

# Amended Draft Mapping of ICAP's credit assessments under the Standardised Approach

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## 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'<sup>1</sup> of the credit assessments of ICAP S.A. (ICAP), with respect to the version published in November 2015.
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)<sup>2</sup> 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 November 2015. Regarding qualitative developments, the qualitative factors as described in the Implementing Regulation remain unchanged and ICAP has introduced credit assessments at the issue level.
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<sup>3</sup> nor should be understood as a comparison of the rating methodologies of ICAP with those of other ECAs. This mapping should however be interpreted as the correspondence of the rating categories of ICAP 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.

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<sup>1</sup> 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).

<sup>2</sup> OJ L 275, 12.10.2016, p. 3-18

<sup>3</sup> In this regard please consider [http://www.esma.europa.eu/system/files/esma\\_\\_2015-1473\\_report\\_on\\_the\\_possibility\\_of\\_establishing\\_one\\_or\\_more\\_mapping....pdf](http://www.esma.europa.eu/system/files/esma__2015-1473_report_on_the_possibility_of_establishing_one_or_more_mapping....pdf).

5. As described in Recital 12 of the Implementing Regulation, it is necessary to avoid causing undue material disadvantage on those ECAs 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 ECAs' 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, the Global long-term issuer rating scale.

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

Credit assessment	Credit quality step
AAA	2
AA	2
A	3
BBB	3
BB	4
B	4
CCC	5
CC	5
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 S.A. (ICAP) with respect to the version published in November 2015.
8. ICAP 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)<sup>4</sup>.
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<sup>5</sup>) 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. Further, ICAP introduced credit assessments at the issue level.
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’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 Implementing Technical Standards on the mapping of ECAIs’ credit assessments under Article 136(1) and (3) of Regulation (EU) No 575/2013.

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<sup>4</sup> The mapping does not contain any assessment of the registration process of ICAP carried out by ESMA.

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

### 3. ICAP credit ratings and rating scales

13. ICAP produces Long-term issuer and issue ratings, which may be used by institutions for the calculation of risk weights under the Standardised Approach (SA)<sup>6</sup>, as shown in column 2 of Figure 2 in Appendix 1.

14. ICAP 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 5.

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

15. The conclusions on the mapping of the Global long-term issuer rating scale remains unchanged. 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. The mapping takes into consideration the amendments introduced by ICAP in the denomination of the rating categories (i.e. symbols), which leave unchanged the number of rating categories, their definition and underlying risk profile. Please refer to Figure 4 for a correspondence table between the old and new denomination of the long-term issuer rating categories.

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 6 and Figure 7 in Appendix 3. The following aspects should be highlighted:

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

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<sup>6</sup> 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 categories the number of ratings cannot be considered sufficient for the calculation of the short and long run default rates specified in Articles 3 – 5 ITS. Therefore also in this case the allocation of the CQS would have to be made in accordance with Article 6 ITS, by considering the number of defaulted and not defaulted items. However in this case the size of the pools is too large<sup>7</sup> to be evaluated by a small pool methodology. In this situation Article 6 is applied by considering the number of defaulted and not defaulted items through the computation of short run default rates and a proxy for the long run default rate<sup>8</sup>.

#### 4.1.2. Mapping proposal based on the long run default rate

18. The assignment of the rating categories to credit quality steps has been initially made in accordance with Article 6 of the ITS, please refer to Figures 8 and 9 of Appendix 3. Therefore, the numbers of defaulted and non-defaulted rated items have been used together with the prior expectation of the equivalent rating category of the international rating scale.

19. The analysis of the additional quantitative information collected since the original mapping was produced is consistent with the current allocation of credit quality steps.

#### 4.2. Final mapping after review of the qualitative factors

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

21. ICAP 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

22. 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.

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<sup>7</sup> If the total number of rated items over a 5 years period is larger than 10 times the number representing the inverse of the long run default rate benchmark associated with the equivalent rating category in the international rating scale, but at the same time this pool of ratings does not satisfy Article 3 ITS, then this pool of ratings is considered to be too large for the application of a small pool methodology.

<sup>8</sup> It has to be noted that in this situation the proxy LRDR is formally not a LRDR, the latter needs indeed to be computed over at least 10 short run default rates.

23. 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's relevant credit ratings and rating scales

SA exposure classes	Name of credit rating	Credit rating scale
<b>Long-term ratings</b>		
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
AA	The AA-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 AA are characterized by exceptional financial strength, very strong business growth and important market position.
A	The A-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 A are characterized by very strong financials, strong business growth and important market position.
BB	The BB-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 BB are characterized by significant financial strength, stable business growth and competitive market position.
B	The B-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 B are characterized by satisfactory financial strength, stable business growth and relatively competitive market position.
C	The C-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 C are characterized by moderate financial strength and stable business level and relatively declining competitive market position.
D	The D-rating indicates relatively increased credit risk and it is assigned to companies that are rather sensitive to market and economic conditions. Companies rated with D are characterized by below average financial strength and negative business growth and declining competitive market position.
E	The E-rating indicates increased credit risk and it is assigned to companies that are very sensitive to market and economic conditions. Companies rated with E are characterized by low financial strength and substantially negative business growth and low competitive market position.



## Credit assessment

## Meaning of the credit assessment

F	The F-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 F are characterized by significantly low financial strength and competitive market position
G	The G-rating indicates very high credit risk and it is assigned to companies with significant problems in honouring their financial obligation. Companies rated with G are characterized by encumbered financial strength that put in jeopardy their business.
H	The H-rating indicates the highest credit risk and it is assigned to companies with very significant problems in honouring their financial obligation. Companies rated with H are characterized by extremely encumbered financial strength that put in significantly jeopardy their business.

Source: ICAP

Figure 4: Global long-term issuer rating scale, correspondence between the denomination of the new and old rating categories

New denomination	Old denomination
AAA	AA
AA	A
A	BB
BBB	B
BB	C
B	D
CCC	E
CC	F
C	G
D	H

Figure 5: Global long-term issue rating scale

**Credit  
assessment**

**Meaning of the credit assessment**

<b>AAA</b>	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 AA are issued by corporates characterized by exceptional financial strength, very strong business growth and important market position, while bearing recovery prospects robustly approaching 100%.
<b>AAA-</b>	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 AA- 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.
<b>AA+</b>	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 A+ 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.
<b>AA</b>	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 A are issued by corporates characterized by very strong financials, strong business growth and important market position, while bearing recovery prospects confidently approaching 100%.

<b>AA-</b>	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 A- 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.
<b>A+</b>	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 BB+ 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.
<b>A</b>	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 BB 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.
<b>A-</b>	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 BB- 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.
<b>BBB+</b>	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 B+ 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.
<b>BBB</b>	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 B 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.

<b>BBB-</b>	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 be relatively stable. Instruments rated B- 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.
<b>BB+</b>	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 rated with C+ 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.
<b>BB</b>	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 C 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.
<b>BB-</b>	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 C- 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>B+</b>	Indicates relatively increased credit risk and it is assigned to instruments that are rather sensitive to market and economic conditions. Instruments rated with D+ 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>B</b>	Indicates relatively increased credit risk and it is assigned to instruments that are rather sensitive to market and economic conditions. Instruments rated with D 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>B-</b>	Indicates relatively increased credit risk and it is assigned to instruments that are rather sensitive to market and economic conditions. Instruments rated with D- 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.
<b>CCC+</b>	Indicates increased credit risk and it is assigned to instruments that are very sensitive to market and economic conditions. Instruments rated with E+ 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.
<b>CCC</b>	Indicates increased credit risk and it is assigned to instruments that are very sensitive to market and economic conditions. Instruments rated with E 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.
<b>CCC-</b>	Indicates increased credit risk and it is assigned to instruments that are very sensitive to market and economic conditions. Instruments rated with E- 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.
<b>CC+</b>	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 F+ 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.
<b>CC</b>	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 F 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.
<b>CC-</b>	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 F- 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.

<b>C+</b>	Indicates very high credit risk and it is assigned to instruments with significant problems in honouring their financial obligation. Instruments rated with G+ 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.
<b>C</b>	Indicates very high credit risk and it is assigned to instruments with significant problems in honouring their financial obligation. Instruments rated with G 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.
<b>C-</b>	Indicates very high credit risk and it is assigned to instruments with significant problems in honouring their financial obligation. Instruments rated with G- 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.
<b>D+</b>	Indicates the highest credit risk and it is assigned to instruments with very significant problems in honouring their financial obligation. Instruments rated with H+ 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.
<b>D</b>	Indicates the highest credit risk and it is assigned to instruments with very significant problems in honouring their financial obligation. Instruments rated with H 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

## Appendix 2: Definition of default

ICAP'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's own means from first instance courts and government gazettes 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 has enriched its default definition by using 90+ delay of payments based on Greek banks reporting on ECAF eligible cases. Moreover, ICAP cooperates with a number of Greek companies and collects invoice data. ICAP uses this data to identify additional defaults.

Respectively, according to ICAP'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



## Appendix 3: Default rates of each rating category

Figure 6: Number of weighted items<sup>9</sup>

	AA	A	BB	B	C	D	E	F	G	H
01JAN2005	162.5	415	561	534.5	561.5	467.5	189.5	94	22.5	5.5
01JUL2005	187.5	419	539	503	456.5	411	186.5	92.5	27.5	4.5
01JAN2006	187	447	535	487	479.5	391.5	180.5	88	23.5	3
01JUL2006	143	432	543.5	532.5	527.5	423.5	211.5	101.5	26	7.5
01JAN2007	151.5	400.5	538	542	549.5	425	238.5	107.5	23.5	9
01JUL2007	167.5	454.5	569.5	583.5	585.5	439.5	244	141.5	36.5	11
01JAN2008	179.5	394.5	551.5	601	543.5	440.5	268.5	178.5	45.5	12.5
01JUL2008	292	654	598	566.5	472.5	327	201.5	156.5	21	6
01JAN2009	236.5	561	620	524	466.5	351	245.5	151.5	21	13
01JUL2009	218	476	599.5	508	457	357.5	255.5	152	20	16.5
01JAN2010	173	373	478.5	432	404.5	345	234.5	140	23	35
01JUL2010	156	199.5	425.5	335	372	379	196.5	120.5	30	28.5
01JAN2011	150.5	172.5	420	307	345.5	359	173.5	95.5	29	58.5
01JUL2011	113.5	126	458.5	188.5	266	343.5	230	80	20.5	78
01JAN2012	84	91	265.5	272.5	305.5	381.5	336	133.5	30	145.5
01JUL2012	6.5	26	80.5	141	166.5	276	348	399	214.5	168
01JAN2013	4.5	19	70	57	55.5	102	168.5	307.5	421	324.5
01JUL2013	3	14	70	57	66.5	93	143	267.5	406.5	333.5
01JAN2014	2	14	62	54	65	101	151	217	356	349.5
01JUL2014	2	13.5	62	48	64	92	161	212.5	324	295.5
01JAN2015	3	12.5	57.5	49	78.5	94.5	161.5	217	249	241
01JUL2015	3	12	54	48.5	90	88.5	138	192	216	234
01JAN2016	1	9.5	45	37	71.5	70.5	110	180.5	162	192
01JUL2016	0.5	7.5	27	32.5	46.5	55.5	83.5	125.5	128	153
01JAN2017	1	7.5	27.5	20	19	50.5	78	108	102.5	118.5
01JUL2017	0.5	7	31.5	17.5	23	59	93	95	84	94.5
01JAN2018	0.5	6.5	36.5	13.5	22	65.5	101.5	86.5	71	76.5
01JUL2018	0.5	7	37	16.5	22	71.5	103.5	84.5	64.5	61.5

Source: Joint Committee calculations based on CERE data

<sup>9</sup> Withdrawn ratings have been weighted by 50% in accordance with Article 4(3) of the ITS.

Figure 7: Number of defaulted rated items

	AA	A	BB	B	C	D	E	F	G	H
01JAN2005	0	0	2	3	5	7	6	3	6	4
01JUL2005	0	0	0	3	3	6	4	3	0	3
01JAN2006	0	0	0	3	1	6	5	4	4	1
01JUL2006	0	0	0	2	6	8	2	8	5	3
01JAN2007	0	0	0	2	6	9	8	8	4	5
01JUL2007	0	1	3	4	7	18	12	15	12	7
01JAN2008	0	0	2	5	5	19	14	20	11	8
01JUL2008	0	4	11	13	23	32	28	22	8	5
01JAN2009	1	5	13	19	29	38	40	25	4	9
01JUL2009	3	8	23	27	40	42	48	32	1	13
01JAN2010	13	35	54	43	57	48	52	28	6	30
01JUL2010	22	27	65	45	63	95	63	37	13	23
01JAN2011	21	24	70	48	53	91	56	31	16	54
01JUL2011	8	20	70	34	53	113	95	36	17	73
01JAN2012	4	12	44	32	52	111	125	65	25	131
01JUL2012	0	0	3	9	17	53	108	200	128	159
01JAN2013	0	0	1	0	4	10	40	115	264	286
01JUL2013	0	0	1	0	1	7	28	88	222	285
01JAN2014	0	0	0	0	0	5	9	53	149	273
01JUL2014	0	0	0	0	1	6	11	47	149	239
01JAN2015	0	0	0	1	0	7	10	55	119	189
01JUL2015	0	0	0	1	0	9	11	49	115	199
01JAN2016	0	0	0	0	1	4	5	26	35	30
01JUL2016	0	0	0	0	1	4	5	23	30	26
01JAN2017	0	0	0	0	1	3	2	16	20	23
01JUL2017	0	0	0	0	1	3	3	14	9	9
01JAN2018	0	0	0	0	0	1	4	10	7	3
01JUL2018	0	0	0	0	0	0	2	3	3	1

Source: Joint Committee calculations based on CEREP data

Figure 8: Mapping proposal for rating categories with a non-sufficient number of credit ratings, for the most recent data cohort

	AA	A	BB	B
CQS of equivalent international rating category	CQS 1	CQS 1	CQS 2	CQS3
N. observed defaulted items	4	12	49	43
Minimum N. rated items	2206	7010	n.a.	n.a.
Observed N. rated items	109	211.5	625.5	764
<b>Mapping proposal</b>	<b>CQS 2</b>	<b>CQS 2</b>	<b>CQS 3</b>	<b>CQS4</b>

Figure 9: Proxy long-run default rate for rating categories C to H

Rating category	C	D	E	F	G	H
CQS of equivalent international rating category	CQS 4	CQS 4	CQS 5	CQS 5	CQS 6	CQS 6
Long-run default rate	6%	11%	16%	25%	48%	79%
<b>Mapping proposal</b>	<b>CQS 4</b>	<b>CQS 4</b>	<b>CQS 5</b>	<b>CQS 5</b>	<b>CQS 6</b>	<b>CQS 6</b>

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

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

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