

Amended Draft Mapping of S&P Global Ratings Europe 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’¹ report of the credit assessments of S&P Global Ratings Europe Limited (S&P), with respect to the version published in May 2019.
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 May 2019. Regarding qualitative developments, the qualitative factors as described in the Implementing Regulation remain unchanged. Further, S&P introduced the long- and short- term Financial Institution Resolution Counterparty Ratings.
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 S&P with those of other ECAs. This mapping should however be interpreted as the correspondence of the rating categories of S&P with a regulatory scale which has been defined for prudential purposes.

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 https://www.esma.europa.eu/sites/default/files/library/esma_2015-1473_report_on_the_possibility_of_establishing_one_or_more_mapping.pdf.

5. 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.
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 the main ratings scale of S&P, the Long-term issuer credit rating scale.

Figure 1: Mapping of S&P Long-term issuer credit rating scale

Credit assessment	Credit quality step
AAA	1
AA	1
A	2
BBB	3
BB	4
B	5
CCC	6
CC	6
R	6
SD/D	6

2. Introduction

7. This report describes the mapping exercise carried out by the JC to propose an amended ‘mapping’ report of the credit assessments of S&P Global Ratings Europe Limited (S&P), with respect to the version published in May 2019.
8. S&P is a credit rating agency that registered with ESMA since 31 October 2011 and therefore meets the conditions to be an external credit assessment institution (ECAI)⁴.
9. The methodology applied to produce the mapping remains as specified in Commission Implementing Regulation (EU) 2016/1799 of 7 October 2016 (the Implementing Regulation) 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.
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. 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.
11. Regarding qualitative developments, the qualitative factors as described in the Implementing Regulation remain unchanged. Further, S&P introduced the long- and short- term Financial Institution Resolution Counterparty Ratings.
12. The following sections describe the rationale underlying the mapping exercise carried out by the JC. Section 3 describes the relevant ratings scales of S&P for the mapping. Section 4 contains the methodology applied to derive the mapping of S&P main rating scale, 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 Consultation Paper on the revised ITS on the mapping of ECAIs’ credit assessments under Article 136(1) and (3) of Regulation (EU) No 575/2013.

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

⁵ <https://cerrep.esma.europa.eu/cerep-web/>

3. S&P credit ratings and rating scales

13.S&P produces a variety of credit ratings. Column 2 of Figure 2 in Appendix 1 shows the relevant credit ratings that may be used by institutions for the calculation of risk weights under the Standardised Approach (SA)⁶:

- **Long-term issuer credit ratings⁷.** An S&P issuer credit rating is a forward-looking opinion about an obligor's overall creditworthiness. This opinion focuses on the obligor's capacity and willingness to meet its financial commitments as they come due. It does not apply to any specific financial obligation, as it does not take into account the nature of and provisions of the obligation, its standing in bankruptcy or liquidation, statutory preferences, or the legality and enforceability of the obligation.
- **Short-term issuer credit ratings⁴.** Similar to Long-term issuer credit ratings, but are generally assigned to those obligations considered short-term in the relevant market. Short-term ratings are also used to indicate the creditworthiness of an obligor with respect to put features on long-term obligations.
- **Long-term issue credit ratings.** An S&P issue credit rating is a forward-looking opinion about the creditworthiness of an obligor with respect to a specific financial obligation, a specific class of financial obligations, or a specific financial program (including ratings on medium-term note programs and commercial paper programs). It takes into consideration the creditworthiness of guarantors, insurers, or other forms of credit enhancement on the obligation and takes into account the currency in which the obligation is denominated. The opinion reflects S&P view of the obligor's capacity and willingness to meet its financial commitments as they come due, and may assess terms, such as collateral security and subordination, which could affect ultimate payment in the event of default.
- **Short-term issue credit ratings.** Similar to Long-term issue credit ratings, but are generally assigned to those obligations considered short-term in the relevant market. Short-term ratings are also used to indicate the creditworthiness of an obligor with respect to put features on long-term obligations.
- **Long-term financial institution resolution counterparty rating.** It is a forward-looking opinion about an entity's creditworthiness in reference to the timely fulfilment of the terms of certain financial obligations that may be protected from default within an applicable bail-in resolution process. This rating type only applies to financial institutions subject to effective bail-in resolution regimes. A resolution counterparty rating is either aligned with the issuer credit rating on a financial institution or raised incrementally higher if S&P

⁶ As explained in recital 4 of the 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.

⁷ S&P issuer credit ratings make a distinction between foreign currency ratings and local currency ratings. An issuer's foreign currency rating will differ from its local currency rating when the obligor has a different capacity to meet its obligations denominated in its local currency, vs. obligations denominated in a foreign currency.

believes certain categories of designated liabilities have lower default risk than liabilities rated in line with the issuer credit rating.

- **Short-term financial institution resolution counterparty rating.** The short-term resolution counterparty rating on a financial institution is determined in reference to its long-term resolution counterparty rating, based on applicable mapping criteria.
- **Insurer financial strength ratings.** S&P insurer financial strength rating is a forward-looking opinion about the financial security characteristics of an insurance organization with respect to its ability to pay under its insurance policies and contracts in accordance with their terms. Insurer financial strength ratings are also assigned to health maintenance organizations and similar health plans with respect to their ability to pay under their policies and contracts in accordance with their terms.
- **Mid-market evaluation ratings.** An S&P Mid-Market Evaluation (MME) rating is a forward-looking opinion about the creditworthiness of a mid-market company relative to other mid-market companies. It assesses a mid-market company's relative capacity and willingness to meet its financial obligations as they come due. S&P assigns the MME rating at an obligor level, but can assign it at a debt instrument level as well.

14. S&P 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 credit ratings scale.** The specification of this rating scale is described in Figure 3 of Appendix 1.
- **Long-term issue credit ratings scale.** The specification of this rating scale is described in Figure 4 of Appendix 1.
- **Short-term issuer credit ratings scale.** The specification of this rating scale is described in Figure 5 of Appendix 1.
- **Short-term issue credit ratings scale.** The specification of this rating scale is described in Figure 6 of Appendix 1.
- **Insurer financial strength ratings scale.** The specification of this rating scale is described in Figure 7 of Appendix 1.
- **Mid-Market Evaluation ratings scale.** The specification of this rating scale is described in Figure 8 of Appendix 1.
- **Long-term financial institution resolution counterparty rating scale.** The specification of this rating scale is described in Figure 9 of Appendix 1.

- **Short-term financial institution resolution counterparty rating scale.** The specification of this rating scale is described in Figure 10 of Appendix 1.

15. The mapping of the Long-term issuer credit ratings scale is explained in Section 4 and it has been derived in accordance with the quantitative factors, qualitative factors and benchmarks specified in the Implementing Regulation.
16. The mapping of the Short-term issuer credit rating 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 S&P between these two scales, as specified in Article 13 of the ITS. This internal relationship is shown in Figure 11 of Appendix 1.
17. The indirect mapping approach described in the previous paragraph has also been applied in the case of the other long-term and short-term rating scales, as explained in Section 6. In these cases, however, the relationship with the Long-term issuer credit ratings scale (or Short-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 S&P Long-term issuer credit ratings scale

18. The mapping of the Long-term issuer credit ratings scale 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 Implementing Regulation 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 used to arrive at an initial mapping proposal by comparing its value with the benchmark specified in point (a) of Article 14 of the Implementing Regulation.
 - The *short run default rates* of a rating category have been compared with the benchmarks specified in point (b) of Article 14 of the Implementing Regulation, which represent the maximum expected deviation of a default rate from its long-term value within a CQS.
20. In a second stage, the qualitative factors proposed in Article 7 of the Implementing Regulation 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

21. This mapping report reflects additional quantitative information collected after the submission of the draft Implementing Regulation by the JC to the Commission.

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

22. The short run and long run default rates of each rating category have been calculated based on the information contained in CEREP and according to the provisions laid down in the Implementing Regulation. The following aspects should be highlighted:

- For AAA and AA rating categories, the number of credit ratings cannot be considered to be sufficient for the calculation of the short and long run default rates specified in Articles 3 – 5 of the Implementing Regulation. Therefore, the allocation of the CQS has been made in accordance with Article 6 of the Implementing Regulation, as shown in Figure 14 of Appendix 3. In these cases, 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.
- For R, SD and D rating categories, no calculation of default rates has been made since they already reflect a 'default' situation.
- For the remaining rating categories, the number of credit ratings can be considered to be sufficient and therefore the calculation has followed the rules established in Articles 3 to 5 of the Implementing Regulation. The result of the calculation of the short run and long run default rates for each rating category is shown in Figure 15 of Appendix 3.

23. Withdrawn ratings have been weighted by 50% as indicated in Article 4(3) of the Implementing Regulation.

24. The default definition applied by S&P, described in Appendix 2, has been used for the calculation of default rates.

4.1.2. Mapping proposal based on the long run default rate

25. The rating categories of the Long-term issuer credit rating scale of S&P have been initially allocated to each CQS based on the comparison of the long run default rates (see Figure 12 in Appendix 3) and the long run default rate benchmark intervals established in point (a) of Article 14 of the Implementing Regulation. Considering the additional data collected since the mapping was produced rating categories A, BBB, BB and B remain allocated to CQS 2, 3, 4 and 5 based on the comparison of the long run default.

26. In the case of rating categories AAA and AA, where the number of credit ratings cannot be considered to be sufficient, this comparison has been made according to Article 6 of the Implementing Regulation, see Figure 14 of Appendix 3. The analysis of the 2001h1 – 2005h2 period reveals that no defaults were observed during those years and that CQS 1 should be proposed, while the analysis for the 2006h1 – 2010h2 period suggests a mapping to CQS2. When considering the additional data collected since the original mapping was produced, the absence of defaults is consistent with CQS1 as the number of rated items is equal or larger than the

respective minimum required number of observed items given the number of defaulted items in the rating category. This reinforces the existing mapping.

4.1.3. Reviewed mapping based on the short run default rates

27. The short run default rates of rating categories A to B have been compared with the short run default rate benchmark values established in point (b) of Article 14 of the Implementing Regulation⁸.

28. The objective is to assess, for each rating category, whether the short-run default rates have deviated from their corresponding benchmark values and whether any observed deviation has been caused by a weakening of the assessment standards. Therefore short run default rates experienced within a rating category have been confronted with the short run benchmarks “monitoring” and “trigger” levels specified in Annex I of the Implementing Regulation.

29. The additional short-run default rates available after the mapping was produced do not breach neither the monitoring nor the trigger level, which confirms the existing mapping.

4.2. Final mapping after review of the qualitative factors

30. The qualitative factors specified in Article 7 Implementing Regulation have been used to challenge the mapping proposed by the default rate calculation.

31. S&P has not registered any change in the quantitative factors since the draft Implementing Technical Standards submitted by the JC to the Commission. Therefore the qualitative considerations remain unchanged with respect to the original mapping report, which means that the meaning and relative position of the credit assessments is the only qualitative factor that suggests an adjustment of the mapping proposal resulting from the quantitative factors. In particular, the meaning and relative position of rating categories AAA and AA are in line with CQS 1. In the case of RS and SD/D rating categories, their meaning is consistent with the one of CQS 6 stated in Annex II of the Implementing Regulation.

5. Mapping of S&P Short-Term issuer credit rating scale

32. S&P also produces short-term credit ratings and assigns them to the Short-term issuer 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 Implementing Regulation, the internal relationship established by S&P between these two rating scales (described in Figure 11 of Appendix 1) has been used to derive the mapping of the Short-term issuer rating scale. This should ensure the consistency of the mappings proposed for S&P.

⁸ For AAA and AA rating categories, the number of credit ratings cannot be considered to be sufficient and therefore no calculation of the short run default rate has been made. In the case of rating categories CCC to C, the review of the short run default rates is not necessary since they have been mapped to CQS 6.

33. More specifically, as each short-term issuer rating can be associated with a range of long-term issuer ratings, the CQS assigned to the short-term credit rating category has been determined based on the most frequent CQS assigned to the related long-term credit rating categories. In case of draw, the most conservative CQS has been considered. If the most frequent step is identified as CQS 5 or 6, CQS 4 is allocated, as the risk weights assigned to CQS 4 to 6 are all equal to 150% according to Article 131 CRR.

34. The result is shown in Figure 17 of Appendix 4:

- **A-1+.** This rating category indicates a strong capacity to meet its financial commitment on the obligation is extremely strong. It is internally mapped to long-term categories AAA to AA-, which are mapped to CQS 1. Therefore, CQS 1 is the proposed mapping.
- **A-1.** This rating category indicates a strong capacity to meet its financial commitment on the obligation is strong. It is internally mapped to the long-term category A+ and A, which are mapped to CQS 2. Therefore, CQS 2 is the proposed mapping.
- **A-2.** This rating category indicates a satisfactory capacity to repay short-term debt obligations. It is internally mapped to long-term categories A to BBB, which are mapped to CQS 2 and 3. Since the long-term categories are mapped to CQS 2 and 3 in an equal number of cases, the most conservative CQS has been considered. Therefore, CQS 3 is the proposed mapping.
- **A-3.** This rating category indicates a weakened capacity to repay short-term debt obligations. It is internally mapped to long-term categories BBB to BB+, which are mapped to CQS 3 and 4, but mostly CQS 3. Therefore, CQS 3 is the proposed mapping.
- **B.** This rating category is regarded as vulnerable. It is internally mapped to long-term categories BB+ to CC, which are mapped to CQS 4 to 6. Since the risk weights assigned to CQS 4 to 6 are all equal to 150% according to Article 131 CRR, the mapping proposed for the B rating category is CQS 4.
- **C.** This rating category is regarded as vulnerable and dependent upon favourable conditions, consistent with the meaning and relative position representative of CQS 5 and 6. In addition, it is internally mapped to long-term categories CC to B, which are mostly mapped to CQS 5. Since the risk weights assigned to CQS 4 to 6 are all equal to 150% according to Article 131 CRR, the mapping proposed for the C rating category is CQS 4.
- **R.** This category refers to issuers who that are under regulatory supervision owing to its financial condition and the regulators may have the power to favour one class of obligations over others or pay some obligations and not others. This category is consistent with category R of the Long-term issuer credit rating scale corresponding to CQS 6. Since the risk weights assigned to CQS 4 to 6 are all equal to 150% according to Article 131 CRR, the mapping proposed for the C rating category is CQS 4.

- **D.** A short-term obligation rated 'D' is in payment default, consistent with the meaning and relative position representative of CQS 6. In addition, it is internally mapped to long-term categories D and SD, which are mapped to CQS 6. Since the risk weights assigned to CQS 4 to 6 are equal to 150% according to Article 131 CRR, the mapping proposed for the D/SD rating category is CQS 4.

6. Mapping of other S&P credit rating scales

35. As mentioned in Section 3, S&P produces a number of additional credit ratings that are assigned to different credit rating scales.

36. Based on the methodology described in the previous section, the mapping of each rating scale has been derived from the relationship established by the JC with the relevant Long-term or Short-term issuer credit ratings scale. More specifically, as each rating can be associated with one or a range of long-term (or short-term) rating categories, its CQS has been determined based on the most frequent CQS assigned to the related rating categories. In case of draw, the most conservative CQS has been considered.

37. The results are shown in Figures 16 to 23 of Appendix 4:

- **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. The result of the mapping of this scale is shown in Figure 18 of Appendix 4.
- **Short-term issue credit rating scale** (see Figure 6 in Appendix 1). The rating categories can be considered comparable to those of the Short-term issuer credit ratings scale. Therefore the mapping of each rating category has been derived by the JC from its meaning and relative position and the mapping of the corresponding categories of the Short-term issuer rating scale. The result of the mapping of this scale is shown in Figure 19 of Appendix 4.
- **Insurer financial strength ratings scale** (see Figure 7 in Appendix 1). The rating categories can be considered comparable to those of the Long-term issuer credit rating scale. Even though the definitions of the rating categories refer to insurance companies, the mapping has been derived from the meaning and relative position of the rating categories and the mapping of the corresponding categories of the Long-term issuer rating scale. The result of the mapping of this scale is shown in Figure 20 of Appendix 4.
- **Mid-Market Evaluation rating scale** (see Figure 8 in Appendix 1). The rating categories can be considered comparable to those of the Long-term issuer credit rating scale. Therefore the mapping of each rating category has been derived by the JC from its meaning and relative position and the mapping of the corresponding categories of the Long-term issuer credit rating scale. The result of the mapping is shown in Figure 21 of Appendix 4.

- **Long-term financial institution resolution counterparty rating** (see Figure 9 in Appendix 1). The rating categories can be considered comparable to those of the Long-term issuer credit rating scale. The mapping has been derived from the meaning and relative position of the rating categories and the mapping of the corresponding categories of the Long-term issuer rating scale. The result of the mapping of this scale is shown in Figure 22 of Appendix 4.
- **Short-term financial institution resolution counterparty rating** (see Figure 10 in Appendix 1). The rating categories can be considered comparable to those of the Long-term issuer credit rating scale. The mapping has been derived from the meaning and relative position of the rating categories and the mapping of the corresponding categories of the Long-term issuer rating scale. The result of the mapping is shown in Figure 23 of Appendix 4.

Appendix 1: Credit ratings and rating scales

Figure 2: S&P relevant credit ratings and rating scales

SA exposure classes	Name of credit rating	Credit rating scale
Long-term ratings		
Central governments/ Central banks	Long-term issuer credit ratings	Long-term issuer credit rating scale
	Long-term issue credit ratings	Long-term issue credit rating scale
Regional and local governments and PSEs	Long-term issuer credit rating	Long-term issuer credit rating scale
	Long-term issue credit ratings	Long-term issue credit rating scale
Institutions	Long-term issuer credit rating	Long-term issuer credit rating scale
	Long-term issue credit ratings	Long-term issue credit rating scale
	Long-term financial institution resolution counterparty rating	Long-term financial institution resolution counterparty rating scale
Corporates	Long-term issuer credit rating	Long-term issuer credit rating scale
	Long-term issue credit ratings	Long-term issue credit rating scale
	Insurer financial strength ratings (FSR)	Insurer financial strength rating scale
	Mid-market evaluation ratings (MME)	Mid-market evaluation rating scale
Covered bonds	Long-term issue credit ratings	Long-term issue credit rating scale

SA exposure classes	Name of credit rating	Credit rating scale
Short-term ratings		
Institutions	Short-term issuer credit ratings	Short-term issuer credit rating scale
	Short-term issue credit ratings	Short-term issue credit rating scale
	Short-term financial institution resolution counterparty rating	Short -term financial institution resolution counterparty rating scale
Corporates	Short-term issuer credit ratings	Short-term issuer credit rating scale
	Short-term issue credit ratings	Short-term issue credit rating scale

Source: S&P

Figure 3: Long-term issuer credit ratings scale

Credit assessment	Meaning of the credit assessment
AAA	An obligor rated 'AAA' has extremely strong capacity to meet its financial commitments. 'AAA' is the highest issuer credit rating assigned by S&P.
AA	An obligor rated 'AA' has very strong capacity to meet its financial commitments. It differs from the highest-rated obligors only to a small degree.
A	An obligor rated 'A' has strong capacity to meet its financial commitments but is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligors in higher-rated categories.
BBB	An obligor rated 'BBB' has adequate capacity to meet its financial commitments. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitments.
BB	An obligor rated 'BB' is less vulnerable in the near term than other lower-rated obligors. However, it faces major ongoing uncertainties and exposure to adverse business, financial, or economic conditions that could lead to the obligor's inadequate capacity to meet its financial commitments.
B	An obligor rated 'B' is more vulnerable than the obligors rated 'BB', but the obligor currently has the capacity to meet its financial commitments. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitments.
CCC	An obligor rated 'CCC' is currently vulnerable, and is dependent upon favourable business, financial, and economic conditions to meet its financial commitments.
CC	An obligor rated 'CC' is currently highly vulnerable. The 'CC' rating is used when a default has not yet occurred, but S&P expects default to be a virtual certainty, regardless of the anticipated time to default.

R

An obligor rated 'R' is under regulatory supervision owing to its financial condition. During the pendency of the regulatory supervision the regulators may have the power to favour one class of obligations over others or pay some obligations and not others.

SD/D

An obligor rated 'SD' (selective default) or 'D' is in default on one or more of its financial obligations including rated and unrated financial obligations but excluding hybrid instruments classified as regulatory capital or in non-payment according to terms. An obligor is considered in default unless S&P believes that such payments will be made within five business days of the due date in the absence of a stated grace period, or within the earlier of the stated grace period or 30 calendar days. A 'D' rating is assigned when S&P believes that the default will be a general default and that the obligor will fail to pay all or substantially all of its obligations as they come due. An 'SD' rating is assigned when S&P believes that the obligor has selectively defaulted on a specific issue or class of obligations but it will continue to meet its payment obligations on other issues or classes of obligations in a timely manner. An obligor's rating is lowered to 'D' or 'SD' if it is conducting a distressed exchange offer.

Source: S&P

Figure 4: Long-term issue credit ratings scale

Credit assessment	Meaning of the credit assessment
AAA	An obligation rated 'AAA' has the highest rating assigned by S&P. The obligor's capacity to meet its financial commitment on the obligation is extremely strong.
AA	An obligation rated 'AA' differs from the highest-rated obligations only to a small degree. The obligor's capacity to meet its financial commitment on the obligation is very strong.
A	An obligation rated 'A' is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher-rated categories. However, the obligor's capacity to meet its financial commitment on the obligation is still strong.
BBB	An obligation rated 'BBB' exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation.
BB	An obligation rated 'BB' is less vulnerable to non-payment than other speculative issues. However, it faces major ongoing uncertainties or exposure to adverse business, financial, or economic conditions which could lead to the obligor's inadequate capacity to meet its financial commitment on the obligation.
B	An obligation rated 'B' is more vulnerable to non-payment than obligations rated 'BB', but the obligor currently has the capacity to meet its financial commitment on the obligation. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitment on the obligation.
CCC	An obligation rated 'CCC' is currently vulnerable to non-payment, and is dependent upon favourable business, financial, and economic conditions for the obligor to meet its financial commitment on the obligation. In the event of adverse business, financial, or economic conditions the obligor is not likely to have the capacity to meet its financial commitment on the obligation.
CC	An obligation rated 'CC' is currently highly vulnerable to non-payment. The 'CC' rating is used when a default has not yet occurred, but S&P expects default to be a virtual certainty, regardless of the anticipated time to default.

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- C An obligation rated 'C' is currently highly vulnerable to non-payment, and the obligation is expected to have lower relative seniority or lower ultimate recovery compared to obligations that are rated higher.
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- D An obligation rated 'D' is in default or in breach of an imputed promise. For non-hybrid capital instruments, the 'D' rating category is used when payments on an obligation are not made on the date due, unless S&P believes that such payments will be made within five business days in the absence of a stated grace period or within the earlier of the stated grace period or 30 calendar days. The 'D' rating also will be used upon the filing of a bankruptcy petition or the taking of similar action and where default on an obligation is a virtual certainty, for example due to automatic stay provisions. An obligation's rating is lowered to 'D' if it is subject to a distressed exchange offer.
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Source: S&P

Figure 5: Short-term issuer credit ratings scale

Credit assessment	Meaning of the credit assessment
A-1	An obligor rated 'A-1' has strong capacity to meet its financial commitments. It is rated in the highest category by S&P. Within this category, certain obligors are designated with a plus sign (+). This indicates that the obligor's capacity to meet its financial commitments is extremely strong.
A-2	An obligor rated 'A-2' has satisfactory capacity to meet its financial commitments. However, it is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligors in the highest rating category.
A-3	An obligor rated 'A-3' has adequate capacity to meet its financial obligations. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitments.
B	An obligor rated 'B' is regarded as vulnerable and has significant speculative characteristics. The obligor currently has the capacity to meet its financial commitments; however, it faces major ongoing uncertainties which could lead to the obligor's inadequate capacity to meet its financial commitments.
C	An obligor rated 'C' is currently vulnerable to non-payment that would result in a 'SD' or 'D' issuer rating, and is dependent upon favourable business, financial, and economic conditions for it to meet its financial commitments.
R	An obligor rated 'R' is under regulatory supervision owing to its financial condition. During the pendency of the regulatory supervision the regulators may have the power to favour one class of obligations over others or pay some obligations and not others.
SD/D	An obligor rated 'SD' (selective default) or 'D' has failed to pay one or more of its financial obligations (rated or unrated), excluding hybrid instruments classified as regulatory capital or in non-payment according to terms, when it came due. An obligor is considered in default unless S&P believes that such payments will be made within any stated grace period. However, any stated grace period longer than five business days will be treated as five business days. A 'D' rating is assigned when S&P believes that the default will be a general default and that the obligor will fail to pay all or substantially all of its obligations as they come due. An 'SD' rating is assigned when S&P believes that the obligor has selectively defaulted on a specific issue or class of obligations, excluding hybrid instruments classified as regulatory

capital, but it will continue to meet its payment obligations on other issues or classes of obligations in a timely manner. An obligor's rating is lowered to 'D' or 'SD' if it is conducting a distressed exchange offer.

Source: S&P

Figure 6: Short-term issue credit ratings scale

Credit assessment	Meaning of the credit assessment
A-1	A short-term obligation rated 'A-1' is rated in the highest category by S&P. The obligor's capacity to meet its financial commitment on the obligation is strong. Within this category, certain obligations are designated with a plus sign (+). This indicates that the obligor's capacity to meet its financial commitment on these obligations is extremely strong.
A-2	A short-term obligation rated 'A-2' is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher rating categories. However, the obligor's capacity to meet its financial commitment on the obligation is satisfactory.
A-3	A short-term obligation rated 'A-3' exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation.
B	A short-term obligation rated 'B' is regarded as vulnerable and has significant speculative characteristics. The obligor currently has the capacity to meet its financial commitments; however, it faces major ongoing uncertainties which could lead to the obligor's inadequate capacity to meet its financial commitments.
C	A short-term obligation rated 'C' is currently vulnerable to non-payment and is dependent upon favourable business, financial, and economic conditions for the obligor to meet its financial commitment on the obligation.
D	A short-term obligation rated 'D' is in default or in breach of an imputed promise. For non-hybrid capital instruments, the 'D' rating category is used when payments on an obligation are not made on the date due, unless S&P believes that such payments will be made within any stated grace period. However, any stated grace period longer than five business days will be treated as five business days. The 'D' rating also will be used upon the filing of a bankruptcy petition or the taking of a similar action and where default on an obligation is a virtual certainty, for example due to automatic stay provisions. An obligation's rating is lowered to 'D' if it is subject to a distressed exchange offer.

Source: S&P

Figure 7: Insurer financial strength ratings scale

Credit assessment	Meaning of the credit assessment
AAA	An insurer rated 'AAA' has extremely strong financial security characteristics. 'AAA' is the highest insurer financial strength rating assigned by S&P.
AA	An insurer rated 'AA' has very strong financial security characteristics, differing only slightly from those rated higher.
A	An insurer rated 'A' has strong financial security characteristics, but is somewhat more likely to be affected by adverse business conditions than are insurers with higher ratings.
BBB	An insurer rated 'BBB' has good financial security characteristics, but is more likely to be affected by adverse business conditions than are higher-rated insurers.
BB	An insurer rated 'BB' has marginal financial security characteristics. Positive attributes exist, but adverse business conditions could lead to insufficient ability to meet financial commitments.
B	An insurer rated 'B' has weak financial security characteristics. Adverse business conditions will likely impair its ability to meet financial commitments.
CCC	An insurer rated 'CCC' has very weak financial security characteristics, and is dependent on favorable business conditions to meet financial commitments.
CC	An insurer rated 'CC' has extremely weak financial security characteristics and is likely not to meet some of its financial commitments.
SD/D	An insurer rated 'SD' (selective default) or 'D' is in default on one or more of its insurance policy obligations but is not under regulatory supervision that would involve a rating of 'R'. The 'D' rating also will be used upon the filing of a bankruptcy petition or the taking of similar action if payments on a policy obligation are at risk. A 'D' rating is assigned when S&P believes that the default will be a general default and that the obligor will fail to pay substantially all of its obligations in full in accordance with the policy terms. An 'SD' rating is

assigned when S&P believes that the insurer has selectively defaulted on a specific class of policies but it will continue to meet its payment obligations on other classes of obligations. A selective default includes the completion of a distressed exchange offer. Claim denials due to lack of coverage or other legally permitted defences are not considered defaults.

R

An insurer rated 'R' is under regulatory supervision owing to its financial condition. During the pendency of the regulatory supervision, the regulators may have the power to favour one class of obligations over others or pay some obligations and not others. The rating does not apply to insurers subject only to nonfinancial actions such as market conduct violations.

Source: S&P

Figure 8: Mid Market Evaluation rating scale

Credit assessment	Meaning of the credit assessment
MM1	The company has a very strong capacity to meet financial commitments relative to other mid-market companies. Companies rated at this level are less susceptible to the adverse effects of changes in circumstances and economic conditions than other mid-market companies.
MM2	The company has a strong capacity to meet its financial commitments relative to other mid-market companies. However, the company is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than companies in the higher category.
MM3	The company has a good capacity to meet its financial commitments relative to other mid-market companies. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the company to meet its financial commitments.
MM4	The company has an adequate capacity to meet its financial commitments relative to other mid-market companies. However, it is more exposed to adverse economic conditions or changing circumstances than companies with a higher MME rating.
MM5	The company has reasonably adequate capacity to meet its financial commitments relative to other mid-market companies. It faces ongoing uncertainties or exposure to adverse business, financial, or economic conditions, which could result in an inadequate capacity on the part of the company to meet its financial commitments.
MM6	The company has a weak capacity to meet financial commitments, although it is less vulnerable relative to other mid-market companies with a lower MME rating. Adverse business, financial, or economic conditions are likely to impair the entity's capacity or willingness to meet its financial commitments.

MM7	The company is currently vulnerable to defaulting and is dependent upon favorable business and financial conditions to meet financial commitments. In the event of adverse business, financial, or economic conditions, the obligor is not likely to have the capacity to meet its financial commitments.
MM8	The company is currently highly vulnerable to defaulting and is dependent upon favorable business and financial conditions to meet financial commitments. We expect default to be a virtual certainty, either through a missed payment, a distressed exchange, or similar debt restructuring, or a bankruptcy filing.
MMD	The company has either failed to pay one or more of its financial obligations when due, or it has been placed into bankruptcy, or it has completed a distressed exchange or similar debt restructuring.

Source: S&P

Figure 9: Long-term Financial Institution Resolution Counterparty Rating

Credit assessment	Meaning of the credit assessment
AAA	A resolution counterparty rating of 'AAA' indicates extremely strong creditworthiness in reference to RCR liabilities. 'AAA' is the highest resolution counterparty rating assigned by S&P Global Ratings.
AA	A resolution counterparty rating of 'AA' indicates very strong creditworthiness in reference to RCR liabilities, differing only slightly from higher resolution counterparty ratings.
A	A resolution counterparty rating of 'A' indicates strong creditworthiness in reference to RCR liabilities, but the obligor is somewhat more likely to be affected by adverse business or operating conditions than are obligors with higher resolution counterparty ratings.
BBB	A resolution counterparty rating of 'BBB' indicates good creditworthiness in reference to RCR liabilities, but the obligor is more likely to be affected by adverse business or operating conditions than are obligors with higher resolution counterparty ratings.
BB	A resolution counterparty rating of 'BB' indicates marginal creditworthiness in reference to RCR liabilities. Positive attributes exist, but adverse business or operating conditions could lead to insufficient ability to fulfill the terms of RCR liabilities.
B	A resolution counterparty rating of 'B' indicates weak creditworthiness in reference to RCR liabilities. Adverse business or operating conditions will likely impair the obligor's ability to fulfill the terms of RCR liabilities.
CCC	A resolution counterparty rating of 'CCC' indicates very weak creditworthiness in reference to RCR liabilities and that the obligor is dependent on favorable business and operating conditions to fulfill the terms of RCR liabilities.
CC	A resolution counterparty rating of 'CC' indicates extremely weak creditworthiness in reference to RCR liabilities and that the obligor is likely not to fulfill the terms of some RCR liabilities.

SD and D

A resolution counterparty rating of 'SD' (selective default) or 'D' indicates that the obligor is in default on one or more of its RCR liabilities (whether rated or unrated), including when this default occurs as part of a resolution process. If a temporary payment moratorium tool is included in a resolution framework and is subsequently declared as part of a resolution, we assign a 'D' rating if we expect that fulfillment of the terms of RCR liabilities will not take place within applicable standards regarding grace periods as per our criteria. In situations other than a resolution process, the 'D' resolution counterparty rating will be used upon the filing of a bankruptcy petition or the taking of a similar action if fulfillment of the terms of RCR liabilities is at risk. A 'D' resolution counterparty rating is assigned when S&P Global Ratings believes that the default will be a general default and that the obligor will fail to fulfill the terms of substantially all of its RCR liabilities in full. An 'SD' resolution counterparty rating is assigned when S&P Global Ratings believes that the obligor has selectively defaulted on certain RCR liabilities but it will continue to fulfill the terms of its other RCR liabilities. A resolution counterparty rating is lowered to 'D' or 'SD' if the obligor is conducting a distressed debt restructuring of RCR liabilities.

Source: S&P

Figure 10: Short-term Financial Institution Resolution Counterparty Rating

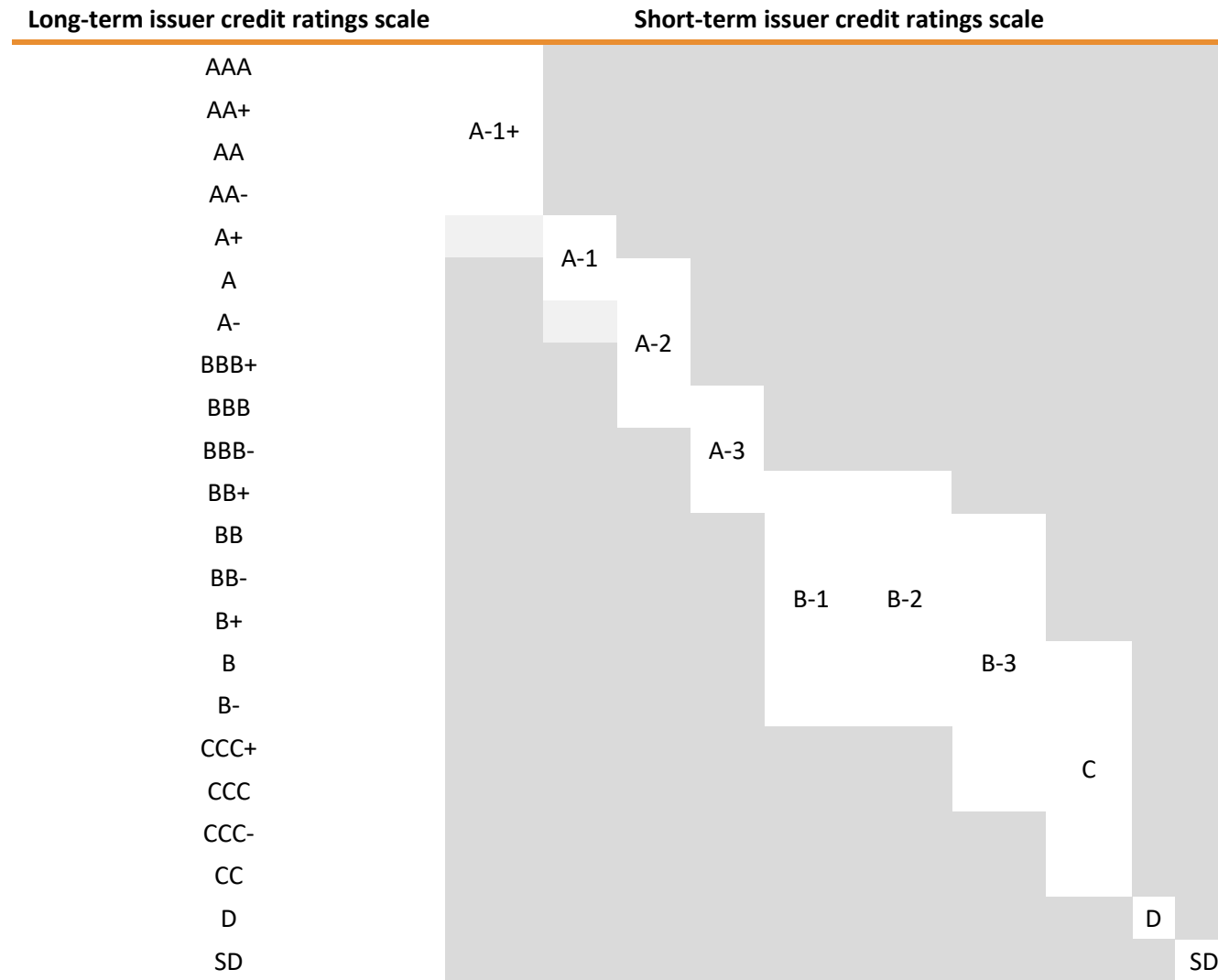
Credit assessment	Meaning of the credit assessment
A-1	A short-term resolution counterparty rating of 'A-1' indicates strong creditworthiness in reference to RCR liabilities. This is the highest short-term resolution counterparty rating assigned by S&P Global Ratings. Within this category, certain obligations are designated with a plus sign (+). This indicates that the obligor's creditworthiness in reference to RCR liabilities is extremely strong.
A-2	A short-term resolution counterparty rating of 'A-2' indicates satisfactory creditworthiness in reference to RCR liabilities. However, the obligor is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligors with higher short-term resolution counterparty ratings.
A-3	A short-term resolution counterparty rating of 'A-3' indicates adequate creditworthiness in reference to RCR liabilities. However, adverse economic conditions or changing circumstances are more likely to weaken the obligor's capacity to fulfill the terms of its RCR liabilities.
B	A short-term resolution counterparty rating of 'B' indicates the obligor is regarded as vulnerable and has significant speculative characteristics in reference to its RCR liabilities. The obligor currently has the capacity to fulfill the terms of its RCR liabilities; however, it faces major ongoing uncertainties that could lead to the obligor's inadequate capacity to fulfill the terms of its RCR liabilities.
C	A short-term resolution counterparty rating of 'C' indicates the obligor is currently vulnerable to defaulting and is dependent upon favorable business, financial, operating, and economic conditions to fulfill the terms of its RCR liabilities.

SD and D

A short-term resolution counterparty rating of 'SD' (selective default) or 'D' indicates that the obligor is in default on one or more of its RCR liabilities (whether rated or unrated). If a temporary payment moratorium tool is included in a resolution framework and is subsequently declared as part of a resolution, we assign a 'D' rating if we expect that fulfillment of the terms of RCR liabilities will not take place within five business days of the due date. In situations other than a resolution process, the 'D' rating will be used upon the filing of a bankruptcy petition or the taking of a similar action if fulfillment of the terms of RCR liabilities is at risk. A 'D' resolution counterparty rating is assigned when S&P Global Ratings believes that the default will be a general default and that the obligor will fail to pay substantially all of its RCR liabilities in full in accordance with their terms. An 'SD' short-term resolution counterparty rating is assigned when S&P Global Ratings believes that the obligor has selectively defaulted on certain RCR liabilities but it will continue to fulfill the terms of its other RCR liabilities. A short-term resolution counterparty rating is lowered to 'D' or 'SD' if the obligor is conducting a distressed debt restructuring of RCR liabilities.

Source: S&P

Figure 11: Internal relationship between S&P long-term and short-term issuer ratings scales



Source: S&P

Appendix 2: Definition of default

S&P Ratings distinguishes between two different default situations: normal default and selective default, and they are assigned whenever the obligor has failed to pay one or more of its financial obligations (rated or unrated) when it came due. In addition, the obligors under regulatory supervision are also included in the default category.

Selective default ratings ('SD') are assigned when S&P believes that the obligor has selectively defaulted on a specific issue or class of obligations but it will continue to meet its payment obligations on other issues or classes of obligations in a timely manner. A selective default includes:

- when payments on an obligation are not made on the date due even if the applicable grace period has not expired, unless S&P believes that such payments will be made during such grace period
- filing of a bankruptcy petition or the taking of similar action if payments on an obligation are jeopardized
- the completion of a distressed exchange offer, whereby one or more financial obligation is either repurchased for an amount of cash or replaced by other instruments having a total value that is less than par.

Default ratings ('D') is assigned when S&P believes that the default will be a general default and that the obligor will fail to pay all or substantially all of its obligations as they come due.

Regulatory supervision ratings ('R') is assigned when S&P believes that an obligor is under regulatory supervision owing to its financial condition. During the pendency of the regulatory supervision the regulators may have the power to favour one class of obligations over others or pay some obligations and not others.

Source: S&P

Appendix 3: Default rates of each rating category

Figure 12: Number of rated items, with relevant weights⁹

	AAA	AA	A	BBB	BB	B	CCC-C
01JAN2000	234.5	845.5	1562.5	1606.5	1006	954	126.5
01JUL2000	230.5	832	1527	1553	958	878	129.5
01JAN2001	219	854	1521.5	1591.5	938	854.5	143.5
01JUL2001	227.5	848	1571	1654	975	778.5	151.5
01JAN2002	207	832.5	1603	1696.5	936	697.5	216.5
01JUL2002	187	760.5	1594.5	1752	925	670.5	176
01JAN2003	155	691.5	1605.5	1682.5	936	708	175.5
01JUL2003	151.5	617	1564	1530.5	834	677.5	148
01JAN2004	152	598	1581.5	1560.5	826.5	704.5	121
01JUL2004	149	582	1567	1554	842	766.5	107.5
01JAN2005	147.5	589.5	1596.5	1529	876.5	776	90.5
01JUL2005	100.5	641	1642.5	1468	897	787.5	93.5
01JAN2006	100	647	1695	1479	864.5	865.5	89
01JUL2006	101.5	680	1735.5	1456.5	843	917	87
01JAN2007	113.5	720	1710	1453	871	947.5	90
01JUL2007	114.5	739.5	1693.5	1448	878.5	1037	76
01JAN2008	141.5	774.5	1657	1458.5	882	1037.5	81.5
01JUL2008	93.5	812	1672	1493.5	827	994	93
01JAN2009	89	695.5	1747	1461.5	781	920	147.5
01JUL2009	80.5	565.5	1740	1470	755	803.5	202.5
01JAN2010	80	554	1771.5	1453	741.5	844.5	182.5
01JUL2010	69	528	1810	1462	776	933	138.5
01JAN2011	61.5	538	1793	1485	803.5	1015	105.5
01JUL2011	61.5	492.5	1799.5	1544.5	834.5	1105.5	101.5
01JAN2012	37	498.5	1734	1550.5	836	1104	113
01JUL2012	34	458	1736	1584.5	865.5	1139.5	119
01JAN2013	34	451	1716	1607	897.5	1239	111.5
01JUL2013	34	458	1725.5	1640	926	1344.5	117.5
01JAN2014	26	461.5	1733.5	1638	982.5	1422.5	123.5
01JUL2014	24	495.5	1710.5	1635.5	1012	1498	124.5
01JAN2015	22	481	1703.5	1657	1019.5	1560	121
01JUL2015	22	494	1700.5	1629	1048.5	1522.5	132
01JAN2016	21.5	1535.5	1785.5	1747	1104.5	1586	198
01JUL2016	12	888	966.5	983	642.5	994.5	200
01JAN2017	7.5	878	946	940	648.5	972.5	198.5
01JUL2017	7	775.5	928.5	923.5	631	920.5	177
01JAN2018	5.5	725	914.5	890	594.5	908.5	147
01JUL2018	5	730.5	918.5	900.5	595.5	979.5	132.5

Source: Joint Committee calculations based on CEREP data

⁹ Withdrawn ratings have been weighted by 50% as indicated in Article 4(3) of the ITS.

Figure 13: Number of defaulted rated items

	AAA	AA	A	BBB	BB	B	CCC-C
01JAN2000	0	0	15	42	104	275	63
01JUL2000	0	0	11	53	109	257	70
01JAN2001	0	0	10	50	107	241	72
01JUL2001	0	0	6	35	100	214	65
01JAN2002	0	0	3	37	53	143	109
01JUL2002	0	0	1	27	27	100	73
01JAN2003	0	0	1	5	25	69	72
01JUL2003	0	0	1	3	18	45	55
01JAN2004	0	0	0	1	17	33	36
01JUL2004	0	0	0	1	8	35	30
01JAN2005	0	0	0	2	8	34	20
01JUL2005	0	0	0	4	8	38	27
01JAN2006	0	2	6	8	14	62	25
01JUL2006	1	2	12	15	32	117	36
01JAN2007	1	4	8	20	51	150	42
01JUL2007	2	4	8	22	48	204	36
01JAN2008	2	3	10	19	38	234	46
01JUL2008	0	1	9	19	28	232	56
01JAN2009	0	0	2	17	14	175	100
01JUL2009	0	0	1	4	15	76	95
01JAN2010	0	0	0	2	9	62	63
01JUL2010	0	0	0	3	5	79	53
01JAN2011	0	0	0	2	5	85	38
01JUL2011	0	0	0	1	5	84	43
01JAN2012	0	0	0	0	8	67	52
01JUL2012	0	0	0	1	7	69	58
01JAN2013	0	0	0	0	9	91	53
01JUL2013	0	0	0	4	21	116	52
01JAN2014	0	0	0	6	22	148	52
01JUL2014	0	0	0	7	25	170	62
01JAN2015	0	0	0	3	28	199	61
01JUL2015	0	0	0	5	22	188	67
01JAN2016	0	0	0	4	11	178	112
01JUL2016	0	0	0	2	2	93	122
01JAN2017	0	0	0	0	2	62	107
01JUL2017	0	0	0	0	2	30	96
01JAN2018	0	0	0	0	0	17	69
01JUL2018	0	0	0	0	0	11	33

Source: Joint Committee calculations based on CEREP data

Figure 14: Mapping proposal for rating categories with a non-sufficient number of credit ratings

Data cohort 1	AAA	AA
CQS of equivalent international rating category	CQS1	CQS1
N. observed defaulted items	0	2
Minimum N. rated items	0	1038
Observed N. rated items	1577	6807
Mapping proposal	CQS1	CQS 1
Data cohort 2	AAA	AA
CQS of equivalent international rating category	CQS1	CQS1
N. observed defaulted items	6	14
Minimum N. rated items	3336	8505
Observed N. rated items	944.5	6607
Mapping proposal	CQS2	CQS2
Data cohort 3	AAA	AA
CQS of equivalent international rating category	CQS1	CQS1
N. observed defaulted items	0	0
Minimum N. rated items	0	0
Observed N. rated items	316	5825.5
Mapping proposal	CQS1	CQS1

Source: Joint Committee calculations based on CEREP data

Figure 15: Long-run default rate for rating categories A, BBB, BB and B

Rating category	A	BBB	BB	B
CQS of equivalent international rating category	2	3	4	5
Long-run default rate	0.2%	0.8%	3.4%	12.9%
Mapping proposal	2	3	4	5

Source: Joint Committee calculations based on CEREP data



Appendix 4: Mappings of each rating scale

Figure 16: Mapping of S&P Long-term issuer credit ratings scale

Credit assessment	Initial mapping based on LR DR (CQS)	Review based on SR DR (CQS)	Final review based on qualitative factors (CQS)	Main reason for the mapping
AAA	n.a.	n.a.	1	Quantitative evidence together with the meaning, relative position and time horizon of the rating category are representative of the final CQS.
AA	n.a.	n.a.	1	
A	2	2	2	The quantitative factors are representative of the final CQS.
BBB	3	3	3	The quantitative factors are representative of the final CQS.
BB	4	4	4	The quantitative factors are representative of the final CQS.
B	5	5	5	The quantitative factors are representative of the final CQS.
CCC	6	6	6	The quantitative factors are representative of the final CQS.
CC	6	6	6	The quantitative factors are representative of the final CQS.
R	n.a.	n.a.	6	The meaning and relative position of the rating category is representative of the final CQS.
SD/D	n.a.	n.a.	6	The meaning and relative position of the rating category is representative of the final CQS.

Figure 17: Mapping of S&P Short-term issuer credit ratings scale

Credit assessment	Corresponding Long-term issuer credit ratings scale (established by S&P)	Range of CQS of corresponding Long-term issuer credit ratings scale	Final review <i>based on qualitative factors</i> (CQS)	Main reason for the mapping
A-1+	AAA/AA	1	1	The final CQS has been determined based on the most frequent step associated with the corresponding long-term credit rating category.
A-1	A	2	2	The final CQS has been determined based on the most frequent step associated with the corresponding long-term credit rating category.
A-2	A/BBB	2 - 3	3	The final CQS has been determined based on the most frequent step associated with the corresponding long-term credit rating category. As there is a draw between CQS 2 and 3, the most conservative CQS has been considered.
A-3	BBB/BB+	3 - 4	3	The final CQS has been determined based on the most frequent step associated with the corresponding long-term credit rating category.
B	BB+/CCC	4 - 6	4	The final CQS has been determined based on the range of steps associated with the corresponding long-term credit rating category. The risk weights assigned to CQS 4 to 6 are all 150%, therefore CQS 4.
C	B/CC	5 - 6	4	
R	R	6	4	
SD/D	SD/D	6	4	

Figure 18: Mapping of S&P Long-term issue credit ratings scale

Credit assessment	Corresponding Long-term issuer credit ratings scale assessment (assessed by JC)	Range of CQS of corresponding Long-term issuer credit ratings scale	Final review <i>based on qualitative factors</i> (CQS)	Main reason for the mapping
AAA	AAA	1	1	The final CQS has been determined based on the most frequent step associated with the corresponding long-term credit rating category.
AA	AA	1	1	
A	A	2	2	
BBB	BBB	3	3	
BB	BB	4	4	
B	B	5	5	
CCC	CCC	6	6	
CC	CC	6	6	
C	CC	6	6	
D	SD/D	6	6	

Figure 19: Mapping of S&P Short-term issue credit ratings scale

Credit assessment	Corresponding Short-term issuer credit ratings scale assessment (assessed by JC)	Range of CQS of corresponding Short-term issuer credit ratings scale	Final review <i>based on qualitative factors</i> (CQS)	Main reason for the mapping
A-1+	A-1+	1	1	The final CQS has been determined based on the most frequent step associated with the corresponding short-term credit rating category.
A-1	A-1	2	2	
A-2	A-2	3	3	
A-3	A-3	3	3	
B	B	4	4	
C	C	4	4	
D	R, SD/D	4	4	

Figure 20: Mapping of S&P Insurer financial strength ratings scale

Credit assessment	Corresponding Long-term issuer credit ratings scale assessment (assessed by JC)	Range of CQS of corresponding Long-term issuer credit ratings scale	Final review based on qualitative factors (CQS)	Main reason for the mapping
AAA	AAA	1	1	The final CQS has been determined based on the most frequent step associated with the corresponding long-term credit rating category.
AA	AA	1	1	
A	A	2	2	
BBB	BBB	3	3	
BB	BB	4	4	
B	B	5	5	
CCC	CCC	6	6	
CC	CC	6	6	
SD/D	SD/D	6	6	
R	R	6	6	

Figure 21: Mapping of S&P Mid Market Evaluation rating scale

Credit assessment	Corresponding Long-term issuer credit ratings scale assessment (assessed by JC)	Range of CQS of corresponding Long-term issuer credit ratings scale	Final review <i>based on qualitative factors</i> (CQS)	Main reason for the mapping
MM1	AAA/AA/A	2	2	The final CQS has been determined based on the most frequent step associated with the corresponding long-term credit rating category.
MM2	BBB	3	3	
MM3	BB	4	4	
MM4	BB	4	4	
MM5	B	5	5	
MM6	B	5	5	
MM7	CCC	6	6	
MM8	CC	6	6	
MMD	SD/D	6	6	

Figure 22: Mapping of S&P's Long-term Financial Institution Resolution Counterparty Rating

Credit assessment	Corresponding rating category long-term scale	Range of CQS of corresponding Long-term rating scale	Final review <i>based on qualitative factors</i> (CQS)	Main reason for the mapping
AAA	AAA	1	1	The final CQS has been determined based on the most frequent step associated with the corresponding long-term credit rating category.
AA	AA	1	1	
A	A	2	2	
BBB	BBB	3	3	
BB	BB	4	4	
B	B	5	5	
CCC	CCC	6	6	
CC	CC	6	6	
SD and D	SD and D	6	6	

Figure 23: Mapping of S&P's Short-term Financial Institution Resolution Counterparty Rating

Credit assessment	Corresponding rating category long-term scale	Range of CQS of corresponding Long-term rating scale	Final review <i>based on qualitative factors</i> (CQS)	Main reason for the mapping
A-1+	A-1+	1	1	The final CQS has been determined based on the most frequent step associated with the corresponding short-term credit rating category.
A-1	A-1	2	2	
A-2	A-2	3	3	
A-3	A-3	3	3	
B	B	4	4	
C	C	4	4	
SD and D	SD and D	4	4	