





Creditreform Rating AG's credit assessments under the Standardised Approach

1. Executive summary¹

- 1. The methodology applied to produce the mapping is the one specified in the Commission Implementing Regulation (EU) 2016/1799 of 7 October 2016 (the Implementing Regulation)² laying down implementing technical standards with regard to the mapping of credit assessments of external credit assessment institutions for credit risk in accordance with Articles 136(1) and 136(3) of Regulation (EU) No 575/2013 of the European Parliament and of the Council (Capital Requirements Regulation CRR). This Implementing Regulation employs a combination of the provisions laid down in Article 136(2) of the CRR.
- 2. The information base used reflects additional quantitative and qualitative information collected after the submission of the draft Implementing Technical Standards by the JC to the European Commission.
- 3. The mapping neither constitutes the one which ESMA shall report on in accordance with Article 21(4b) of Regulation (EC) No 1060/2009 (Credit Rating Agencies Regulation CRA) with the objective of allowing investors to easily compare all credit ratings that exist with regard to a specific rated entity³ nor should be understood as a comparison of the rating methodologies of Creditreform with those of other ECAIs. This mapping should however be interpreted as the correspondence of the rating categories of Creditreform with a regulatory scale which has been defined for prudential purposes.
- 4. As described in Recital 12 of the Implementing Regulation, it is necessary to avoid causing undue material disadvantage on those ECAIs which, due to their more recent entrance in the market, present limited quantitative information, with the view to balancing prudential with market

¹ The Joint Committee (JC) of the European Supervisory Authorities (ESAs) produces mapping reports illustrating how the outcome of the mapping assessment has been reached, based on the methodology set out in the Implementing Regulation (EU) 2016/1799 of 7 October 2016. While mapping reports are not mandated by the Capital Requirements Regulation, they are produced by own initiative to enhance transparency.

The JC of the ESAs has not received the consent from Creditreform Rating AG to publish the information transmitted by the ECAI for the purposes of assessing the mapping. Therefore, the JC of the ESAs is not in a position to provide similar information for Creditreform Rating AG as for other ECAIs having consented to the publication of their mapping reports.

² OJ L 275, 12.10.2016, p. 3-18

³ In this regard please consider https://www.esma.europa.eu/sites/default/files/library/esma 2015-1473 report on the possibility of establishing one or more mapping.pdf.







concerns. Updates to the mapping should be made wherever this becomes necessary to reflect quantitative information collected after the entry into force of the Implementing Regulation.

5. The resulting mapping tables have been specified in Annex III of the revised draft ITS on the mapping of ECAIs' credit assessments under Article 136(1) and (3) of Regulation (EU) No 575/2013. Figure 1 below shows the result for Creditreform's long-term issuer rating scale.

Figure 1: Mapping of Creditreform's long-term issuer rating scale

Credit assessment	Credit quality step
AAA	1
AA	1
Α	2
ВВВ	4
ВВ	5
В	6
С	6
SD	6
D	6







2. Introduction

- 7. Creditreform Ratings AG (Creditreform) is a credit rating agency that registered with ESMA on 18 May 2011 and therefore meets the conditions to be an eligible credit assessment institution (ECAI)⁴. Creditreform group (founded in 1879) is a provider of b2b business information in Germany and Europe.
- 8. The methodology applied to produce the mapping is the one specified in the Implementing Regulation. This Implementing Regulation employs a combination of the provisions laid down in Article 136(2) of the CRR. The information base used to produce this mapping report reflects additional quantitative and qualitative information collected after the submission of the draft Implementing Technical Standards by the JC to the European Commission. The quantitative information is drawn from data available in the ESMA's central repository (CEREP⁵) based on the credit rating information submitted by the ECAIs as part of their reporting obligations.
- 9. Section 3 describes the relevant rating scales of Creditreform. Section 4 contains the methodology applied to derive its mapping whereas Sections 5 and 6 refer to the mapping of its remaining relevant ratings scales. The mapping tables are shown in Appendix 4 of this document and have been specified in Annex III of the revised draft ITS on the mapping of ECAIs' credit assessments under Article 136(1) and (3) of Regulation (EU) No 575/2013.

3. Creditreform credit ratings and rating scales

- 10.Creditrefom produces a variety of types of credit ratings, which may be used by institutions for the calculation of risk weights under the Standardised Approach (SA)⁶, as shown in column 2 of Figure 2 in Appendix 1:
 - Long term bank issuer rating, defined as establishing the extent to which the bank under review will be able to meet the contractual obligations of its various financing instruments fully and on time.
 - **Short-term bank issuer rating,** defined as the long term bank issuer rating, but referring to a horizon of up to 1 year.
 - Bank issue rating, defined as having a modular structure and being based on the long-term issuer rating of the bank under review. Additional criteria such as the bail-in cascade pursuant to the BRRD (Bank Recovery and Resolution Directive), the type and class of instrument and the structure of total liabilities are also being taken into account, potentially leading to an upgrade or a downgrade of certain classes of instruments. Bank ratings may be accompanied by simultaneously conducted bank capital and unsecured debt instrument ratings, optionally also by ratings for specific issues.

⁴ It is important to note that the mapping does not contain any assessment of the registration process of Creditreform carried out by ESMA.

⁵ https://cerep.esma.europa.eu/cerep-web/

⁶ As explained in recital 4 of the Implementing Regulation, Article 4(1) CRA allows the use of the credit assessments for the determination of the risk-weighted exposure amounts as specified in Article 113(1) CRR as long as they meet the definition of credit rating in Article 3(1)(a) CRA.







- Corporate issuer ratings, defined as assessing the financial strength of the company or
 issuer under review in an integrated rating process. This enables potential investors and
 business partners to develop a reliable assessment of whether or not the company or issuer
 in question will be able to meet its financial obligations fully and on time.
- Corporate issue ratings, defined as providing assessments of the credit quality of individual issues by non-financial companies, including for example promissory notes, loans, corporate bonds or any other form of borrowed funds.
- **SME issuer rating,** defined as assessing the financial strength of the issuer under review in an integrated rating process. This enables potential investors and business partners to develop a reliable assessment of whether or not the company or issuer in question will be able to meet its financial obligations fully and on time.
- **SME issue rating**, defined as providing assessments of the credit quality of individual issues by non-financial companies, including for example promissory notes, loans, corporate bonds or any other form of borrowed funds.
- Bank covered bonds rating, defined as primarily based on an analysis of the issuer, following which the legal framework and the structure of the issue will be examined.
- Sovereign issuer ratings, defined as providing assessments of the creditworthiness of a sovereign in its capacity as a debtor with universally comparable standards across different levels of economic development.
- **Sovereign issue ratings**, defined as ratings for specific debt instruments or bonds that have been issued by governments either in local or foreign currency.
- Institutional investor debt rating, defined as using asset-based finance ratings to analyze
 directly- or indirectly-financed investments. The product range includes ratings in different
 asset categories, for private equity and private debt investments as well as for investments
 in fields such as infrastructure, renewables, real estate, aviation and logistics.

Creditreform assigns these credit ratings to different rating scales as illustrated in column 3 of Figure 2 in Appendix 1. Therefore, a specific mapping has been prepared for the following rating scales:

- Long-term issuer rating scale. The specification of this rating scale is described in Figure 3 of Appendix 1.
- Long-term issue rating scale. The specification of this rating scale is described in Figure 4 of Appendix 1.
- **Short-term rating scale**. The specification of this rating scale is described in Figure 5 of Appendix 1.







- 11. The mapping of the Creditreform Long-term issuer rating scale is explained in Section 4 and it has been derived in accordance with the quantitative factors, qualitative factors and benchmarks specified in the ITS.
- 12. The mapping of the short-term credit ratings scale is explained in Section 5 and it has been indirectly derived from the mapping of the long-term issuer credit ratings scale and the internal relationship established by Creditreform between these two scales, as specified in Article 13 of the ITS.
- 13. The indirect mapping approach described in the previous paragraph has also been applied In the case of the other long- rating scales. In this case, however, the relationship with the long-term issuer credit ratings scale has been assessed, for the purpose of the mapping, by the JC based on the comparison of the meaning and relative position of the rating categories.

4. Mapping of Creditreform's Long-term rating scale

- 14. The mapping of the Long-term rating scale has consisted of two differentiated stages where the quantitative and qualitative factors as well as the benchmarks specified in Article 136(2) CRR have been taken into account.
- 15.In the first stage, the quantitative factors referred to in Article 1 of the ITS have been taken into account to differentiate between the levels of risk of each rating category. The *long run default rate* of a rating category has been calculated in accordance with Article 6 of the ITS, as the number of credit ratings cannot be considered to be sufficient.
- 16.In a second stage, the qualitative factors proposed in Article 7 of the ITS have been considered to challenge the result of the previous stage, especially in those ratings categories where less default data has been available.

4.1.Initial mapping based on the quantitative factors

17. This mapping report reflects additional quantitative information collected after the submission of the draft ITS by the JC to the Commission.

4.1.1. Calculation of the long-run default rates

- 18. The number of credit ratings, shown in Figure 7 in Appendix 3, cannot be considered sufficient for the calculation of the short and long run default rates specified in the Articles 3 5 of the Implementing Regulation since the number of rated items is below the required minimum. As a result, the allocation of the CQS has been made in accordance with Article 6 of the Implementing Regulation.
- 19. The long run default rate benchmark associated with the equivalent category in the international rating scale is a key qualitative factor that has been used for the mapping proposal.







20.For 'D' and 'SD' rating categories, no allocation has been made based on this methodology since they already reflect a 'default' situation.

4.1.2. Mapping proposal based on the long run default rate

- 21.As illustrated in the second column of Figure 10 in Appendix 4, the assignment of the rating categories to credit quality steps has been initially made in accordance with Article 6 of the Implementing Regulation. Therefore, the numbers of defaulted and non-defaulted rated items have been used together with the prior expectation of the equivalent rating category of the international rating scale. The results are specified in Figure 9 of Appendix 3.
 - AAA/AA: no defaults are registered in the available time series, so the assignment to CQS
 1 and 2 is warranted, regardless of the data cohort chosen. As shown in Figure 6 of Appendix
 3, the number of rated items in each of these categories is equal or larger than the
 respective minimum required number of observed items given the number of defaulted
 items in the rating category.
 - BBB/BB: The analysis is displayed in Figure 6 of Appendix 3. The first data cohort suggests a mapping aligned with the international rating scale (i.e. CQS 3 for BBB and CQS 4 for BB), as no defaults are recorded. The second data cohort, which incorporates the additional quantitative information collected after submission of the draft ITS to the Commission, indicates allocation to CQS 4 for BBB and to CQS5 for BB as the pool of rated items is not large enough given the number of defaulted items.
 - B: As shown in Figure 6 of Appendix 3, the number of rated items in each of these categories
 does not reach the minimum required number of observed items given the number of
 defaulted items in the rating category. A mapping to CQS 6 is warranted.
 - **C:** since the CQS associated with the equivalent rating category of the international rating scale is 6, the proposed mapping for these rating categories is also CQS 6.

4.2. Final mapping after review of the qualitative factors

22. The Joint Committee of the European Supervisory Authorities has not received the consent from Creditreform Rating AG to publish the information transmitted by the ECAI.

5. Mapping of Creditreform's Short-Term credit rating scale

23.Creditreform also produces short-term credit ratings and assigns them to the short-term credit ratings scale (see Figure 5 in Appendix 1). Given that the default information referred to these rating categories cannot be comparable with the 3-year time horizon that characterizes the benchmarks established in the ITS, the internal relationship established by Creditreform between these two rating scales has been used to derive the mapping.







24. The Joint Committee of the European Supervisory Authorities has not received the consent from Creditreform Rating AG to publish the information transmitted by the ECAI.

6. Mapping of Creditreform's long-term issue credit rating scale

- 25.Based on the methodology described in the previous section, the mapping has been derived from the relationship established by the JC with the relevant Long-term issuer credit ratings scale.
- 26.**Long-term issue credit ratings scale** (see Figure 4 in Appendix 1). The rating categories can be considered comparable to those of the Long-term issuer credit ratings scale. Therefore the mapping of each rating category has been derived from its meaning and relative position and the mapping of the corresponding categories of the long-term issuer rating scale.







Appendix 1: Credit ratings and rating scales

Figure 2: Creditreform's relevant credit ratings and rating scales

Long-term ratings Central governments or central banks Sovereign issuer rating Long-term issuer rating Public sector entities Corporate issuer rating Long-term issuer rating Public sector entities Corporate issuer rating Long-term issuer rating Institutions Long-term bank issuer rating Long-term issuer rating Short-term bank issuer rating Short-term rating scale Bank issue rating Long-term issuer rating Corporates Corporate issuer rating Long-term issuer rating Corporate issue rating Long-term issue rating SME issuer rating Long-term issuer rating Covered bonds Bank covered bonds rating Long-term issue rating	SA exposure classes	Name of credit rating	Credit rating scale	
Sovereign issue rating Public sector entities Corporate issuer rating Corporate issuer rating Long-term issuer rating Long-term issuer rating Institutions Long-term bank issuer rating Long-term issuer rating Short-term bank issuer rating Short-term rating scale Bank issue rating Corporates Corporate issuer rating Long-term issuer rating Corporates Corporate issuer rating Long-term issuer rating SME issuer rating Long-term issuer rating Long-term issuer rating SME issuer rating Long-term issuer rating Long-term issuer rating Long-term issuer rating Long-term issuer rating	Long-term ratings			
Public sector entities Corporate issuer rating Corporate issue rating Long-term issuer rating Long-term issuer rating Long-term issuer rating Short-term bank issuer rating Short-term bank issuer rating Corporates Corporate issuer rating Corporates Corporate issuer rating Corporate issuer rating Corporate issuer rating Corporate issuer rating SME issuer rating SME issuer rating Long-term issuer rating	Central governments or central banks	Sovereign issuer rating	Long-term issuer rating	
Corporate issue rating Long-term issue rating Long-term issue rating Short-term bank issuer rating Short-term bank issuer rating Short-term rating scale Bank issue rating Corporates Corporate issuer rating Corporate issuer rating Corporate issuer rating SME issuer rating SME issuer rating Long-term issuer rating		Sovereign issue rating	Long-term issue rating	
Institutions Long-term bank issuer rating Short-term bank issuer rating Short-term rating scale Bank issue rating Corporates Corporate issuer rating Corporate issuer rating Corporate issuer rating Corporate issuer rating SME issuer rating SME issuer rating Long-term issuer rating	Public sector entities	Corporate issuer rating	Long-term issuer rating	
Short-term bank issuer rating Bank issue rating Corporates Corporate issuer rating Corporate issuer rating Corporate issue rating SME issuer rating SME issuer rating SME issuer rating Long-term issuer rating		Corporate issue rating	Long-term issue rating	
Bank issue rating Corporates Corporate issuer rating Corporate issuer rating Corporate issue rating Long-term issuer rating SME issuer rating SME issuer rating Long-term issuer rating Long-term issuer rating Long-term issuer rating Long-term issuer rating	Institutions	Long-term bank issuer rating	Long-term issuer rating	
Corporates Corporate issuer rating Corporate issue rating Long-term issuer rating SME issuer rating Long-term issuer rating Long-term issuer rating Long-term issuer rating Long-term issuer rating		Short-term bank issuer rating	Short-term rating scale	
Corporate issue rating SME issuer rating SME issue rating SME issue rating Long-term issue rating Long-term issue rating		Bank issue rating	Long-term issue rating	
SME issuer rating SME issue rating Long-term issuer rating Long-term issue rating	Corporates	Corporate issuer rating	Long-term issuer rating	
SME issue rating Long-term issue rating		Corporate issue rating	Long-term issue rating	
<u> </u>		SME issuer rating	Long-term issuer rating	
Covered bonds Bank covered bonds rating Long-term issue rating		SME issue rating	Long-term issue rating	
	Covered bonds	Bank covered bonds rating	Long-term issue rating	
Institutional investor debt rating Long-term issue rating		Institutional investor debt rating	Long-term issue rating	







Figure 3: Long-term issuer rating scale

Credit assessment	Meaning of the credit assessment
AAA	Highest level of creditworthiness, lowest default risk
AA	Very high level of creditworthiness, very low default risk
А	High level of creditworthiness, low default risk
BBB	Highly satisfactory level of creditworthiness, low to medium default risk
ВВ	Satisfactory level of creditworthiness, medium default risk s
В	Moderate level of creditworthiness, increased default risk
С	Low level of creditworthiness, high or very high default risk
SD	Insufficient level of creditworthiness, selective default of a considerable proportion of the company's payment obligations
D	Insufficient level of creditworthiness, default, insolvency







Figure 4: Long-term issue rating scale

Credit assessment	Meaning of the credit assessment
AAA	Highest level of credit quality, lowest investment risk
AA	Very high level of credit quality, very low investment risk
A	High level of credit quality, low investment risk
ВВВ	Highly satisfactory level of credit quality, low to medium investment risk
ВВ	Satisfactory level of credit quality, medium investment risk
В	Moederate level of credit quality, increased investment risk
С	Low level of credit quality, high or very high investment risk
D	Insufficient level of credit quality, total loss of investment





Figure 5: Short-term rating scale

Credit assessment	Meaning of the credit assessment
L1	Extraordinarily high level of liquidity
L2	High level of liquidity
L3	Adequate level of liquidity
NEL	Inadequate level of liquidity or liquidity at risk
D	Default







Appendix 3: Default rates of each rating category

Figure 6: Number of rated items, with relevant weights⁷

Date	AAA	AA	Α	BBB	ВВ	В	С
01/01/2001	0.0	0.5	0.0	0.0	0.0	0.0	0.0
01/07/2001	0.0	0.5	0.5	0.0	0.0	0.0	0.0
01/01/2002	0.0	0.5	0.5	0.0	0.0	0.0	0.0
01/01/2003	0.0	0.0	1.5	0.0	1.0	0.0	0.0
01/07/2003	0.0	0.0	1.5	0.0	1.0	0.0	0.0
01/01/2004	0.0	0.0	1.5	0.5	1.0	0.0	0.0
01/07/2004	0.0	0.0	1.5	0.5	1.0	0.0	0.0
01/01/2005	0.0	0.0	1.0	2.0	0.0	0.0	0.0
01/07/2005	0.0	0.0	1.5	2.0	0.0	0.0	0.0
01/01/2006	0.0	0.0	1.5	1.0	0.0	0.0	0.0
01/07/2006	0.0	0.0	1.0	1.5	1.0	0.0	0.0
01/01/2007	0.0	0.0	2.0	1.5	0.5	0.0	0.0
01/07/2007	0.0	0.0	2.0	1.0	0.5	0.0	0.0
01/01/2008	0.0	0.0	3.0	2.0	1.0	0.0	0.0
01/07/2008	0.0	0.0	3.5	2.0	1.0	0.0	0.0
01/01/2009	0.0	0.0	2.5	2.0	1.0	0.0	0.0
01/07/2009	0.0	0.0	2.0	2.5	1.5	0.0	0.0
01/01/2010	0.0	0.0	3.5	2.0	0.5	0.0	0.0
01/07/2010	0.0	0.0	4.0	4.5	1.5	0.0	0.0
01/01/2011	0.0	0.5	3.0	8.5	3.0	0.0	0.0
01/07/2011	0.0	0.5	5.5	14.0	13.0	0.0	0.0
01/01/2012	0.0	0.0	5.5	14.0	18.5	1.0	0.0
01/07/2012	0.0	0.0	3.0	17.0	19.0	0.5	0.0
01/01/2013	0.0	0.0	5.0	18.5	24.0	0.5	0.0

Source: Joint Committee calculations based on CEREP.

 $^{^{7}}$ Withdrawn ratings have been weighted by 50% as indicated in Article 4(3) of the ITS.



Figure 7: Number of defaulted rated items

Date	AAA	AA	Α	BBB	ВВ	В	С
01/01/2001	0	0	0	0	0	0	0
01/07/2001	0	0	0	0	0	0	0
01/01/2002	0	0	0	0	0	0	0
01/01/2003	0	0	0	0	0	0	0
01/07/2003	0	0	0	0	0	0	0
01/01/2004	0	0	0	0	0	0	0
01/07/2004	0	0	0	0	0	0	0
01/01/2005	0	0	0	0	0	0	0
01/07/2005	0	0	0	0	0	0	0
01/01/2006	0	0	0	0	0	0	0
01/07/2006	0	0	0	0	0	0	0
01/01/2007	0	0	0	0	0	0	0
01/07/2007	0	0	0	0	0	0	0
01/01/2008	0	0	0	0	0	0	0
01/07/2008	0	0	0	0	0	0	0
01/01/2009	0	0	0	0	0	0	0
01/07/2009	0	0	0	0	0	0	0
01/01/2010	0	0	0	0	0	0	0
01/07/2010	0	0	0	0	0	0	0
01/01/2011	0	0	0	0	1	0	0
01/07/2011	0	0	0	3	3	0	0
01/01/2012	0	0	0	4	6	1	0
01/07/2012	0	0	0	3	8	0	0
01/01/2013	0	0	0	4	5	0	0

Source: Joint Committee calculations based on CEREP data







Figure 8: Mapping proposal for rating categories with a non-sufficient number of credit ratings

	AAA/AA	Α
Credit Quality Step of equivalent international rating category	CQS1	CQS 2
N. observed defaulted items	0	0
Minimum N. rated items	0	0
Observed N. rated items	2.5	56.5
Mapping proposal	CQS1	CQS 2
ВВВ	2004-2008	2009-2013
Credit Quality Step of equivalent international rating category	CQS3	CQS3
N. observed defaulted items	0	14
Minimum N. rated items	0	441
Observed N. rated items	14	83
Mapping proposal	CQS3	CQS4
ВВ	2003-2008	2009-2013
Credit Quality Step of equivalent international rating category	CQS4	CQS4
N. observed defaulted items	0	23
Minimum N. rated items	0	n.a.
Observed N. rated items	6	82
Mapping proposal	CQS4	CQS5
В	2012-2013	
Credit Quality Step of equivalent international rating category	CQS5	
N. observed defaulted items	1	
Minimum N. rated items	11	
Observed N. rated items	2	
Mapping proposal	CQS6	







Appendix 4

Figure 9: Mapping of Creditreform's Long-term issuer rating scale

Credit Quality Step
1
1
2
4
5
6
6
6
6





Figure 10: Mapping of Creditreform's Short-term credit rating scale

Credit assessment	Credit Quality Step
L1	1
L2	2
L3	4
NEL	4
D	4





Figure 11: Mapping of Creditreform's Long-term issue credit rating scale

Credit assessment	Credit Quality Step
AAA	1
AA	1
Α	2
ВВВ	4
ВВ	5
В	6
С	6
D	6
	<u> </u>