements, by considering, *in primis*, the value of the production and the EBITDA margin. Such indicators are analysed both in terms of point in time historical / prospective values and in comparison to reference sectorial benchmarks. After this, additional factors as the trend of the reference sector, the company strategies, the underwritten and planned investments are taken into account.



For the unlimited partnerships (i.e. *Società di Persone*) and the sole proprietorships (i.e. *Ditte Individuali*), in absence of deposited financial statements, the evaluation is based on indicators of the economic / patrimonial trend of the rated entity gathered during interviews.

#### 6.3 Rating proposed by the model

The qualitative and quantitative analyses previously described merge onto an integrated assessment of the rated entity, combining the automatic information deriving from the structural and behavioural scores with the evaluations coming from the critical analysis of the rating analyst.

Such information and evaluations are integrated in a rating proposed by the model that constitutes the starting point for the assignment of the final rating.

#### 6.4 Other risk factors notch

The rating suggested by the model can be confirmed or in case modified by the analyst when it is available further factual evidence which may have an impact of the assessment of the creditworthiness of the rated entity.

Therefore the evaluations of the analyst can be integrated with qualitative or quantitative factors acting as corrective elements to the rating proposed by the model through the use of the notch tool. In particular, it is worth to highlight the following factors:

- sizing criteria, taking into account the turnover and / or the net assets of the rated entity;
- membership to a Group and availability of a consolidated financial statement;
- sustainability and efficacy of the business plan (where available);
- extraordinary corporate operations currently underway or planned;
- evaluations of news about the reference market and business peculiarities;
- stability and robustness of the property and quality of the corporate management.

The whole informative set contributes, according to a set of agreed rules and operational procedures, to the attribution of the final rating by the Agency.



## 7. The rating process

The rating model and the related governance processes have been deployed in compliance with the requirements depicted in the current regulatory framework for rating agencies, pursuant to the Regulation E.C. n. 1060/2009 and subsequent amendments.

The integrated score produced by the statistical model represents the starting basis for the rating assignment process, which can be summarised in the following phases:

- 1. the rating process is started after the request by the rated entity or a third party;
- 2. the analyst in charge of rating assignment examines the available information, in terms of completeness and timeliness, and verifies the value of the automatic score and the individual grading;
- 3. the analyst collects further data in case the informative set is deemed incomplete and / or not sufficiently up to date. The rating issued by Cerved Rating Agency can be required by other parties than the rated company or directly by the latter. In this second case the structure of the credit rating assignment process remains basically unchanged, although some relevant differences occur. In particular, the rated company takes part in the rating process and provides the analysts with the required information, both through the documental sets and the allowance of the analysts in the company. The visit includes an interview to the key company roles and is aimed at deepening the knowledge about the company and the management, and at gathering information about the economic / financial prospective trend, the competitive landscape identifying the strength and weakness areas of the rated entity;
- 4. the analyst expressed their evaluation about the rated entity, with regards to the income profile and financial structure, economic / financial trend and regularity of the payments. The evaluation process follows a series of strictly regulated steps, including the comparison between the situation of the rated company and the values of the sectorial benchmarks. The robustness of the process and the sectorial peers analyses aim at ensuring the maximum objectivity in the judgement;
- 5. the appraisal expressed by the analyst is combined with the integrated score through a matrix compatibility system attributing a preliminary rating; the analyst, if needed, can take action with further corrections of the final rating (*notch*);
- 6. the subsequent final rating judgement is submitted to the screening by a supervisor or Rating Committee for the approval; during the rating validation phase, the supervisor or, depending on the case, Rating Committee can either confirm the final judgement proposed by the responsible analyst, modify it or require further deepening;
- 7. the approved rating and the main elements on which the rating relies on are communicated to the rated company at least 24 working hours in advance with respect to the rating publication in order to draw the attention of the rating agency on possible typos;
- 8. all the public credit ratings issued by Cerved Rating Agency, regardless of the type of the requiring subject, are subjected to continuous monitoring and review at least on an annual basis. The monitoring and review activities of the rating can be carried out with several modes, jointly adopted, as described below:
- 1. Activation of automatic triggers following the update of the informative set
  - a) after the rating assignment all the official and proprietary news, both qualitative and quantitative, are kept under continuous update by the dedicated Cerved Group structures; in particular the update process involves the following informative sets:
    - company financial statements, refreshed, reclassified and made available to the analyst as soon as received from the Chambers of Commerce;
    - extraordinary corporate operations;
    - news collected by 100 national, regional and local providers, as well as the information taken from internet;
    - activation of insolvency proceedings;
    - prejudicial and protest events related to the rated company and the reference physical persons;
    - · attitudes and payment trend of the rated company.



- b) the consistency between the new information received and the assigned rating is verified through a crossed controls system;
- c) in the cases of significant variations between the assigned rating and the event detected by the system the triggers (CRON PEN) leading to the launch of the rating review process by the analyst are activated;
- 2. Variation of the integrated score from investment to sub-investment grade

The counterparties not belonging to the cases mentioned above are identified on a monthly basis when the integrated score has switched from investment to sub-investment grade;

- 3. Alert to the analysts due to particular events
  - a) monitoring of the events that can impact to the economic system, the companies or their representatives;
  - b) provision of information on the event through company intranet, in particular to benefit of the analysts;
  - c) impact evaluation with related identification of the companies potentially affected by the event and activation of a specific trigger yielding to the begin of the rating review process by the analyst;
- 4. Autonomous launch of the process by the analyst

Each analyst has the list of the entities rated in the last year (watch list), always up to date in real time. The analyst, in presence of information or events that according to them can affect the rating, can autonomously launch the review process of the rating.

The validity of the rating has in any case a natural expiration period equal to one year. The entire evaluation process can be summarised as follows:

2. VERIFICATION OF COMPLETE AVAILABILITY AND UPDATING OF INFORMATION SET

3. COLLECTION, PROCESSING AND STORAGE OF OFFICIAL AND PROPRIETARY DATA

4. EVALUATION OF QUANTITATIVE AND QUALITATIVE RISK PROFILE

5. RATING PROPOSAL

6. RATING APPROVAL

7. COMMUNICATION OF RATING TO RATED ENTITY AND PUBLICATION OF RATING

8. MONITORING OF RATING

Figure 3 - Rating assignment process