Amended Mapping of ICAP CRIF's 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 determine the 'mapping'[1] of the credit assessments of ICAP CRIF S.A. (ICAP CRIF), 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 and qualitative information collected after the production of the mapping report published in June 2021. Regarding qualitative developments, the qualitative factors as described in the Implementing Regulation remain unchanged.

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 entity[3] nor should be understood as a comparison of the rating methodologies of ICAP CRIF with those of other ECAIs. This mapping should however be interpreted as the correspondence of the rating categories of ICAP CRIF 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. 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 ICAP CRIF, the Global long-term issuer rating scale.

Figure 1: Mapping of ICAP CRIF's Global long-term issuer rating scale

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

2. Introduction

7. This report describes the mapping exercise carried out by the Joint Committee (JC) to determine the 'mapping' of the credit assessments of ICAP CRIF S.A. (ICAP CRIF) with respect to the version published in June 2021.

8. Following the acquisition by Crif SpA in December 2021, former ICAP S.A. operates now as ICAP CRIF S.A. It is a credit rating agency that registered with ESMA on 7 July 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 last draft Implementing Technical Standards (ITS) by the JC to the European Commission. The quantitative information is drawn from data available in the ESMA's central repository (CEREP[5]) and RADAR[6] based on the credit rating information submitted by the ECAIs as part of their reporting obligations.

11. Regarding qualitative developments, the qualitative factors described in the Implementing Regulation remain unchanged.

12. The following sections describe the rationale underlying the mapping exercise carried out by the Joint Committee (JC) to determine the applicable mapping. Section 3 describes ICAP CRIF's ratings scales relevant for the purpose of the mapping. Section 4 contains the mapping of the global long-term issuer rating scale, whereas Section 5 refers to the mapping of the global long-term issue rating scale. 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] The mapping does not contain any assessment of the registration process of ICAP CRIF carried out by ESMA.

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

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

3. ICAP CRIF credit ratings and rating scales

13. ICAP CRIF produces Long-term issuer and issue ratings, which may be used by institutions for the calculation of risk weights under the Standardised Approach (SA),[7] as shown in column 2 of Figure 2 in Appendix 1.

14. ICAP CRIF assigns these credit ratings to the Global long-term issuer and issue rating scales, as illustrated in column 3 of Figure 2 in Appendix 1. Therefore, a specific mapping has been prepared for these rating scales. The specification of Global long-term issuer rating scale is shown in Figure 3 of Appendix 1, and that of the issue scale is displayed in Figure 4.

4. Mapping of ICAP CRIF's long-term issuer rating scale

15. Following a significant change in the credit assessment methodology in 2012 due to which a comparison between the credit assessment carried out prior and post this period is not possible, the quantitative analysis is based on available rating information after 30 June 2012, resulting in changes to the mapping of the Global long-term issuer rating scale. The analysis 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.

16. 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. 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

4.1. Initial mapping based on the quantitative factors

4.1.1. Calculation of the long-run default rates

17. The information on ratings and default data is shown in Figure 5 and Figure 6 in Appendix 3. The following aspects should be highlighted:

- For AAA to BBB rating categories, the number of credit ratings cannot be considered sufficient as per Article 3(1)(a) of the Implementing Regulation for the calculation of the short and long run default rates specified in the Articles 3 – 5 of the Implementing Regulation. 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.

[7] 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.

- 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.

4.1.2. Mapping proposal based on the long run default rate

18. As illustrated in the second column of Figure 9 in Appendix 4, the rating categories BB, B, CCC, CC, C and D of the Long-term issuer rating scale have been initially allocated to each CQS based on the comparison of the long run default rates (see Figure 8 in Appendix 3) and the long run default rate benchmark intervals established in point (a) of Article 14 of the Implementing Regulation. Rating categories BB, B, CCC, CC, C and D are assigned to CQS 4, 4, 5, 5, 6 and 6 respectively.

19. In the case of rating categories AAA, AA, A and BBB, 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. The results are shown in Figure 7 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. For rating category A, there is a draw between the first data cohort (CQS 2) and the second data cohort (CQS 3). The additional quantitative information collected since the mapping was produced does not register any default and suggests mapping to CQS 2. Thus, the credit quality steps associated with the AAA/AA, A and BBB rating categories in the international rating scale (CQS 1, CQS 2, and CQS 3 respectively) can be assigned.

20. The analysis of the additional quantitative information collected since the previous mapping was established, result to changes compared to the allocation of credit quality steps produced in the last mapping.

4.2. Final mapping after review of the qualitative factors

21. The qualitative factors specified in Article 7 of the ITS have been used to challenge the mapping proposed by the default rate calculation.

22. ICAP CRIF has not registered any changes in the qualitative factors described in the Implementing Regulation since the last draft Implementing Regulation was produced. Therefore, no amendments are proposed based on these factors.

5. Mapping of Global long-term issue credit rating scale

23. The mapping of the global long-term issue credit rating scale has been derived from the relationship established by the JC with the long-term issuer credit ratings scale, as the rating categories can be considered comparable. 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. This is in line with Article 13 of the

Implementing Regulation and ensures consistency across the mappings proposed for ICAP CRIF.

24. More specifically, as each rating can be associated with one or a range of long-term issuer 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. The result is shown in Figure 10 of Appendix 4.

Appendix 1: Credit ratings and rating scales

Figure 2: ICAP CRIF's relevant credit ratings and rating scales

SA exposure classes	Name of credit rating	Credit rating scale
Long-term ratings		
Corporates	Long-term issuer rating	Global long-term issuer rating scale
Corporates	Long-term issue rating	Global long-term issue rating scale

Figure 3: Global long-term issuer rating scale

Credit assessment	Meaning of the credit assessment
AAA	The AAA-rating indicates the lowest credit risk and it is assigned to companies that are able to honour their obligations even under severe distressed conditions and therefore their credit worthiness is expected to continue to be very high. Companies rated with AAA are characterized by exceptional financial strength, very strong business growth and important market position.
AA	The AA-rating indicates very low credit risk and it is assigned to companies that are able to honour their obligations even under severe distressed conditions and therefore their credit worthiness is expected to continue to be high. Companies rated with AA are characterized by very strong financials, strong business growth and important market position.
A	The A-rating indicates very low credit risk and it is assigned to companies that are likely to be affected very marginally by severe distressed conditions and therefore their credit worthiness is expected to continue to be relatively high. Companies rated with A are characterized by significant financial strength, stable business growth and competitive market position.
BBB	The BBB-rating indicates low credit risk and it is assigned to companies that are likely to be affected slightly by severe distressed conditions and therefore their credit worthiness is expected to continue to be relatively stable. Companies rated with BBB are characterized by satisfactory financial strength, stable business growth and relatively competitive market position
BB	The BB-rating indicates moderate credit risk and it is assigned to companies that are sensitive to market and economic conditions and therefore their credit worthiness is expected to continue to be relatively stable. Companies rated with BB are characterized by moderate financial strength and stable business level and relatively declining competitive market position.
B	The B-rating indicates relatively increased credit risk and it is assigned to companies that are rather sensitive to market and economic conditions. Companies rated with B are characterized by below average financial strength and negative business growth and declining competitive market position.
CCC	The CCC-rating indicates increased credit risk and it is assigned to companies that are very sensitive to market and economic conditions. Companies rated with CCC are characterized by low financial strength and substantially negative business growth and low competitive market position.

Credit assessment	Meaning of the credit assessment
CC	The CC-rating indicates significantly increased credit risk and it is assigned to companies that have or are very likely to have in the short term a problem in honouring their financial obligation. Companies rated with CC are characterized by significantly low financial strength and competitive market position
C	The C-rating indicates very high credit risk and it is assigned to companies with significant problems in honouring their financial obligation. Companies rated with C are characterized by encumbered financial strength that put in jeopardy their business.
D	The D-rating indicates the highest credit risk and it is assigned to companies with very significant problems in honouring their financial obligation. Companies rated with D are characterized by extremely encumbered financial strength that put in significantly jeopardy their business.

Source: ICAP CRIF

Figure 4: Global long-term issue rating scale

Credit assessment	Meaning of the credit assessment
AAA	Indicates the lowest credit risk and it is assigned to instruments that are able to honour their obligations even under severe distressed conditions and therefore their credit worthiness is expected to continue to be very high. Instruments rated with AAA are issued by corporates characterized by exceptional financial strength, very strong business growth and important market position, while bearing recovery prospects robustly approaching 100%.
AAA-	Indicates the lowest credit risk and it is assigned to instruments that are able to honour their obligations even under severe distressed conditions and therefore their credit worthiness is expected to continue to be very high. Instruments rated with AAA- are issued by corporates characterized by exceptional financial strength, very strong business growth and important market position, while bearing recovery prospects confidently approaching 100% with very positive view.
AA+	Indicates very low credit risk and it is assigned to instruments that are able to honour their obligations even under severe distressed conditions and therefore their credit worthiness is expected to continue to be high. Instruments rated with AA+ are issued by corporates characterized by very strong financials, strong business growth and important market position, while bearing recovery prospects confidently approaching 100% with positive view.
AA	Indicates very low credit risk and it is assigned to instruments that are able to honour their obligations even under severe distressed conditions and therefore their credit worthiness is expected to continue to be high. Instruments rated with AA are issued by corporates characterized by very strong financials, strong business growth and important market position, while bearing recovery prospects confidently approaching 100%.
AA-	Indicates very low credit risk and it is assigned to instruments that are able to honour their obligations even under severe distressed conditions and therefore their credit worthiness is expected to continue to be high. Instruments rated with AA- are issued by corporates characterized by very strong financials, strong business growth and important market position, while bearing recovery prospects robustly placed in the top quartile of the recovery rate scale with very positive view.

A+	Indicates very low credit risk and it is assigned to instruments that are likely to be affected very marginally by severe distressed conditions and therefore their credit worthiness is expected to continue to be relatively high. Instruments rated with A+ are issued by corporates characterized by significant financial strength, stable business growth and competitive market position, while bearing recovery prospects robustly placed in the top quartile of the recovery rate scale with positive view.
A	Indicates very low credit risk and it is assigned to instruments that are likely to be affected very marginally by severe distressed conditions and therefore their credit worthiness is expected to continue to be relatively high. Instruments rated with A are issued by corporates characterized by significant financial strength, stable business growth and competitive market position, while bearing recovery prospects robustly placed in the top quartile of the recovery rate scale.
A-	Indicates very low credit risk and it is assigned to instruments that are likely to be affected very marginally by severe distressed conditions and their credit worthiness is expected to continue to be relatively high. Instruments rated with A- are issued by corporates characterized by significant financial strength, stable business growth and competitive market position, while bearing recovery prospects robustly placed in the upper middle quartile of the recovery rate scale with very positive view.
BBB+	Indicates low credit risk and it is assigned to instruments that are likely to be affected slightly by severe distressed conditions and therefore their credit worthiness is expected to continue to be relatively stable. Instruments rated with BBB+ are issued by corporates characterized by satisfactory financial strength, stable business growth and relatively competitive market position, while bearing recovery prospects robustly placed in the upper middle quartile of the recovery rate scale with positive view.
BBB	Indicates low credit risk and it is assigned to instruments that are likely to be affected slightly by severe distressed conditions and therefore their credit worthiness is expected to continue to be relatively stable. Instruments rated with BBB are issued by corporates characterized by satisfactory financial strength, stable business growth and relatively competitive market position, while bearing recovery prospects robustly placed in the upper middle quartile of the recovery rate scale.
BBB-	Indicates low credit risk and it is assigned to instruments that are likely to affected slightly by severe distressed conditions and therefore their credit worthiness is expected to be relatively stable. Instruments rated BBB- are issued by corporates characterized by satisfactory financial strength, stable business growth, relatively competitive market position, while bearing recovery prospects robustly placed in the upper end of the lower middle quartile of the recovery rate scale with very positive view.

BB+	Indicates moderate credit risk and it is assigned to instruments that are sensitive to market and economic conditions and therefore their credit worthiness expected to be relatively stable. Instruments rated with BB+ are issued by corporates characterized by moderate financial strength, stable business level and relatively declining competitive market position, while bearing recovery prospects robustly placed in the upper end of the lower middle quartile of the recovery rate scale with positive view.
BB	Indicates moderate credit risk and it is assigned to instruments that are sensitive to market and economic conditions and therefore their credit worthiness is expected to continue to be relatively stable. Instruments rated with BB are issued by corporates characterized by moderate financial strength, stable business level and relatively declining competitive market position, while bearing recovery prospects robustly placed in the upper end of the lower middle quartile of the recovery rate scale.
BB-	Indicates moderate credit risk and it is assigned to instruments that are sensitive to market and economic conditions and therefore their credit worthiness is expected to be relatively stable. Instruments with BB- are issued by corporates characterized by moderate financial strength, stable business level and relatively declining competitive market position, while bearing recovery prospects confidently placed in the upper end of the lower middle quartile of the recovery rate scale with very positive view.
B+	Indicates relatively increased credit risk and it is assigned to instruments that are rather sensitive to market and economic conditions. Instruments rated with B+ are issued by corporates characterized by below average financial strength, negative business growth and declining competitive market position, while bearing recovery prospects confidently placed in the upper end of the lower middle quartile of the recovery rate scale with positive view.
B	Indicates relatively increased credit risk and it is assigned to instruments that are rather sensitive to market and economic conditions. Instruments rated with B are issued by corporates characterized by below average financial strength, negative business growth and declining competitive market position, while bearing recovery prospects confidently placed in the upper end of the lower middle quartile of the recovery rate scale.
B-	Indicates relatively increased credit risk and it is assigned to instruments that are rather sensitive to market and economic conditions. Instruments rated with B- are issued by corporates characterized by below average financial strength, negative business growth and declining competitive market position, while bearing recovery prospects placed in the lower end of the lower middle quartile of the recovery rate scale with very positive view.

CCC+	Indicates increased credit risk and it is assigned to instruments that are very sensitive to market and economic conditions. Instruments rated with CCC+ are issued by corporates characterized by low financial strength, substantially negative business growth and low competitive market position, while bearing recovery prospects placed in the lower end of the lower middle quartile of the recovery rate scale with positive view.
CCC	Indicates increased credit risk and it is assigned to instruments that are very sensitive to market and economic conditions. Instruments rated with CCC are issued by corporates characterized by low financial strength, substantially negative business growth and low competitive market position, while bearing recovery prospects placed in the lower end of the lower middle quartile of the recovery rate scale.
CCC-	Indicates increased credit risk and it is assigned to instruments that are very sensitive to market and economic conditions. Instruments rated with CCC- are issued by corporates characterized by low financial strength, substantially negative business growth and low competitive market position, while bearing recovery prospects placed around the borderline between the lower middle and the lowest quartile of the recovery rate scale with very positive view.
CC+	Indicates significantly increased credit risk and it is assigned to instruments that have or are very likely to have in the short term a difficulty in honouring their financial obligation. Instruments rated with CC+ are issued by corporates characterized by significantly low financial strength and competitive market position, while bearing recovery prospects placed around the borderline between the lower middle and the lowest quartile of the recovery rate scale with positive view.
CC	Indicates significantly increased credit risk and it is assigned to instruments that have or are very likely to have in the short term a difficulty in honouring their financial obligation. Instruments rated with CC are issued by corporates characterized by significantly low financial strength and competitive market position, while bearing recovery prospects placed around the borderline between the lower middle and the lowest quartile of the recovery rate scale.
CC-	Indicates significantly increased credit risk and it is assigned to instruments that have or are very likely to have in the short term a difficulty in honouring their financial obligation. Instruments rated with CC- are issued by corporates characterized by significantly low financial strength and competitive market position, while bearing recovery prospects placed in the centre of the lowest quartile of the recovery rate scale with very positive view.
C+	Indicates very high credit risk and it is assigned to instruments with significant problems in honouring their financial obligation. Instruments rated with C+ are issued by corporates characterized by encumbered financial strength that put in jeopardy their business, while bearing recovery prospects placed in the centre of the lowest quartile of the recovery rate scale with positive view.

C	Indicates very high credit risk and it is assigned to instruments with significant problems in honouring their financial obligation. Instruments rated with C are issued by corporates characterized by encumbered financial strength that put in jeopardy their business, while bearing recovery prospects placed in the centre of the lowest quartile of the recovery rate scale.
C-	Indicates very high credit risk and it is assigned to instruments with significant problems in honouring their financial obligation. Instruments rated with C- are issued by corporates characterized by encumbered financial strength that put in jeopardy their business, while bearing recovery prospects placed in the bottom of the lowest quartile of the recovery rate scale with very positive view.
D+	Indicates the highest credit risk and it is assigned to instruments with very significant problems in honouring their financial obligation. Instruments rated with D+ are issued by corporates characterized by extremely encumbered financial strength that put in significantly jeopardy their business, while bearing recovery prospects placed in the bottom of the lowest quartile of the recovery rate scale with positive view.
D	Indicates the highest credit risk and it is assigned to instruments with very significant problems in honouring their financial obligation. Instruments rated with D are issued by corporates characterized by extremely encumbered financial strength that put in significantly jeopardy their business, while bearing recovery prospects placed in the bottom of the lowest quartile of the recovery rate scale.

Source: ICAP CRIF

Appendix 2: Definition of default

ICAP CRIF's definition of default at issuer level includes elements that indicate the inability of the obligor to fulfil its obligations. These elements are collected directly by ICAP CRIF's own means from first instance courts and the General Commercial Registry (G.E.MI) and relate to events on bankruptcy and bankruptcy petitions, payment orders, seizures and auctions.

A company falls in default if the information provided meets one of the following three conditions that are set within the year of the observed default:

1. Event of bankruptcy
2. Bankruptcy petition
3. Negative data, i.e. payment orders, seizures and auctions

From 2012 and onwards, ICAP CRIF has enriched its default definition by using 90+ delay of payments based on Greek banks reporting on ECAF eligible cases. Moreover, ICAP CRIF cooperates with a number of Greek companies and collects invoice data. ICAP CRIF uses this data to identify additional defaults.

Respectively, according to ICAP CRIF’s definition of default at issue level, an issue considered to be defaulted if at least one of the following applies: (a) the issuer is not able to pay its credit obligations, meaning that the issuer is defaulted according to the above mentioned default definition and (b) the instrument (issue) specific default clauses are enforced.

Source: ICAP CRIF

Appendix 3: Default rates of each rating category

Figure 5: Number of weighted items[8]

	AAA	AA	A	BBB	BB	B	CCC	CC	C	D
01 Jul 2012	6.5	26.0	80.5	141.0	166.5	276.0	348.0	399.0	214.5	168.0
01 Jan 2013	4.5	19.0	70.0	57.0	55.5	102.0	168.5	307.5	421.0	324.5
01 Jul 2013	3.0	14.0	70.0	57.0	66.5	93.0	143.0	267.5	406.5	333.5
01 Jan 2014	2.0	14.0	62.0	54.0	65.0	101.0	151.0	217.0	356.0	349.5
01 Jul 2014	2.0	13.5	62.0	48.0	64.0	92.0	161.0	212.5	324.0	295.5
01 Jan 2015	3.0	12.5	57.5	49.0	78.5	94.5	161.5	217.0	249.0	241.0
01 Jul 2015	3.0	12.0	54.0	48.0	89.5	88.0	137.5	186.0	195.0	170.0
01 Jan 2016	1.0	9.5	45.0	38.0	71.5	71.5	112.0	183.5	165.0	194.5
01 Jul 2016	1.0	13.0	46.5	43.5	58.0	77.5	128.5	177.0	166.5	177.0
01 Jan 2017	1.5	13.5	49.5	28.0	31.0	72.5	122.0	170.0	136.5	149.0
01 Jul 2017	1.0	13.0	62.0	24.5	40.0	96.0	157.0	148.5	121.0	138.0
01 Jan 2018	1.5	12.5	76.0	28.0	41.5	114.5	181.5	141.0	108.0	138.5
01 Jul 2018	1.5	13.5	80.0	34.5	44.0	135.5	193.0	144.0	110.0	124.5
01 Jan 2019	1.5	8.0	44.0	18.5	37.5	74.0	122.5	80.0	70.5	83.5
01 Jul 2019	2.5	8.0	48.0	19.5	47.5	75.5	131.5	89.5	65.5	107.0
01 Jan 2020	2.5	11.5	52.0	23.0	53.5	71.0	109.5	72.5	50.5	72.5
01 Jul 2020	2.5	11.0	54.5	30.0	53.0	89.0	113.5	80.5	47.5	70.5
01 Jan 2021	1.0	12.0	48.0	38.5	56.5	91.0	127.0	106.0	47.5	61.0

Source: Joint Committee calculations based on CEREP and RADAR data

[8] Withdrawn ratings have been weighted by 50% in accordance with Article 4(3) of the ITS.

Figure 6: Number of defaulted rated items

	AAA	AA	A	BBB	BB	B	CCC	CC	C	D
01 Jul 2012	0	0	3	9	17	53	108	200	128	159
01 Jan 2013	0	0	1	0	4	10	40	115	264	286
01 Jul 2013	0	0	1	0	1	7	28	88	222	285
01 Jan 2014	0	0	0	0	0	5	9	53	149	273
01 Jul 2014	0	0	0	0	1	6	11	47	149	239
01 Jan 2015	0	0	0	1	0	7	10	55	119	189
01 Jul 2015	0	0	0	1	0	8	10	36	72	64
01 Jan 2016	0	0	0	0	1	4	5	26	37	31
01 Jul 2016	0	0	0	0	1	4	7	23	38	31
01 Jan 2017	0	0	0	0	1	4	4	23	26	33
01 Jul 2017	0	0	0	0	1	4	10	23	19	23
01 Jan 2018	0	0	0	0	0	5	15	21	21	23
01 Jul 2018	0	0	0	0	0	4	14	19	20	23
01 Jan 2019	0	0	0	0	0	5	13	13	17	23
01 Jul 2019	0	0	0	0	0	5	13	18	11	26
01 Jan 2020	0	0	0	0	1	4	5	10	8	20
01 Jul 2020	0	0	0	0	0	3	3	5	7	6
01 Jan 2021	0	0	0	0	0	0	0	1	7	3

Source: Joint Committee calculations based on CEREP and Radar data

Figure 7: Mapping proposal for rating categories with a non-sufficient number of credit ratings, for the most recent data cohort

	AAA	**AA**	**A**	**BBB**
CQS of equivalent international rating category	CQS 1	CQS 1	CQS 2	CQS3
N. observed defaulted items	0	0	0	2
Minimum N. rated items	0	0	0	0
Observed N. rated items	17.5	127	597	395.5
Mapping proposal	**CQS 1**	**CQS 1**	**CQS 2**	**CQS3**

Source: Joint Committee calculations based on CEREP and Radar data

Figure 8: Proxy long-run default rate for rating categories BB to D

Rating category	**BB**	**B**	**CCC**	**CC**	**C**	**D**
CQS of equivalent international rating category	CQS 4	CQS 4	CQS 5	CQS 5	CQS 6	CQS 6
Long-run default rate	7.2%	14.7%	22.3%	38.3%	48.3%	69.7%
Mapping proposal	**CQS 4**	**CQS 5**	**CQS 5**	**CQS 6**	**CQS 6**	**CQS 6**

Source: Joint Committee calculations based on CEREP and Radar data

Appendix 4: Mapping of the Global long-term issue rating scale

Figure 9: Mapping of ICAP CRIF Global long-term issuer 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	The quantitative factors are representative of the final CQS.
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.
BBB	3	n.a.	3	The quantitative factors are representative of the final CQS.
BB	4	n.a.	4	The quantitative factors are representative of the final CQS.
B	5	n.a.	5	The quantitative factors are representative of the final CQS.
CCC	5	n.a.	5	The quantitative factors are representative of the final CQS.
CC	6	n.a.	6	The quantitative factors are representative of the final CQS.
C	6	n.a.	6	The quantitative factors are representative of the final CQS.
D	6	n.a.	6	The quantitative factors are representative of the final CQS.

Figure 10: Mapping of ICAP CRIF Global long-term issue rating scale

Credit assessment	Corresponding rating category issuer scale	Range of CQS of corresponding issuer 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 issuer 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	5	5	
CC	CC	6	6	
C	C	6	6	
D	D	6	6	