



European Securities and  
Markets Authority

# Final Report

**Report on the Possibility of Establishing One or More Mappings  
of Credit Ratings Published on the European Rating Platform**



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## Acronyms used

CEREP	Central repository of credit rating data reported to ESMA by credit rating agencies
Commission	European Commission
CRAs	Credit rating agencies
CRA III	The 2013 amendments to the Credit Rating Agencies Regulation (Regulation (EU) No 462/2013) <sup>1</sup>
CRR	Capital Requirements Regulation (Regulation (EU) No 575/2013) <sup>2</sup>
ERP	European Rating Platform
EBA	European Banking Authority
ECAI	External Credit Assessment Institution
EIOPA	European Insurance and Occupational Pensions Authority
ESMA	European Securities and Markets Authority
EU	European Union
ITS	Implementing Technical Standard
RTS	Regulatory Technical Standard
SFI	Structured Finance Instrument

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<sup>1</sup> Regulation (EU) No 462/2013 of the European Parliament and of the Council of 21 May 2013, OJ L146/1 of 31.5.2013, available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R0462&from=EN>.

<sup>2</sup> Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (Text with EEA relevance) Available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32013R0575>.

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# 1 Executive Summary

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1. This report analyses the possibility, cost, and benefit of establishing one or more mappings for the European Rating Platform (ERP). The objective of a mapping is to assist the user in comparing ratings assigned by different credit rating agencies (CRAs) to the same entity or instrument. Three policy options are considered:
  - a. Mapping by harmonising existing rating scales;
  - b. Mapping by comparing ratings of different CRAs based on past performance;
  - c. Refraining from mapping and letting the ERP user carry out assessments independently based on available tools and data.
2. The report concludes that the first option is unlikely to yield the desired benefits, as harmonised rating scales would misrepresent credit ratings in light of different rating methodologies. It is found that heterogeneity of rating scales is beneficial in some cases when it highlights the differences in methodologies underlying ratings assigned by different CRAs or to different asset classes.
3. Furthermore, the report concludes that mapping of ratings by different CRAs based on past performance, the second option, can be carried out in several different ways with different outcomes depending on the applied assumptions and the specific parameters of comparison. However, one single way of mapping would not be appropriate for every rating user at every point in time. As users may perceive a mapping carried out by the European Securities and Markets Authority (ESMA) to be definitive or use it as a benchmark, it could discourage users from carrying out assessments individually. Furthermore, any divergence between an ERP mapping and existing mappings could lead to confusing market participants. Based on experiences from other mapping exercises, option two is also likely to be costly.
4. Consequently, the report recommends that the European Commission takes no further action at this point in time and that a mapping is not carried out for the ERP. Instead, ESMA should focus on continually updating and improving the information, data and tools which ESMA makes available on CEREP and ERP (the third option), thus allowing users of credit ratings to carry out their own research and analysis adapted to their individual needs and interests.

## 2 Introduction

5. Article 21(4b) of the CRA Regulation<sup>3</sup> requires ESMA to report on the possibility of establishing one or more mappings of credit ratings submitted in accordance with Article 11a(1). The report, in particular, assesses the possibility, cost, and benefit of establishing one or more mappings as well as how one or more mappings can be created without misrepresenting credit ratings in light of different rating methodologies. It also considers the potential impact on Level-1 and Level-2 legislation.
6. Article 11a of the CRA Regulation establishes that registered and certified CRAs, when issuing a credit rating or a rating outlook, shall submit to ESMA rating information, including the credit rating and rating outlook of the rated instrument, information on the type of credit rating, the type of rating action, and date and hour of publication. The individual credit ratings are to be published on the European Rating Platform (ERP) in accordance with Article 11a(2) of the CRA Regulation.
7. This report aims to analyse the similarities and differences in rating scales applied by different CRAs and its potential impact on users of the ERP. It further aims to analyse the possibility, cost and benefit of addressing this by carrying out a mapping for the ERP.
8. The report is structured as follows: Section 3 outlines the background and objectives of the ERP. Section 4 sets out the key problems with the current state of play. Section 5 analyses the potential policy options:
  - a. Mapping by harmonising existing rating scales;
  - b. Mapping by comparing ratings of different CRAs based on past performance;
  - c. Refraining from mapping and letting the ERP user carry out assessments independently based on available tools and data.

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<sup>3</sup> Regulation EU No 1060/2009 of 16 September 2009 on credit rating agencies, OJ L 302/1 of 17.11.2009 as amended by Regulation 513/2001 of 11 May 2011, OJ L145/30 of 31.5.2011, available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:145:0030:0056:EN:PDF>, and further amended by Regulation 462/2013 of 21 May 2013, OJ L146/1 of 31.5.2013, available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R0462&from=EN>, (hereinafter the CRA Regulation).

### 3 Background

9. The potential mapping(s) assessed in this report would serve as a guide for users of the ERP. The ERP is a database with a public online interface, which ESMA will implement and run pursuant to Article 11a of the CRA Regulation. On the ERP, ESMA will publish all credit ratings and rating outlooks that are issued or endorsed by the CRAs registered and certified by ESMA, excluding the ones that are exclusively produced and disclosed to investors for a fee.
10. The objectives of the ERP are provided in recital 31 of the 2013 amendments to the CRA Regulation<sup>4</sup> (CRA III) and recital 3 of the Regulatory Technical Standard (RTS) for the ERP.<sup>5</sup> These objectives include providing investors, issuers and other interested parties with a central access point to up-to-date rating information and lowering information costs by allowing for a global view of the different ratings issued on each rated entity or instrument.<sup>6</sup> Furthermore, the ERP will aim to allow investors to easily compare all credit ratings that exist with regard to a specific rated entity. Finally, the ERP should help smaller and new CRAs gain visibility. The ERP will incorporate CEREP, an existing public database with rating information, with a view to creating a single platform for all available credit ratings per instrument.
11. In order for the ERP to be able to attain its objectives of transparency, comparability, and visibility of small and medium-sized CRAs, it is important that the user is able to easily understand how ratings from different CRAs compare. The aim of a potential mapping would be to assist the user in comparing ratings assigned by different CRAs to the same entity or instrument. This could in particular support smaller CRAs and new market entrants.
12. Whilst the objective of the potential mapping(s) is clear, the term '*mapping*' itself carries no definition in the CRA Regulation. The term is used twice in the Impact Assessment carried out for CRA III with reference to a proposal to 'harmonise ratings scales to improve comparability of ratings between CRAs.'<sup>7</sup> A harmonisation of rating scales is in the Impact Assessment deemed to be instrumental for the development of the proposal containing the elements of the European Rating Platform.<sup>8</sup>

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<sup>4</sup> See footnote 1.

<sup>5</sup> Commission Delegated Regulation (EU) 2015/2 of 30 September 2014 supplementing Regulation (EC) No 1060/2009 of the European Parliament and of the Council with regard to Regulatory Technical Standards for the presentation of the information that credit rating agencies make available to the European Securities and Markets Authority Text with EEA relevance, available at: [http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:JOL\\_2015\\_002\\_R\\_0002](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:JOL_2015_002_R_0002). Hereinafter: "The RTS for the ERP"

<sup>6</sup> RTS for the ERP (see footnote 5).

<sup>7</sup> Pages 42-43 of Commission Staff Working Paper Impact Assessment Accompanying the document Proposal for a Regulation amending Regulation (EC) No 1060/2009 on credit rating agencies and a Proposal for a Directive amending Directive 2009/65/EC on coordination on laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS) and Directive 2011/61/EU on Alternative Investment Fund Managers, Available at: [http://ec.europa.eu/internal\\_market/securities/docs/agencies/SEC\\_2011\\_1354\\_en.pdf](http://ec.europa.eu/internal_market/securities/docs/agencies/SEC_2011_1354_en.pdf). Hereinafter "the Impact Assessment to CRA III".

<sup>8</sup> The Impact Assessment to CRA III pp 42-43 (see footnote 7).

13. Another meaning of the term mapping is found in Article 136(1) of the Capital Requirements Regulation<sup>9</sup> (CRR), which requires EBA, EIOPA and ESMA to ‘specify for all ECAIs, with which of the credit quality steps set out in Section 2 the relevant credit assessments of the ECAI correspond (“mapping”)’. An External Credit Assessment Institution (ECAI) is defined in CRR as a CRA that is registered or certified by ESMA or a Central Bank that issues credit ratings and that is exempt from the application of the CRA Regulation.<sup>10</sup> Specific requirements are provided for the mapping carried out under this provision, which include taking into account specific qualitative and quantitative factors and comparing ‘default rates experienced for each credit assessment of a particular ECAI and compare them with a benchmark built on the basis of default rates experienced by other ECAIs on a population of issuers that present an equivalent level of credit risk’.<sup>11</sup>
14. Mapping under Article 136(1) of CRR is developed for the specific purposes of prudential supervision of credit institutions and investment firms<sup>12</sup>. The outcome of this mapping will have implications for credit ratings issued by different CRAs within the context of prudential supervision of financial institutions and thus potentially an impact on competition between CRAs. In the light of these very specific objectives, and considering the separate mandate provided for this report in Article 21(4b) of the CRA Regulation, mapping considered for this provision is likely to be different.
15. In light of the above, the report considers two policy options based on two different understandings of mapping in addition to a scenario in which no mapping is carried out:
  - a. Mapping as a mandatory harmonisation of rating scales and symbols; and
  - b. Mapping as a comparison of ratings on the basis of past performance.

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<sup>9</sup> For more details see footnote 2.

<sup>10</sup> Article 4(1) point (98) of CRR (see footnote 2).

<sup>11</sup> Article 136(1) of CRR (see footnote 2).

<sup>12</sup> Currently three draft Implementing Technical Standards are underway pursuant to Article 136 (mapping of non-structured finance credit ratings), Article 270 of CRR (mapping of structured finance ratings) and Article 109a of Directive 2009/138/EC (mapping of credit ratings under Solvency II).

## 4 Problem definition

16. Scales and symbols as applied by the majority of CRAs for long-term ratings largely follow a common structure. With two exceptions, EIU and ICAP, the number of notches on the general long-term rating scales are very similar, ranging from 18 to 27 with an average of approximately 21. Furthermore, the symbols applied are, with the exceptions of CERVED and ICAP, broadly aligned. A standard letter-scale following the set formula AAA-AA-A-BBB-BB-B is applied by nearly all CRAs with some adding an additional tier to the scale: CCC-CC-C. CRAs typically use different qualifiers to denote subcategories including “+/-“, “high/low“, “H/L” and “1/2/3”. Furthermore, CRAs also vary in their use of capital and lower case letters.
17. CRAs are currently reporting a rating scale to ESMA for each asset class (corporates, structured finance, sovereign and covered bonds) and time horizon (long-term or short-term) for which they assign ratings. These rating scales are made available on CEREP<sup>13</sup>. However, Article 7 of the RTS for CEREP provides that ‘Where a credit rating agency issues ratings for a particular time horizon and rating type using more than one rating scale, it shall report [...] only the rating scale used for the numerical majority of such ratings.’<sup>14</sup> This means that CRAs currently only report their most frequently used rating scale for each asset class and time horizon even if multiple scales exist, which is often the case. As a part of the reporting to the ERP, CRAs will be required to provide more detailed information on rating scales, which will be made publicly available<sup>15</sup>. However, for the purposes of this report, only the main rating scales of the CRAs are taken into account.

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<sup>13</sup> For further detail see the Regulatory Technical Standard for CEREP: Commission Delegated Regulation (EU) No 448/2012 of 21 March 2012 supplementing Regulation (EC) No 1060/2009 of the European Parliament and of the Council with regard to regulatory technical standards for the presentation of the information that credit rating agencies shall make available in a central repository established by the European Securities and Markets Authority. Available at: [http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L\\_.2012.140.01.0017.01.ENG](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2012.140.01.0017.01.ENG) Hereinafter “the RTS for CEREP”.

<sup>14</sup> Article 7 of the RTS for CEREP (see footnote 13).

<sup>15</sup> For more details, see the RTS for the ERP (See footnote 5)

18. Table 1 below provides an overview of the main long-term rating scales as reported to ESMA by its registered and certified CRAs. The shaded area in the middle of the table indicates the asset classes for which a dedicated rating scale exists. On the right-hand side, the number of notches on each rating scale is indicated. With very few exceptions (DBRS, JCR, BCRA and Capital Intelligence), the number of notches on the scale are for each CRA the same across all asset classes. Often the main long-term rating scales used by one CRA for different asset classes are in fact identical or very similar.

Table 1: Long-term rating scales

CRA	Corp	Sov	SFI	CB	Number of notches on each rating scale*
DBRS					27 <sup>a</sup>
Feri					21
Fitch					21
Moody's					21
S&P					22
Creditreform					20
HR Ratings					20
JCR					21 <sup>b</sup>
Kroll					22
BCRA					18 <sup>c</sup>
Capital Intelligence					22 <sup>d</sup>
ARC					22
European Rating Agency					26
Scope					20
Assekurata					22
AM Best					22
Axesor					23
CERVED					13
CRIF					20
Dagong					22
Euler Hermes					23
EuroRating					20
GBB					22
ICAP					10
Spread Research					22
EIU					10

Source: CEREP (1 August 2015).

Legend: 'Corp' - corporate ratings, 'Sov' – sovereign Ratings, 'SFI' – structured finance ratings, 'CB' – covered bonds. The shaded areas indicate asset classes for which the CRA has a dedicated long-term rating scale.

\* The following rating categories are not counted in the number of notches on each rating scale: "NR" (not rated), "WR" (rating withdrawn), and "S" (rating suspended).

<sup>a</sup> DBRS' rating scales for covered bonds and structured finance have 26 notches omitting the rating notch: 'SD'.

<sup>b</sup> JCR's rating scale for SFIs has only 20 notches omitting the rating: 'LD'.

<sup>c</sup> BCRA's rating scale for sovereigns has 22 notches. This scale includes the following additional rating notches 'CCC-', 'CCC', 'CCC+', and 'CC'.

<sup>d</sup> Capital Intelligence's rating scale for sovereigns has only 21 notches omitting the rating notch 'RS'.

19. When it comes to short-term rating scales, the differences are more pronounced. The table below illustrates the short-term rating scales of all the registered and certified CRAs, which issue short-term ratings. For this type of credit ratings, scales range from 4 notches to 13 notches and the symbols applied are less aligned. As in the case of the long-term ratings, the main short-term scales used for different asset classes by the same CRA are typically almost identical.

Table 2: Short-term rating scales<sup>16</sup>

CRA	Corp	Sov	SFI	Rating Scales							Total			
Moody's				P-1	P-2	P-3	NP				4			
CERVED				R-1	S-1	S-2	S-3	V-1			5			
Dagong				A-1	A-2	A-3	B	C	D		6			
HR Ratings				HR1	HR2	HR3	HR4	HR5			6			
BCRA				A-1	A-2	A-3	B	C	D		7			
JCR				J-1	J-2	J-3	LD <sup>a</sup>	NJ	D		7 <sup>a</sup>			
ARC				A-1	A-2	A-3	B	C	D		7			
Fitch				F1	F2	F3	B	C	RD	D	8			
Kroll				K1	K2	K3	B	C	D		9			
Capital Intelligence				A1	A2	A3	B	C	RS <sup>b</sup>	SD	D	9 <sup>b</sup>		
S&P				A-1	A-2	A-3	B-1	B-2	B-3	C	R	SD	D	10
DBRS				R-1	R-2	R-3	R-4	R-5	D		10			
Assekurata				A	B	C	D				11			
European Rating Agency				S1	S2	S3	S4	NS				13		
Scope				S1	S2	S3	S4				5			
Average number of notches on the rating scale.											8			

Source: CEREP (1 August 2015)

Legend: 'Corp' - Corporate Ratings, 'Sov' Sovereign Ratings, 'SFI' - Structured finance ratings. The shaded areas with a darker tone indicate the asset classes for which the CRA has a dedicated rating scale. The shaded areas with a brighter tone indicate categories on the rating scale with subcategories denoted by a qualifier.

<sup>a</sup>The category 'LD' is not provided in JCR's short-term rating scale for SFIs.

<sup>b</sup>The category 'RS' is not provided in Capital Intelligence's rating scale for sovereigns.

20. It is important to mention that Article 10(3) of the CRA Regulation requires a CRA that issues credit ratings for structured finance instruments (SFIs) to ensure that rating categories that are attributed to SFIs are clearly differentiated using an additional symbol which distinguishes them from rating categories used for any other entities, financial instruments or financial obligations. In most cases the letters 'sf' are added to the credit rating symbol and qualifier in order for such ratings to be easily distinguishable from ratings of other asset classes.

<sup>16</sup> This table was updated on 19 January 2016 to correct inaccurate information regarding the short-term rating scales of Scope Ratings.

21. In conclusion, the main difference in scale and symbols is found between long-term and short-term rating scales. Generally, short-term scales have a lower number of notches and use symbols which are different from the standard letter scale used for long-term ratings. In addition, short-term rating scales from different CRAs bear little resemblance. On the other hand, the main long-term rating scales used by most CRAs for most asset classes are generally fairly similar, except for ratings of SFIs, which are legally mandated to be clearly labelled. On the one hand, the differences could constitute an obstacle for users of the European Rating Platform making it difficult to compare ratings assigned by different CRAs to the same instrument or entity. However, when rating scales are too homogeneous across asset classes, time horizons and CRAs it may also raise problems. These problems are discussed in the following section under policy option I.

## 5 Policy Options

### 5.1 Option I: Harmonising credit rating scales and symbols

22. In the Impact Assessment carried out for CRA III, it was proposed to ‘harmonise ratings scales to improve comparability of ratings between CRAs.’<sup>17</sup> The report considered that ‘this measure would facilitate investors in comparing ratings from distinct agencies through a harmonised standard reference scale to be used by registered and authorised rating agencies.’<sup>18</sup>

23. A credit rating is defined in Article 3(1) of the CRA Regulation as ‘an opinion regarding the creditworthiness of an entity or other financial instrument issued using an established and defined ranking system of rating categories’. Article 8 of the CRA Regulation requires that a registered CRA assigns its credit ratings using rating methodologies that are rigorous, systematic, continuous, and subject to validation based on historical experience, including back-testing.<sup>19</sup> Furthermore, changes in credit ratings must be issued in accordance with the rating methodologies published by the CRA.<sup>20</sup> At the same time Article 23 clearly prohibits ESMA, the Commission or any public authorities of an EU Member State from interfering with the methodologies established by the CRAs. Provided that it meets the requirements in Article 8, a CRA thus has discretion to develop its own proprietary rating methodology. This means that methodologies underlying ratings of different CRAs may be very different, assigning different weights to different factors. As ratings of different CRAs are based on different methodologies, the rating outcomes are likely to differ as well, in some cases. Some CRAs may, consequently, over time perform better than others, i.e. their opinions about the credit-worthiness of entities and financial instruments may not have the same predictive power. Mapping by simply harmonising the rating scales would conceal the variation and differences in methodology and performance between CRAs rather than making these visible and easily understandable to the rating user.

24. Methodologies applied by a single CRA also differ depending on the asset class and the time horizon. The heterogeneity of, for example, short-term and long-term rating scales, could therefore be seen as a desirable feature, as it clearly distinguishes two rating types, which may be fundamentally different. As mentioned in the previous section, clear differentiation of ratings assigned to SFIs is in fact required by Article 10(3) in the CRA Regulation. The reasoning is provided in Recital 40 to CRA III: ‘Under certain circumstances SFIs may have effects which are different from traditional corporate debt instruments. It could be misleading for investors to apply the same rating categories to both types of instruments without further explanation.’

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<sup>17</sup> Page 42 of the Impact Assessment to CRA III (see footnote 7).

<sup>18</sup> Page 42 of the Impact Assessment to CRA III (see footnote 7).

<sup>19</sup> Article 8(3) of the CRA Regulation (see footnote 3).

<sup>20</sup> Article 8(2a) of the CRA Regulation (see footnote 3).

25. ESMA carries out a range of supervisory activities in accordance with the CRA Regulation to ensure minimum standards in the industry concerning integrity, transparency, responsibility, good governance and independence of credit rating activities. First of all, the CRA Regulation introduced a wide range of disclosure requirements which aimed to make the process of assigning credit ratings, and notably the underlying methodology, more transparent to end users and enable them to consult and compare methodologies applied by different CRAs. In addition to this, a range of requirements have been introduced to protect users from conflicts of interest aiming to remove incentives at analyst, company and group level to deliberately manipulate or distort rating outcomes. However, these minimum standards and the basic safeguards mitigating conflicts of interest were not intended to homogenise credit rating services. Registered CRAs which are complying with the requirements in the CRA Regulation are not identical and should not be seen as such. On the contrary, an objective of the CRA Regulation is to stimulate competition in the industry<sup>21</sup> and thereby encouraging CRAs to produce high quality ratings. It is important that users understand and appreciate these differences and that they are not given the false impression that ratings from different CRAs are uniform products that can be equated with each other. On the basis of these observations, mapping by harmonising existing rating scales will most likely not yield the desired benefits as it would misrepresent credit ratings in light of different rating methodologies.

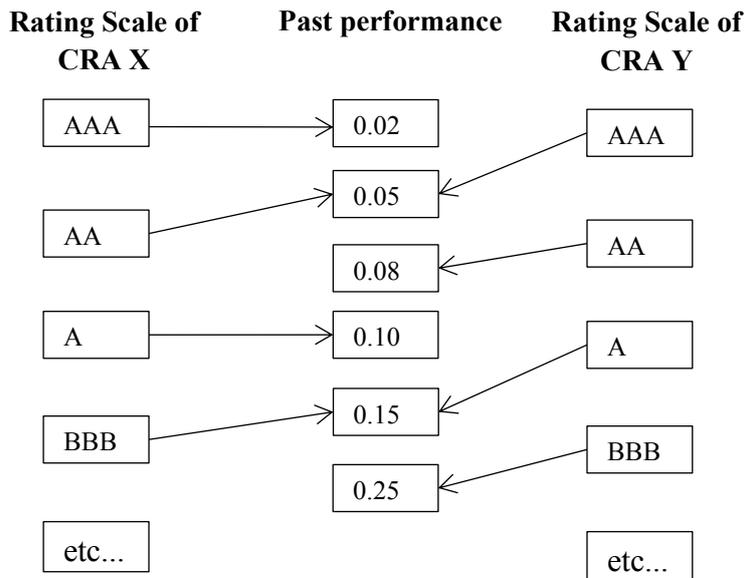
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<sup>21</sup> See for example Recitals 11, 15, and 30 of CRA III (see footnote 1).

## 5.2 Option II: Mapping ratings on the basis of past performance

26. Mapping the rating categories of different CRAs based on past performance would allow for an objective comparison of different credit ratings. An illustration of a mapping of two CRAs' rating scales on the basis of past performance is provided below.

Figure 1: Example of a mapping of the rating scales of two CRAs: X and Y



27. However, such an exercise can be carried out in a number of different ways yielding different results. This section outlines four important factors which must be considered when carrying out a mapping of the performance of credit ratings. These factors are the following:

- performance metric;
- definition of default;
- applicable time horizon; and
- management of limited or non-existing past-performance data.

28. First, the performance of opinions regarding creditworthiness, i.e. credit ratings, can be assessed and compared using different metrics and methodologies. Two metrics were considered in the mapping of ECAIs' credit assessments under Article 136(1) and (3) of CRR<sup>22</sup>:

- the frequency of default of entities and instruments rated by the CRA (i.e. the default rate); and

<sup>22</sup> Consultation Paper: Draft Implementing Technical Standards On the mapping of ECAIs' credit assessments under Article 136(1) and (3) of Regulation (EU) No 575/2013 (Capital Requirements Regulation—CRR). Available at: <http://www.eba.europa.eu/documents/10180/567620/JC-CP-2014-01+Joint+CP+on+draft+ITS+on+the+mapping+of+ECAIs.pdf>. Hereinafter "Draft ITS on mapping of ECAIs under Article 136(1) and (3) of CRR"

- the loss incurred by creditors upon default (i.e. the loss given default rate).

29. In the Cost Benefit Analysis/Impact Assessment for the draft Implementing Technical Standard (ITS) for ECAI mapping under Article 136 of CRR, it is provided that most CRAs ‘provide opinions on the ability of the rated entity to meet the financial obligations derived from the instrument, whereas losses upon default are usually excluded from such credit opinions’.<sup>23</sup> Consequently, databases of the effective losses borne by investors in defaulted instruments are only kept by very few CRAs making it very difficult to obtain reliable and comparable data on this metric<sup>24</sup>. A decision was made to rely on the default rate for the ECAI mapping in part due to better data availability and comparability. Another important reason was to ensure continuity with previous regulatory frameworks which relied on probability of default.<sup>25</sup> A mapping carried out for the ERP would be subject to the same constraints concerning data availability. However, it is possible that a comparison of the performance of two CRAs, for which data is available, based on loss given default or another metric in some cases would be more interesting or relevant for some rating users. The choice of performance metric is, therefore, complex. The remaining three factors outlined below are specifically linked to the use of default rate as the basis for a mapping.

30. Second, a key element of the calculation of default rates is the definition of a default. The events classified as default in the draft ITS on the mapping of ECAs’ credit assessments under Article 136(1) and (3) of CRR are listed below<sup>26</sup>:

- a bankruptcy filing or legal receivership that will likely cause a miss or delay in future contractually required debt service payments;
- a missed or delayed disbursement of a contractually required interest or principal payment, unless payments are made within a contractually allowed grace period;
- a distressed exchange if the offer implies the investor will receive less value than the promise of the original securities; and
- the rated entity is under a significant form of regulatory supervision owing to its financial condition.

31. Developing a mapping on the basis of a broad definition of default will result in a higher number of recorded default events than using a narrow definition for the same population of rated entities. The relevant definition of default is likely to be different depending on the users and the context. The choice of a common default rate definition will also likely result in different outcomes depending on whether it is broad or narrow.

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<sup>23</sup> Page 37 of the Draft ITS on mapping of ECAs under Article 136(1) and (3) of CRR (see footnote 23).

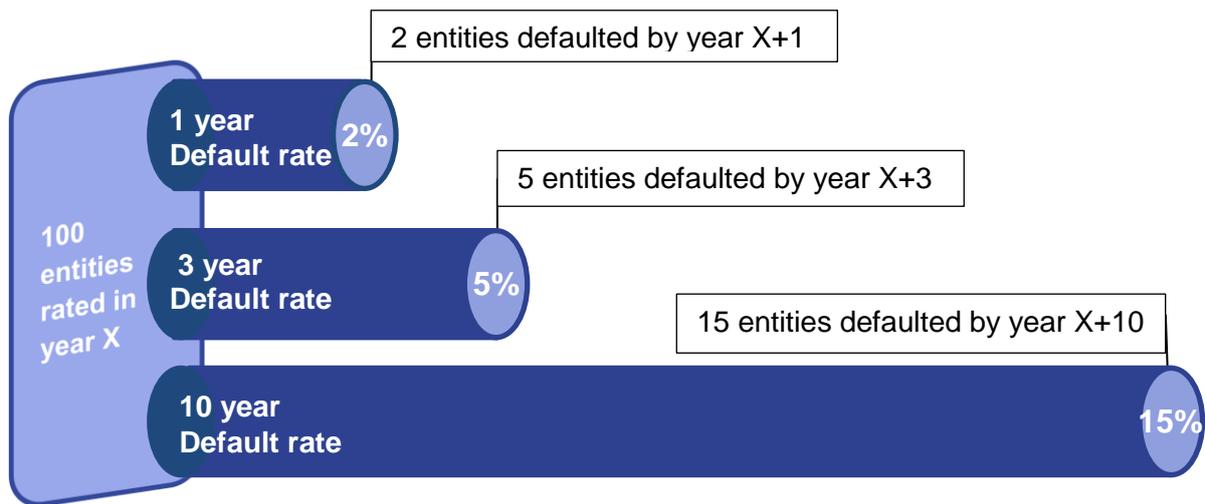
<sup>24</sup> Page 37 of the Draft ITS on mapping of ECAs under Article 136(1) and (3) of CRR (see footnote 23).

<sup>25</sup> Annex 2 of the document ‘Basel II: International Convergence of Capital Measurement and Capital Standards: A Revised Framework — Comprehensive Version’ dated June 2006. Available at: <http://www.bis.org/publ/bcbs128.pdf>

<sup>26</sup> Page 19 of the Draft ITS on mapping of ECAs under Article 136(1) and (3) of CRR (see footnote 23).

32. Third, the applicable time horizon matters. The default rate of entities of a credit rating category from one CRA in a particular year can be very different depending on the time horizon considered. This is illustrated in Figure 2 below, which presents a hypothetical example, where 100 entities are rated equally creditworthy by one CRA in year X. After one year, two of these entities have defaulted yielding a default rate of 2%. However, 10 years after the rating was given, 15 entities have defaulted yielding a very different default rate of 15%. Too long a time horizon could provide for too much uncertainty and random differences, whereas a too short time horizon could risk providing too few default observations, particularly for the categories representing a low credit risk, where defaults are expected to be rare. While there are good reasons to avoid overly short or long time horizons, there is no objective criterion for deciding on one specific time horizon in between the two extremes. For some rating users, shorter time-horizons may be relevant whereas the opposite could be the case for other users.

Figure 2: Simplified illustration of how the default rate of the same rating category of the same CRA changes depending on the time horizon.



33. Fourth, computing reliable estimates of any performance measure (including default rates) requires large numbers of observations. This challenge is particularly important in the case of low-risk ratings, where the number of default observations by definition is expected to be low. The problem is illustrated in the simplified table below.

Figure 3: Simplified illustration of the calculation of default rates for three rating categories (AAA/AA/A) assigned by two fictitious CRAs: Y and X

Rating Notch	CRA	Total number of rated entities	Total number of observed defaults	Default rate
'AAA'	X	500	5	1%
'AA'	X	1000	50	5%
'A'	X	2000	200	10%
'AAA'	Y	0	0	?
'AA'	Y	30	0	0%
'A'	Y	100	10	10%

34. First, different levels of statistical significance can be accounted for in different ways. For entities rated A by CRA X as well as CRA Y, a default rate of 10% can be observed. However, CRA X has 20 times as many observations as CRA Y. This means that the default rate calculated for CRA X is a much more reliable estimate of the long-term performance than the one calculated for CRA Y. However, the default rate itself does not account for this difference.
35. Second, missing observations can be managed in different ways. In some cases there may be rating categories for which there are no observations. This is the case for the AAA category for CRA Y. A similar challenge arises when comparing the AA rating of CRA X and CRA Y. Where CRA X observes 50 defaults out of 1000 entities rated AA, CRA Y has no defaults. However, CRA Y's pool of observations only amounts to 30. In this case it is impossible to compare the two default rates without relying on assumptions.
36. These challenges lead to the key question of how to manage limited or absent data for the calculation of default rates. If there is not enough historical evidence to reach statistically sound conclusions about the performance of ratings issued by a particular CRA, the options are limited:
- a. If a mapping is only carried out for CRAs and rating categories for which there is sufficient data, the natural consequence is the exclusion of a large number of small and newer CRAs from the mapping. This would, however, defeat a key objective of the ERP: creating visibility of Small and Medium-sized CRAs<sup>27</sup>; it could also raise obstacles for new market entrants and in this way risk restricting effective competition in the CRA industry;

<sup>27</sup> Recital 31 of CRA III (see footnote 1).

- b. If CRAs and rating categories with limited data is included in the mapping using conservative assumptions to counterbalance the limited historical evidence, outcomes similar to option 1 could be the result.
  - c. If mapping of CRAs and rating categories with limited data is carried out using favourable assumptions, this would make it easier for new market entrants to compete against the large CRAs. However, this would entail representing some CRAs favourably, despite inconclusive or missing evidence.
37. To sum up, the performance of a credit rating can be measured and compared in several ways. The simplest metric, and the one for which data is most easily available, is the default rate. However, as illustrated in the previous sections, it is challenging to apply even this metric in practice without relying on assumptions. Furthermore, mapping based on past performance raises the question of treatment of small CRAs and new market entrants, which have limited or no past performance to be analysed and compared.
38. It is important to stress that the four factors listed above have been identified and carefully considered in the mapping exercises carried out under CRR and Solvency II by taking into account the specific objectives of these mappings. The objective of a mapping for the ERP would, however, be very broad: assisting the ERP user in comparing ratings assigned by different CRAs to the same entity or instrument. As shown above, mapping/comparison of ratings by different CRAs based on past performance can be carried out in several different ways with different outcomes depending on the applied assumptions and the specific parameters of comparison. One single approach would not be appropriate for every rating user in every context.
39. As users may perceive a mapping carried out by ESMA to be definitive or use it as a benchmark, it could discourage users from carrying out assessments individually. A mapping for the ERP would, unlike the mapping exercises carried out under CRR and Solvency II, be purely informative and have no binding or legal effect. However, any divergence between an ERP mapping and other mappings could lead to confusing market participants. Finally, as an ERP mapping could influence commercial decisions of market participants, any misrepresentation of one or more CRAs could constitute a reputational risk and a liability risk to ESMA.
40. On the basis of these observations, the development of a mapping for the ERP appears likely to have very few benefits. Based on the experience from the mappings under CRR and Solvency II, creating another mapping for the ERP is likely to be very time-consuming and thus potentially very costly. Furthermore, it would need to be continually kept up to date and revised in light of new developments, running up potential costs further.

### **5.3 Option III: Refraining from mapping and letting the ERP user carry out assessments independently based on available tools and data**

41. It is an important precondition for the success of the ERP that its users are able to easily compare and understand the ratings issued by CRAs. However, as outlined in the above sections, there is no single way of mapping ratings assigned by different CRAs, as they are each the product of a specific methodology.
42. However, the absence of a mapping has significant drawbacks as well. As the ERP will help users compare ratings from different CRAs for a single instrument or entity, it is imperative that users are able to appreciate the points of equivalence as well as the differences between ratings from different agencies. Within ESMA's legal mandate, there are various tools available to empower rating users to make their own assessments of credit ratings of different CRAs. The objective of the Central Repository (CEREP) operated by ESMA pursuant to Article 11(2) of the CRA Regulation is to reinforce transparency of credit ratings and contribute to the protection of investors. CEREP makes available and accessible to the public, information on the historical performance data of all registered and certified CRAs<sup>28</sup>.
43. CEREP contains relevant information for users to carry out their own mapping such as rating scales with descriptions of each notch, default definitions, multiannual default rates and transition matrices. CEREP thus equips individual investors, issuers, CRAs, trade associations, academics as well as other interested parties with data and information that can support their own comparison using the assumptions and methods they deem to be appropriate.
44. ESMA should aim to support rating users by ensuring that the tools made available on CEREP and the ERP are continually up-to-date, clear and comprehensive. ESMA works to constantly improve data quality and reliability as well as the presentation of the tools. Within this framework, ESMA annually publishes summary information on the main developments pursuant to Article 11(2) of the CRA Regulation.
45. This option is unlikely to impact on the Regulatory Technical Standards on fees charged by CRAs to their clients<sup>29</sup> and reporting requirements to CRAs for the ERP<sup>30</sup>. This option would not require any change in the Level-1 text.

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<sup>28</sup> Two CRAs that were recently certified/registered are not included in the analysis: Egan Jones and modeFinance.

<sup>29</sup> Commission Delegated Regulation (EU) 2015/1 of 30 September 2014 supplementing Regulation (EC) No 1060/2009 of the European Parliament and of the Council with regard to regulatory technical standards for the periodic reporting on fees charged by credit rating agencies for the purpose of ongoing supervision by the European Securities and Markets Authority Text with EEA relevance, available at: [http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:JOL\\_2015\\_002\\_R\\_0001](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:JOL_2015_002_R_0001) . Hereinafter: "the RTS on Fees".

<sup>30</sup> See the RTS for the ERP (See footnote 5)

## 6 Conclusion

46. One of the key objectives of the ERP is to allow investors to easily compare all credit ratings that exist with regard to a specific rated entity. Finally, the ERP should help smaller and new CRAs gain visibility. This report aimed to understand whether different rating scales applied by different CRAs could constitute an obstacle to the comparison of ratings by the user and assess the costs and benefits of addressing this by carrying out a mapping for the ERP.
47. It is found that the main differences in scale and symbols exist between long-term and short-term rating scales. Furthermore, short-term rating scales from different CRAs bear little resemblance. On the other hand, the main long-term rating scales used by most CRAs for most asset classes are generally similar, except for ratings of SFIs, which are legally mandated to be clearly labelled. These differences could in principle constitute an obstacle for users of the European Rating Platform making it difficult to compare ratings assigned by different CRAs to the same instrument or entity. Three policy options are considered:
- a. Mapping by harmonising existing rating scales;
  - b. Mapping by comparing ratings of ratings different CRAs based on past performance;
  - c. Refraining from mapping and letting the ERP user carry out assessments independently based on available tools and data.
48. The report concludes that the first option is unlikely to yield the desired benefits, as harmonised rating scales would misrepresent credit ratings in light of different rating methodologies. It is found that heterogeneous rating scales in some cases can be desirable in as far as they serve to highlight the differences between ratings, rating scales and underlying methodologies.
49. The report, furthermore, concludes that the second option, mapping of ratings by different CRAs based on past performance, can be carried out in several different ways with different outcomes depending on the applied assumptions and the specific parameters of comparison. However, one single way of mapping would not be appropriate for every rating user at every point in time. As users may perceive a mapping carried out by ESMA to be definitive or use it as a benchmark, it could discourage users from carrying out assessments individually. Furthermore, any divergence between an ERP mapping and existing mappings could lead to confusing the market participants. Based on experiences from other mapping exercises, option two is also likely to be costly.
50. Consequently, the report recommends that the European Commission takes no further action at this point in time and that a mapping is not carried out for the ERP. Instead, ESMA should focus on continually updating and improving the information, data and tools which ESMA makes available on CEREP and ERP (the third option), thus allowing users of credit ratings to carry out their own research and analysis adapted to their individual needs and interests.

51. A legislative mandate would most likely be necessary for ESMA to carry out a mapping for the ERP as described in option one and two. Option three requires no change in legislation. None of the considered options are likely to impact on the RTS on fees charged by CRAs to their clients<sup>31</sup> and reporting requirements to CRAs for the ERP.<sup>32</sup>

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<sup>31</sup> For more details, see the RTS on Fees (see footnote 30)

<sup>32</sup> For more details, see the RTS for the ERP (See footnote 5).

## 7 Annex I: List of registered and certified CRAs

Name of CRA	Country	Status	Effective Date	Short Name
Euler Hermes Rating GmbH	Germany	Registered	2010-11-16	Euler Hermes
Japan Credit Rating Agency Ltd	Japan	Certified	2011-01-06	JCR
BCRA-Credit Rating Agency AD	Bulgaria	Registered	2011-04-06	BCRA
Feri EuroRating Services AG	Germany	Registered	2011-04-14	Feri
Creditreform Rating AG	Germany	Registered	2011-05-18	Creditreform
Scope Ratings GmbH	Germany	Registered	2011-05-24	Scope
ICAP Group SA	Greece	Registered	2011-07-07	ICAP
GBB-Rating Gesellschaft für Bonitätsbeurteilung mbH	Germany	Registered	2011-07-28	GBB
ASSEKURATA Assekuranz Rating-Agentur GmbH	Germany	Registered	2011-08-18	Assekurata
ARC Ratings, S.A. (previously Companhia Portuguesa de Rating, S.A)	Portugal	Registered	2011-08-26	ARC
AM Best Europe-Rating Services Ltd. (AMBERS)	UK	Registered	2011-09-08	AM Best
DBRS Ratings Limited	UK	Registered	2011-10-31	DBRS
Fitch Ratings*	France, Germany, Italy, Poland, Spain, UK (2 entities)	Registered	2011-10-31	Fitch
Moody's*	Cyprus, France, Germany, Italy, Spain, UK** (2 entities)	Registered	2011-10-31	Moody's
Standard & Poor's*	France, Italy, UK	Registered	2011-10-31	S&P
CRIF S.p.A.	Italy	Registered	2011-12-22	CRIF
Capital Intelligence (Cyprus) Ltd	Cyprus	Registered	2012-05-08	Capital Intelligence
European Rating Agency, a.s.	Slovakia	Registered	2012-07-30	European Rating Agency
Axesor SA	Spain	Registered	2012-10-01	Axesor
CERVED Group S.p.A.	Italy	Registered	2012-12-20	CERVED
Kroll Bond Rating Agency	USA	Certified	2013-03-20	Kroll
The Economist Intelligence Unit Ltd	UK	Registered	2013-06-03	EIU
Dagong Europe Credit Rating Srl (Dagong Europe)	Italy	Registered	2013-06-13	Dagong
Spread Research SAS	France	Registered	2013-07-01	Spread Research
EuroRating Sp. z o.o.	Poland	Registered	2014-05-07	EuroRating
HR Ratings de México, S.A. de C.V. (HR Ratings)	Mexico	Certified	2014-11-07	HR Ratings
Egan-Jones Ratings Co. (EJR)	USA	Certified	2014-12-12	Egan-Jones
modeFinance S.r.l.	Italy	Registered	2015-07-10	ModeFinance
<p>*Note: Group of CRAs:  Fitch: Fitch Deutschland GmbH (Germany), Fitch France S.A.S. (France), Fitch Italia S.p.A. (Italy), Fitch Polska S.A. (Poland), Fitch Ratings CIS Limited (UK), Fitch Ratings España S.A.U. (Spain), Fitch Ratings Limited (UK);  Moody's: Moody's Deutschland GmbH (Germany), Moody's France S.A.S. (France), Moody's Investors Service Cyprus Ltd (Cyprus), Moody's Investors Service España S.A. (Spain), Moody's Investors Service Ltd (UK), Moody's Italia S.r.l. (Italy), Moody's Investors Service EMEA Ltd (UK);  Standard &amp; Poor's: Standard &amp; Poor's Credit Market Services Europe Limited (UK), Standard &amp; Poor's Credit Market Services France S.A.S. (France), Standard &amp; Poor's Credit Market Services Italy S.r.l. (Italy).  ** Note: Moody's Investors Service EMEA Ltd (UK) registered on 2014-11-24.</p>				