





Amended Mapping of GBB credit assessments under the Standardised Approach

1. Executive summary

- 1. This report describes the mapping exercise carried out by the Joint Committee (JC) of the European Supervisory Authorities (ESAs) to propose an amended 'mapping' report of the credit assessments of GBB-Rating Gesellschaft fuer Bonitaets-beurteilung mbH's (GBB), with respect to the version published in June 2021.
- 2. The methodology applied to produce the mapping remains as specified in 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.
- 3. The information base used to produce this mapping report reflects additional quantitative information collected after the production of the mapping report published in June 2021. Regarding qualitative developments, the qualitative factors as specified in the Implementing Regulation remain unchanged, and GBB started producing issue ratings for unsecured capital instruments and financial instruments of banks and building societies.
- 4. 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 GBB with those of other ECAIs. This mapping should however be interpreted as the correspondence of the rating categories of GBB with a regulatory scale which has been defined for prudential purposes. This implies that an appropriate degree of prudence may have been applied wherever not sufficient evidence has been found with regard to the degree of risk underlying the credit assessments.

¹ According to Article 136(1), the 'mapping' is the correspondence between the credit assessments of and ECAI and the credit quality steps set out in Regulation (EU) No 575/2013 (Capital Requirements Regulation – CRR).

² OJ L 275, 12.10.2016, p. 3-18

³ In this regard please consider ESMA's Report on the possibility of establishing one or more mapping.







- 5. 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 concerns. Therefore, the relevance of quantitative factors for deriving the mapping is relaxed. This allows ECAIs which present limited quantitative information to enter the market and increases competition. Therefore, the relevance of quantitative factors for deriving the mapping should be relaxed. This allows ECAIs which present limited quantitative information to enter the market and increases competition.
- 6. The resulting mapping tables have been specified in Annex III of the Consultation Paper on 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 GBB rating scale, the Global long-term rating scale.

Figure 1: Mapping of GBB's Global long-term rating scale

| Credit assessment | Credit quality step |
|-------------------|---------------------|
| AAA | 1 |
| AA | 1 |
| Α | 2 |
| ВВВ | 3 |
| ВВ | 4 |
| В | 5 |
| ссс | 6 |
| сс | 6 |
| С | 6 |
| D | 6 |







2. Introduction

- 7. This report describes the mapping exercise carried out by the JC to determine the 'mapping' of the credit assessments of GBB-Rating Gesellschaft fuer Bonitaets-beurteilung mbH's (GBB), with respect to the version published in June 2021.
- 8. GBB is a credit rating agency that has been registered with ESMA on 28 July 2011 and therefore meets the conditions to be an eligible credit assessment institution (ECAI).⁴
- 9. 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.
- 10. The information base used to produce this mapping report reflects additional quantitative information collected after the submission of the draft Implementing Technical Standards by the JC to the European Commission. Regarding qualitative developments, the qualitative factors remain unchanged and GBB started producing issue ratings for capital instruments and financial instruments of banks and building societies.
- 11.The quantitative information is drawn from data available in the ESMA's central repository (CEREP)⁵ and RADAR⁶ based on the credit rating information submitted by the ECAIs as part of their reporting obligations.
- 12. The following sections describe the rationale underlying the mapping exercise carried out by the Joint Committee (JC) to determine the mappings. Section 3 describes the relevant ratings scales of GBB for the purpose of the mapping. Section 4 contains the methodology applied to derive the mapping of GBB rating. The mapping table is shown in Appendix 4 of this document and have been specified in Annex III of the Consultation Paper on the revised draft ITS on the mapping of ECAIs' credit assessments under Article 136(1) and (3) of Regulation (EU) No 575/2013.

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⁴ It is to be noted that the mapping does not contain any assessment of the registration process of GBB carried out by ESMA.

⁵ These statistics are computed from individual rating information provided by registered or certified Credit Rating Agencies to ESMA, as required as per Article 11(2) of the CRA Regulation. http://cerep.esma.europa.eu/cerep-web/

⁶ Commission Delegated Regulation (EU) 2015/2 RADAR RTS.







3. GBB credit ratings and rating scales

- 13.GBB produces **long-term credit ratings (issuer rating)**, ratings for **financial instruments** of financial institutes and building societies and for **covered bonds**, which may be used by institutions for the calculation of risk weights under the Standardised Approach (SA). ⁷ The ratings are shown in Column 2 of Figure 2 in Appendix 1.
- 14.Long-term credit rating (issuer rating) is an evaluation of the creditworthiness of (i) private sector banks, a majority of which are associated to the Deposit Protection Fund of the German banks or seek to be associated to the Deposit Protection Fund of the German banks, (ii) building societies, (iii) companies moving leasable assets and (iv) small- and medium-sized corporates.
- 15. In 2019, GBB introduced credit assessments on covered bonds and in 2021 the credit assessment on financial instruments of banks and building societies. The rating on financial instruments issued by banks and building societies primarily seeks to establish the extent to which an issuer, for the life of the issue, is able, based on a one-year projection, to meet its financial obligations arising from the issue fully and timely.
- 16.GBB assigns these credit ratings to the **Global long-term rating scale** as illustrated in column 3 of Figure 2 in Appendix 1. Therefore, a specific mapping has been prepared for this scale. The specification of the Global long-term rating scale is described in Figure 3 of Appendix 1.
- 17. The mapping of the Global long-term 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.

4. Mapping of GBB's Global long-term rating scale

- 18. The mapping of the Global 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.
- 19.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 as per Article 3(1)(a) of the Implementing Regulation.
- 20.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.

⁷ As explained in recital 4 ITS, 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.







4.1. Initial mapping based on the quantitative factors

4.1.1. Calculation of the short-run and long-run default rates

- 21.In line with the original mapping report, the number of credit ratings is not sufficient for the calculation of the long-run default rate, as per Article 3(1)(a) of the Implementing Regulation on mapping. This is determined by comparing the number of ratings representing the inverse of the long-run default rate benchmark of the rating category, as referred to in point (a) of Article 14 of the Implementing Regulation.
- 22. For rating category BB, the number of ratings cannot be considered sufficient for the calculation of the short and long run default rates specified in Articles 3 5 of the ITS. In this case the allocation of the CQS has been made in accordance with Article 6 of the ITS. However, the size of the pools is too large⁸ to be evaluated by a small pool methodology. In this situation Article 6 is applied by considering the number of defaulted and not defaulted items through the computation of short run default rates and a proxy for the long run default rate (see Figure 7 in Appendix 3). Thus, the computed proxy of the long run default rate is considered as a first indicator to perform the allocation to a CQS, together with the prior expectation of the equivalent rating category of the international rating scale. However, in this case the result needs to be confirmed by the qualitative factors given that only a proxy of the long run default rate has been achieved.
- 23. For the remaining rating categories, the number of credit ratings of the GBB Global rating scale cannot be considered to be sufficient for the calculation of the short run and long run default rates specified in Articles 3 5 of the Implementing Regulation. Therefore, the allocation to the CQS has been made in accordance with Article 6 of the Implementing Regulation, as shown in Figure of Appendix 3.
- 24.For D rating category, no calculation of default rates has been made since it already reflects a 'default' situation.

4.1.2. Mapping proposal based on the long run default rate

- 25.As illustrated in the second column of Figure 7 in Appendix 4, the assignment of the rating categories to credit quality steps has been initially made in accordance with Article 6 of the ITS. Therefore, the number 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.
 - AAA/AA/A/BBB/B: 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. Thus, the credit quality step associated with the

⁸ If the total number of rated items over a 5 years period is larger than 10 times the number representing the inverse of the long run default rate benchmark associated with the equivalent rating category in the international rating scale, but at the same time this pool of ratings does not satisfy Article 3 ITS, then this pool of ratings is considered to be too large for the application of a small pool methodology.

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AAA/AA, A, BBB, B rating categories in the international rating scale (CQS 1, CQS 2, CQS3 and CQS 5, respectively) can be assigned.

- **BB**: The proxy long run default rates are considered as a first indicator to perform the allocation to each CQS, together with the prior expectation of the equivalent rating category of the international rating scale. While the proxy long run default rate assigns rating category BB to CQS 3, the equivalent rating category of the international rating scale is CQS 4. In accordance with these factors, BB can be assigned to CQS 4.
- **CCC-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

- 26.The qualitative factors specified in Article 7 of the Implementing Regulation have been used to challenge the mapping proposed by the default rate calculation. Qualitative factors acquire more importance in the rating categories where quantitative evidence is not sufficient to test the default behavior, as is the case for all rating categories of the Global long-term rating scale.
- 27.GBB has not registered material changes in the qualitative factors since the last draft ITS were submitted by the JC to the Commission. Regarding rating category BB, the meaning and the relative position of the rating category as well as the equivalent rating category of the international rating scale, suggest a mapping to CQS 4.

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⁹ The default behavior of a rating category is considered to be properly tested if the quantitative factors for that rating category are calculated under Articles 3 – 5 ITS.







Appendix 1: Credit ratings and rating scales

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

| SA exposure classes | Name of credit rating | Credit rating scale | |
|---------------------|---|-------------------------------|--|
| Long-term ratings | | | |
| Institutions | Long-term issuer credit rating | Global long-term rating scale | |
| | Long-term issue credit rating for financial instruments | Global long-term rating scale | |
| Corporates | Long-term issuer credit rating | Global long-term rating scale | |
| Covered bonds | Long-term issue credit rating | Global long-term rating scale | |







Figure 3: Global long-term rating scale

| Meaning of the credit assessment | |
|--------------------------------------|--|
| Highest financial standing | |
| Very high financial standing | |
| High financial standing | |
| Good financial standing | |
| Satisfactory financial standing | |
| Financial standing scarcely adequate | |
| Inadequate financial standing | |
| Insufficient financial standing | |
| Insufficient financial standing | |
| Moratorium / insolvency | |
| | |

Source: GBB







Appendix 2: Definition of default

The default definition is the legal definition, i.e. a default occurs in case of moratorium respectively bankruptcy and missed payments for financial facilities as far it is not fixed as an option in the contract. A voluntary renunciation of payments from investor's side is not a default.

GBB also reports a default if there is a missed payment of the coupon of a debt issue as far the missed payment is not covered by contractual terms of the legal agreement or investors voluntarily renouncing their right of payment.

Source: GBB







Appendix 3: Default rates of each rating category

Figure 4: Number of weighted items¹⁰

| | AAA | AA | Α | ВВВ | ВВ | В | CCC-C |
|-----------|-----|------|-------|------|------|-----|-------|
| 01Jul2007 | | 23.0 | 97.5 | 41.0 | 17.5 | 2.0 | 2.0 |
| 01Jan2008 | | 23.0 | 98.5 | 40.0 | 17.0 | 2.0 | 2.0 |
| 01Jul2008 | | 22.5 | 100.5 | 40.0 | 16.0 | 2.0 | 2.0 |
| 01Jan2009 | | 19.5 | 97.5 | 42.5 | 12.0 | 5.5 | 3.0 |
| 01Jul2009 | | 20.5 | 97.5 | 43.0 | 12.5 | 5.5 | 3.0 |
| 01Jan2010 | | 13.0 | 85.0 | 55.0 | 11.0 | 5.0 | 7.0 |
| 01Jul2010 | | 13.0 | 87.0 | 55.0 | 11.0 | 5.0 | 7.0 |
| 01Jan2011 | | 12.0 | 88.5 | 55.0 | 11.5 | 6.0 | 7.5 |
| 01Jul2011 | | 12.0 | 86.5 | 54.0 | 11.5 | 6.0 | 8.5 |
| 01Jan2012 | | 11.0 | 90.0 | 53.5 | 7.5 | 3.0 | 9.5 |
| 01Jul2012 | | 13.0 | 91.5 | 56.0 | 7.5 | 3.0 | 9.5 |
| 01Jan2013 | | 15.0 | 81.5 | 62.0 | 11.0 | 2.0 | 6.5 |
| 01Jul2013 | | 15.0 | 83.5 | 61.0 | 11.0 | 2.0 | 6.5 |
| 01Jan2014 | | 10.0 | 96.5 | 58.5 | 10.5 | 2.0 | 5.5 |
| 01Jul2014 | | 10.0 | 94.5 | 53.0 | 11.5 | 2.0 | 5.5 |
| 01Jan2015 | | 10.0 | 95.0 | 54.5 | 12.5 | 2.0 | 5.0 |
| 01Jul2015 | | 10.0 | 92.0 | 53.5 | 11.5 | 2.0 | 5.0 |
| 01Jan2016 | | 10.5 | 88.0 | 51.0 | 19.0 | 5.0 | |
| 01Jul2016 | | 10.5 | 84.0 | 49.0 | 15.5 | 5.0 | |
| 01Jan2017 | 0.5 | 10.0 | 86.0 | 50.0 | 20.0 | 1.0 | 2.0 |
| 01Jul2017 | 0.5 | 11.0 | 82.0 | 48.0 | 17.0 | 1.5 | 3.0 |
| 01Jan2018 | 0.5 | 13.0 | 83.0 | 49.5 | 14.0 | 2.5 | 3.0 |
| 01Jul2018 | 0.5 | 13.5 | 80.5 | 46.5 | 12.5 | 3.0 | 3.0 |
| 01Jan2019 | 0.5 | 8.0 | 45.0 | 26.0 | 7.0 | 2.0 | 1.0 |
| 01Jul2019 | | 7.0 | 42.5 | 23.0 | 8.5 | 0.5 | 1.0 |
| 01Jan2020 | | 6.5 | 44.0 | 23.0 | 9.0 | 0.5 | 1.0 |
| 01Jul2020 | | 6.0 | 42.0 | 23.0 | 8.0 | 1.0 | 1.0 |
| 01Jan2021 | | 5.0 | 40.0 | 23.5 | 8.5 | 2.0 | 1.0 |

Source: Joint Committee calculations based on CEREP and RADAR data

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 $^{^{10}}$ Withdrawn ratings have been weighted by 50% in accordance with Article 4(3) of the ITS.







Figure 5: Number of defaulted rated items

| | AAA | AA | Α | ВВВ | ВВ | В | CCC-C |
|-------------|-----|----|---|-----|----|---|-------|
| 01 Jul 2007 | | 0 | 2 | 0 | 1 | 0 | 0 |
| 01 Jan 2008 | | 0 | 2 | 0 | 1 | 0 | 0 |
| 01 Jul 2008 | | 0 | 2 | 0 | 0 | 0 | 0 |
| 01 Jan 2009 | | 0 | 0 | 0 | 0 | 0 | 0 |
| 01 Jul 2009 | | 0 | 0 | 0 | 0 | 0 | 0 |
| 01 Jan 2010 | | 0 | 0 | 0 | 0 | 0 | 0 |
| 01 Jul 2010 | | 0 | 0 | 0 | 0 | 0 | 0 |
| 01 Jan 2011 | | 0 | 0 | 0 | 0 | 0 | 0 |
| 01 Jul 2011 | | 0 | 0 | 0 | 0 | 0 | 0 |
| 01 Jan 2012 | | 0 | 0 | 0 | 0 | 0 | 0 |
| 01 Jul 2012 | | 0 | 0 | 0 | 0 | 0 | 0 |
| 01 Jan 2013 | | 0 | 0 | 0 | 0 | 0 | 0 |
| 01 Jul 2013 | | 0 | 0 | 1 | 0 | 0 | 0 |
| 01 Jan 2014 | | 0 | 0 | 1 | 0 | 0 | 0 |
| 01 Jul 2014 | | 0 | 0 | 1 | 0 | 0 | 0 |
| 01 Jan 2015 | | 0 | 0 | 1 | 0 | 0 | 0 |
| 01 Jul 2015 | | 0 | 0 | 1 | 0 | 0 | 0 |
| 01 Jan 2016 | | 0 | 0 | 0 | 1 | 0 | |
| 01 Jul 2016 | | 0 | 0 | 0 | 0 | 0 | |
| 01 Jan 2017 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 01 Jul 2017 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 01 Jan 2018 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 01 Jul 2018 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 01 Jan 2019 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 01 Jul 2019 | | 0 | 0 | 0 | 1 | 0 | 0 |
| 01 Jan 2020 | | 0 | 0 | 0 | 1 | 0 | 0 |
| 01 Jul 2020 | | 0 | 0 | 0 | 1 | 0 | 0 |
| 01 Jan 2021 | | 0 | 0 | 0 | 0 | 1 | 0 |

Source: Joint Committee calculations based on CEREP and RADAR data







Figure 6: Mapping proposal for rating categories with a non-sufficient number of credit ratings

| Most recent data cohort | AAA/AA | Α | ВВВ | В |
|---|--------|-------|-------|-------|
| CQS of equivalent international rating category | CQS 1 | CQS 2 | CQS 3 | CQS5 |
| N. observed defaulted items | 0 | 0 | 4 | 0 |
| Minimum N. rated items | 0 | 0 | 52 | 0 |
| Observed N. rated items | 110.5 | 881.5 | 513.5 | 26 |
| Mapping proposal | CQS 1 | CQS 2 | CQS 3 | CQS 5 |

Source: Joint Committee calculations based on CEREP and RADAR data

Figure 7: Short-run and proxy of the long-run default rates

| | ВВ |
|------------------|--------|
| 01 Jul 2007 | 5.71% |
| 01 Jan 2008 | 5.88% |
| 01 Jul 2008 | 0.00% |
| 01 Jan 2009 | 0.00% |
| 01 Jul 2009 | 0.00% |
| 01 Jan 2010 | 0.00% |
| 01 Jul 2010 | 0.00% |
| 01 Jan 2011 | 0.00% |
| 01 Jul 2011 | 0.00% |
| 01 Jan 2012 | 0.00% |
| 01 Jul 2012 | 0.00% |
| 01 Jan 2013 | 0.00% |
| 01 Jul 2013 | 0.00% |
| 01 Jan 2014 | 0.00% |
| 01 Jul 2014 | 0.00% |
| 01 Jan 2015 | 0.00% |
| 01 Jul 2015 | 0.00% |
| 01 Jan 2016 | 5.26% |
| 01 Jul 2016 | 0.00% |
| 01 Jan 2017 | 0.00% |
| 01 Jul 2017 | 0.00% |
| 01 Jan 2018 | 0.00% |
| 01 Jul 2018 | 0.00% |
| 01 Jan 2019 | 0.00% |
| 01 Jul 2019 | 12.50% |
| 01 Jan 2020 | 11.11% |
| 01 Jul 2020 | 12.50% |
| 01 Jan 2021 | 0.00% |
| Weighted Average | 1.00% |

Source: Joint Committee calculations based on CEREP and RADAR data







Appendix 4: Mappings of each rating scale

Figure 8: Mapping of GBB's Global long-term rating scale

| Credit assessment | Initial mapping based on LRDR (CQS) | Review based on SRDR (CQS) | Final review based on qualitative factors (CQS) | Main reason for the mapping |
|----------------------|-------------------------------------|----------------------------------|---|--|
| AAA | 1 | n.a. | 1 | |
| AA | 1 | n.a. | 1 | The quantitative factors are representative of the final CQS. |
| A | 2 | n.a. | 2 | The quantitative factors are representative of the final CQS. |
| ВВВ | 3 | n.a. | 3 | The quantitative factors are representative of the final CQS. |
| ВВ | 4 | 4 | 4 | The quantitative factors and the meaning and relative position of the rating category are representative of the final CQS. |
| В | 5 | n.a. | 5 | The quantitative factors are representative of the final CQS. |
| ссс | 6 | n.a. | 6 | |
| сс | 6 | n.a. | 6 | The quantitative factors are representative of the final CQS. |
| С | 6 | n.a. | 6 | |
| D | 6 | n.a. | 6 | The meaning and relative position of the rating category is representative of the final CQS. |