



EIOPA-BoS-15-223

29 September 2015

**Final Report on Consultation Paper no.  
15/004 on the Call for Advice from the  
European Commission on the  
identification and calibration of  
infrastructure investment risk categories**

## Table of Contents

<b>1. Introduction</b> .....	3
<b>2. Summary of main stakeholder comments and conclusions (“Feedback Statement”)</b> .....	5
<b>3. Final advice</b> .....	23
<b>4. Annex</b> .....	31

# 1. Introduction

## Background

The European Commission issued in February 2015 a call for advice to EIOPA on the identification and calibration of infrastructure investment risk categories in Commission Delegated Regulation (EU) 2015/35 on Solvency II (hereinafter "Delegated Regulation"). The scope of the advice includes the following tasks:

- Provide one or several clear definitions of debt and equity infrastructure investments that could be used to specify new risk categories in the standard formula. This should not only be limited to investments with predictable long-term cash flows. Investments where the risks cannot be properly identified, managed and monitored should be excluded;
- Provide calibrations for those new categories in line with the requirements set out in Article 101 of Directive 2009/138/EC of 25 November 2009 of the European Parliament and of the Council on the taking-up and pursuit of the business of Insurance and Reinsurance (hereinafter "Solvency II Directive");
- Assess how the categories could fit within the existing structure of the market and counterparty default risk module or whether new sub-modules are necessary;
- Identify any potential existing obstacles to infrastructure investments in the Delegated Regulation that are not prudentially justified and suggest remedies.

In addition to the areas listed in the call for advice, EIOPA considered it of utmost importance to analyse whether the current investments and system of governance requirements in Solvency II are sufficient to ensure that the risks of this complex, heterogeneous and, for insurers, relatively new asset class, are properly managed.

## Process followed by EIOPA

Given the relevance as well as the complexity of the topic, EIOPA strived to benefit as much as possible from the expertise of stakeholders and involved them at all stages of the project. This included discussions with EIOPA's Insurance and Reinsurance Stakeholders Group (IRSG), two Roundtable events, a Public Hearing and numerous discussions with a wide range of relevant market participants including insurers, industry associations, asset managers and rating agencies, as well as with academics specialising in the field.

EIOPA presented in March preliminary ideas regarding the scope of eligible infrastructure investments, criteria for their identification and different approaches to derive a calibration in a discussion paper (EIOPA CP-15/003). The areas under consideration regarding risk management requirements were also described.

The responses received from stakeholders to the discussion paper together with further analysis performed by EIOPA resulted in a consultation paper (EIOPA CP-15/004) that was published at the beginning of July.

EIOPA presented its preliminary conclusions from the stakeholder feedback on the consultation paper in a public hearing at the beginning of September. The input received during this meeting was reflected in the final advice.

### **Structure of the final advice**

This final report should be read in conjunction with the consultation paper, which provides more details on the rationale for the advice. This document presents the main feedback provided by stakeholders to CP 15/004, the results of some further analysis by EIOPA, and the conclusions EIOPA has reached (Chapter 2). It then presents the text of EIOPA's final advice (Chapter 3).

### **Next steps**

The Advice will be submitted to the European Commission by the end of September 2015.

### **Acknowledgment**

EIOPA would like to thank the Insurance and Reinsurance Stakeholder Group (IRSG) and all the participants to the Public Consultation and the Public Hearing of 4 September for their comments on the draft advice to the European Commission. The responses received have provided important guidance to EIOPA in preparing a final version of the advice for submission to the European Commission. All of the comments made were given careful consideration by EIOPA. A summary of the main comments received and EIOPA's response to them can be found in Chapter 2 and a full list of all the comments provided and EIOPA's responses in the Annex.

## **2. Summary of main stakeholder comments and conclusions ("Feedback Statement")**

### **Calibration**

#### ***Debt investments***

##### **Treatment of debt without an external credit rating**

A number of stakeholders suggested that the use of internal credit assessments by undertakings to determine the capital requirement in the standard formula should be allowed.

EIOPA is mindful of the need to reduce overreliance on external ratings. EIOPA is also aware that the costs of obtaining a rating by an External Credit Assessment Institution (ECAI) may be a constraint for smaller projects. For these reasons EIOPA proposed in the consultation paper a more favourable treatment of infrastructure project debt without an ECAI rating provided a relatively limited number of criteria are met.

As to the use of undertakings' own internal credit assessments of infrastructure project debt, EIOPA sees no need to change the general provisions laid down in the Delegated Regulation.

##### **Modified credit risk approach**

The credit risk approach outlined in the consultation paper assumed a reduction of 40 % in the spread risk charge attributable to credit risk for the Credit Quality Steps (CQS) 2 and 3. Stakeholders suggested applying the reduction also to CQS 0 and 1.

One of the reasons for excluding CQS 0 and 1 from the scope was that their recovery rates were expected to be meaningfully higher. But when looking at cumulative default rates for CQS 0 and 1 over a longer period the defaults occur predominantly after a number of years when the issuer has already been downgraded. For this reason, EIOPA now considers that it is appropriate to apply the reduction of 40 % also to CQS 0 and 1.

The comparison of the fundamental credit risk for similar portfolios of corporate and infrastructure project debt showed, in a number of cases, that the former were at least twice as risky. In addition, as discussed in the consultation paper the systematic risk for infrastructure project debt of lower investment grade should be considerably lower than for comparable corporate issues. Consequently, it has been decided to now apply a reduction of 50 % in the spread risk charge attributable to credit risk for CQS 3.

The following table, mirroring the table in Article 176(3) of the Delegated Regulation, sets out the resulting spread risk charges for infrastructure project debt with an ECAI rating:

	0		1		2		3	
Duration	a	b	a	b	a	b	a	b
up to 5	0.00%	0.68%	0.00%	0.84%	0.00%	1.06%	0.00%	1.75%
5 to 10	3.42%	0.38%	4.18%	0.46%	5.32%	0.53%	8.75%	1.05%
10 to 15	5.32%	0.38%	6.46%	0.38%	7.98%	0.38%	14.00%	0.70%
15 to 20	7.22%	0.38%	8.36%	0.38%	9.88%	0.38%	17.50%	0.70%
20 and more	9.12%	0.38%	10.26%	0.38%	11.78%	0.38%	21.00%	0.35%

Debt without an ECAI rating that meets the qualifying criteria would be subject to the same treatment as qualifying ECAI rated debt with CQS 3.

### **Liquidity approach**

It is relevant to elaborate on the disadvantages of the liquidity approach, although these were outlined in the consultation paper.

The liquidity approach reduces the part of the spread risk charge attributable to liquidity risk in order to reflect the possibility that the undertaking is able to hold the instrument to maturity. In this case, losses resulting from changes in the liquidity component of the spread would be transitory.

However, the undertaking will suffer a loss in basic own funds where the value of the investment in the Solvency II balance sheet declines, irrespective of whether the asset is sold or not. Where such losses result from changes in the liquidity component of the spread, they are not fully captured under the liquidity approach. Whether the effect is material on a stand-alone basis depends on the volatility of the part of the market value of the infrastructure debt that is driven by the liquidity component of the spread. Where infrastructure project debt represents a meaningful proportion of the investment portfolio, the resulting Solvency Capital Requirement (SCR) may underestimate the value-at-risk of the level of basic own funds over a 12-month period.

Another disadvantage is that the liquidity approach introduces a different measurement of risks than for other investments subject to the spread risk sub-module, or for other risk types within the market risk module, where no partial benefit for the ability to hold-to-maturity is foreseen. This seems more problematic for the former category as fixed income instruments have a kind of "built-in" mean reversion. There are arguments why undertakings may in many cases hold infrastructure project debt to maturity. However, similar arguments apply also to other illiquid debt investments.

The approach leads, therefore, to a less consistent measurement of market risk under the SCR standard formula. Another disadvantage is the need to determine the probability of a sale.

The disadvantages of the liquidity approach are "inherited" by the combined approach. In addition, the necessity to quantify the combined reduction arises.

## **Probability of sale in the liquidity approach**

Stakeholders commented that they considered the probability of sale of 10 % provided in the consultation paper as too high and suggested instead values close to zero. One argument put forward was that infrastructure debt is highly illiquid (also relative to other illiquid investments) and would therefore only be sold if there was no alternative. It was also emphasised that an undertaking would not “voluntarily realise a loss”.

The probability of sale covers the whole maturity of the infrastructure debt which may extend over several decades. There is no requirement for a strict matching of the cash flows that the debt instrument generates with the payments for a set of insurance contracts for which the cash flows can be predicted with a high degree of certainty. As a result, the ability of the undertaking to hold the infrastructure debt until maturity depends to a certain degree on the level of new business and surrenders in the coming decades. These quantities are subject to a meaningful degree of uncertainty.

Another point to consider is that the undertaking may accept a certain risk of a forced sale as the need for liquidity has to be balanced with the opportunity costs in the form of lost investment returns.

Even if there is no need for a sale to meet obligations the insurer may decide to sell and realise a loss if the obtainable price is above its internal assessment of the value. The undertaking may also decide after several years that the costs associated with maintaining the expertise for infrastructure investments outweigh the investment opportunities and exit from its infrastructure investments.

Finally, the debtor may default in which case the value is permanently impaired.

Looking at these factors, EIOPA considers 10 % an appropriate value for the probability of a sale.

## **The possibility of combining liquidity and credit risk approach**

The credit risk approach accounts for the lower fundamental credit risk of qualifying infrastructure debt, while the liquidity approach reflects the fact that losses resulting from an expansion in the liquidity component of the spread are transitory if the credit instrument is held to maturity.

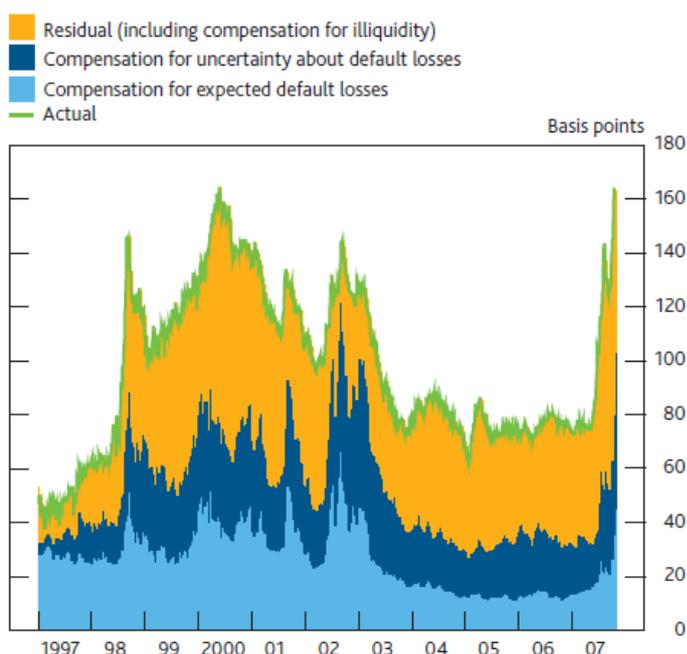
The two components may appear independent from each other, but this is not necessarily the case: If the credit risk component in the spread of the instrument expands, basic own funds are, other things being equal, reduced and the solvency position of the undertaking deteriorates. This could, on the one hand, reduce the likelihood that the debt instrument can be held to maturity. On the other hand, the overall effect on the solvency position of the undertaking may be limited, since infrastructure investments would usually represent only a relatively limited part of the portfolio. In addition, there are diversification benefits with other investments, as well as the loss absorbing capacity of technical provisions and deferred taxes. Therefore, a

combination seems in principle possible. Stakeholders argued in favour of such a combination.

In case the one-year 99.5 % shocks for the credit and liquidity component would occur over the same period and the shocks had no impact on the ability of the undertaking to hold the investment to maturity (or the probability of sale used reflected the financial situation of the undertaking after the shock) the reductions in the spread risk charge from both approaches could simply be added up.

While it seems plausible that both the credit risk and the liquidity component of the spread would spike in a crisis (e.g. 2008-2009), the chart below indicates that credit and liquidity shocks are not necessarily synchronised. In 2002-2003 a significant increase in the credit component of the spread could be observed without a corresponding increase in the liquidity component:<sup>1</sup>

**Chart 1** Decomposition of sterling-denominated investment-grade corporate bond spreads



**Figure 1: Decomposition of sterling-denominated investment-grade corporate bond spreads**

Simply adding up the reductions from the credit and the liquidity approach would consequently overestimate the combined effect. Therefore, EIOPA suggests that the overall reduction should be around 75 % of the combined reduction of both approaches. This means, for example, that if the reduction for CQS 2 in the credit risk approach is 24 % and for the liquidity approach is 14.38 %, then the overall reduction using 75 % would be  $0.75 \times (24 \% + 14.38 \%) = 26.54 \%$ .

<sup>1</sup> See Webber/Churm (2007): Decomposing corporate bond spreads, Bank of England Quarterly Bulletin, 47, p. 533-541

The following table shows the resulting risk charges for the combined approach when a combination parameter of 75 % is used:

		0		1		2		3	
Duration	a		a		a		a		
up to 5	0.00%	0.64%	0.00%	0.78%	0.00%	1.00%	0.00%	1.67%	
5 to 10	3.20%	0.36%	3.92%	0.43%	4.99%	0.50%	8.34%	1.00%	
10 to 15	4.99%	0.36%	6.05%	0.36%	7.48%	0.36%	13.34%	0.67%	
15 to 20	6.77%	0.36%	7.83%	0.36%	9.26%	0.36%	16.68%	0.67%	
20 and more	8.55%	0.36%	9.61%	0.36%	11.04%	0.36%	20.01%	0.33%	

Debt without an ECAI rating that meets the qualifying criteria would be subject to the same treatment as qualifying ECAI rated debt with credit quality step 3.

For illustrative purposes, the following tables show the resulting risk charges for combination parameters of 65 % and 85 % respectively:<sup>2</sup>

		0		1		2		3	
Duration	a	b	a	b	a	b	a	b	
up to 5	0.00%	0.68%	0.00%	0.83%	0.00%	1.05%	0.00%	1.75%	
5 to 10	3.38%	0.38%	4.13%	0.45%	5.25%	0.53%	8.75%	1.05%	
10 to 15	5.25%	0.38%	6.38%	0.38%	7.88%	0.38%	14.00%	0.70%	
15 to 20	7.13%	0.38%	8.26%	0.38%	9.76%	0.38%	17.50%	0.70%	
20 and more	9.01%	0.38%	10.13%	0.38%	11.63%	0.38%	21.00%	0.35%	

		0		1		2		3	
Duration	a	b	a	b	a	b	a	b	
up to 5	0.00%	0.61%	0.00%	0.74%	0.00%	0.94%	0.00%	1.56%	
5 to 10	3.03%	0.34%	3.71%	0.40%	4.72%	0.47%	7.78%	0.93%	
10 to 15	4.72%	0.34%	5.73%	0.34%	7.07%	0.34%	12.46%	0.62%	
15 to 20	6.40%	0.34%	7.41%	0.34%	8.76%	0.34%	15.57%	0.62%	
20 and more	8.09%	0.34%	9.10%	0.34%	10.44%	0.34%	18.68%	0.31%	

## Counterparty default risk module

Many stakeholders expressed their preference for the counterparty default risk module. The advantages put forward were similar to those set out in the consultation paper. Stakeholders referred to Recital 41 of the Regulation on European Fund for Strategic Investments and the call for advice from the European Commission, which in their view could be interpreted as a "mandate" for EIOPA to propose a treatment in the counterparty default risk module.

EIOPA has thoroughly assessed the advantages and disadvantages of a treatment of infrastructure debt in the counterparty default risk module.

<sup>2</sup> Where the combined approach would result in a spread risk charge higher than for the credit risk approach alone, the latter value is used instead.

Insurance Europe (IE) suggested a calibration of the counterparty default risk module based on stressed loss-rates over the maturity of the instrument.<sup>3</sup> The data used are observed historical cumulative loss rates and loss-given defaults.

Stressed credit losses over a one-year period would not capture the negative effect from a deterioration in credit quality. The approach suggested by IE mitigates this problem by taking into account the time until maturity. Nevertheless, the substantial concerns voiced by EIOPA in the consultation paper remain:

1. The definition of risk used in the approach differs substantially from the definition used in Article 101 of the Solvency II Directive. Therefore, the IE approach may result in a considerable underestimation of the volatility of basic own funds over one year.

2. The counterparty default risk module assumes implicitly that the probability of a sale is zero or that there is no loss in case of a sale. At the same time, the proposed restrictions are much weaker than for the matching adjustment. EIOPA considers that the risk of an unfavourable sale for investments which may have a maturity of several decades has to be taken into account if a meaningful underestimation of risks is to be avoided.

Based on these considerations EIOPA does not see the treatment of infrastructure debt in the counterparty default risk module as a suitable option. With respect to Recital 41 of the Regulation on European Fund for Strategic Investments, it is worth mentioning that the substantial reduction of the spread risk charge that EIOPA has proposed based on the credit risk approach is based to a large extent on the evidence for higher recovery rates of infrastructure project debt compared with corporate debt.

### **Initial spread approach**

EIOPA presented in the consultation paper the idea to use initial spreads of loans for the calibration. This seemed a promising approach as the calibration would be based on observed "prices" for infrastructure project debt.

After the consultation paper, EIOPA explored the approach further benefitting from input by Professor Blanc-Brude and his co-workers at the EDHEC Risk Institute Singapore.

However, due to a number of problems, EIOPA decided that the approach was not practicable, and to focus on the other options presented in the consultation paper.

---

<sup>3</sup> The suggestion can be downloaded under: <https://eiopa.europa.eu/Pages/Consultations/CP-15-004-Consultation-Paper-on-the-Call-for-Advice-from-the-European-Commission-on-the-identification-and-calibration-of.aspx>

## **Treatment of Regional Government and Local Authority (RGLA) guarantees**

Many stakeholders suggested that guarantees provided by RGLAs should be treated in the same way as guarantees provided by central governments. They put forward the following arguments:

- From a risk perspective, there should be no difference between a guarantee provided by a central government or RGLA. In some Member States regional governments have more fiscal powers than the central government;
- In the event of a default a clear guarantee ensures repayment by the RGLA, thereby exposing undertakings directly to the creditworthiness of the RGLA. The lower credit risk of the RGLA should therefore be recognised in prudential regulation;
- For the counterparty default module, point 11 of Article 199 of the Delegated Regulation ensures that RGLA guarantees are treated as central government exposures. Not recognising RGLA guarantees for qualifying infrastructure within the spread and market risk concentration sub-modules would lead to an inconsistent treatment in comparison to the counterparty default module;
- In some Member States, public-private partnerships have been established for many of the infrastructure projects which are steered and controlled by a regional or local government. The financing usually occurs through the issuance of bonds (or sometimes bank loans) which benefit from an RGLA guarantee against default. The RGLAs monitor very strictly the quality of the projects, the financing process and conditions, and the amount of guarantees provided;
- Through the guarantees provided by RGLAs private investors benefit from an inherently lower credit risk on the infrastructure projects they invest in. This is recognized by the governments when determining the financing conditions.

EIOPA considers a different treatment for RGLA guarantees in general as being outside the scope of the call for advice. A specific treatment of RGLA guarantee for infrastructure investments would, however, have a number of advantages. The involvement of RGLA institutions which are specialised in infrastructure project finance would be supported. In these cases, the quality of infrastructure projects is assessed by the specialised RGLA which has a sound knowledge and expertise regarding these projects. Moreover, a part of the risk the undertaking bears is transferred to the RGLA/central government. The public-private partnership could also mitigate political risk. Furthermore, guarantees could be provided for pools of infrastructure projects, which allow for multiple investors to invest in (tranches of) diversified infrastructure projects.

On the other hand, there are also disadvantages: In case a reduced risk charge was justified only based on the RGLA guarantee and not with the specific features of the qualifying infrastructure investment this could be seen as a recommendation to change the treatment of RGLA guarantees in general (which would be outside the scope of the call for advice). In this context it seems worth pointing out that the

treatment of government or quasi government exposures has been subject to intense debates in the past.

Based on these considerations EIOPA suggests that the treatment of RGLA guarantees should be one element of the foreseen review of the Solvency II standard formula before end 2018.

### **Conclusions: debt calibration**

Based on the results presented in the consultation paper, the further work carried out since then and the analysis of the stakeholder comments, EIOPA considers that there are three possible options:

1. The credit risk approach with the changes outlined in the section "Modified credit risk approach".
2. The liquidity approach as described in the consultation paper with a probability of sale of 10 %.
3. A combination of the modified credit risk approach and the liquidity approach based on a combination parameter around 75 % as described in the section "Considerations regarding the combination of liquidity and credit risk approach".

From a prudential perspective the credit risk approach is clearly preferable. In this approach, the available evidence regarding the credit risk of infrastructure project debt is used. In addition, the aggregate spread risk charge captures the potential volatility in own funds, as both changes in liquidity conditions and changes in the market price for bearing the credit risk of the exposure are captured. Finally, no requirements to ensure the ability of the insurer to hold the debt to maturity are needed.

The liquidity approach can also be seen as a possible option. However, it does not fully capture losses resulting from changes in the liquidity component of the spread. As a consequence, the SCR could be underestimated in certain circumstances. Moreover, a different treatment for infrastructure debt compared with other exposures with similar risk is introduced.<sup>4</sup>

Another possible option is the combined approach. However, it "inherits" the disadvantages of the liquidity approach, and it is also necessary to quantify the combined reduction arises.

The treatment of infrastructure project debt in the counterparty default risk module is not considered a suitable option. The resulting capital requirement could substantially underestimate the volatility in basic own funds over a one-year period. In addition, the risk of an unfavourable sale before maturity is not taken into account at all.

---

<sup>4</sup> For a more detailed discussion of the disadvantages see the section "Liquidity approach".

Debt without ECAI rating that meets the qualifying criteria would be in all suitable options subject to the same treatment as qualifying ECAI rated debt with credit quality step 3.

The treatment of RGLA guarantees should be one element of the foreseen review of the Solvency II standard formula before end 2018.

## ***Equity investments***

### **Treatment of unlisted equities**

Many stakeholders supported the proposed range between 30 and 39 % for the equity risk charge, but suggested that there should be a more favourable treatment for unlisted infrastructure equity. It was claimed that unlisted infrastructure equity exhibits returns with much lower volatility and a close to zero correlation with both listed infrastructure equity and other assets.

Due to a lack of suitable data these claims are difficult to evaluate. The academic literature does not give clear indications. A different treatment of listed and unlisted infrastructure could only be justified if the underlying risks were different. Based on these considerations EIOPA does not suggest a different treatment for listed and unlisted infrastructure project equity.

### **Used proxies**

Some stakeholders raised concerns about the impact of using leveraged entities as proxies. Instead they suggested using a look-through approach.

EIOPA acknowledges that the level of leverage can influence the volatility in the market prices of the proxies used in the analysis. However, on the basis of the data that is currently available the chosen proxies remain the best option for calculating the equity calibration. Furthermore, no convincing methodology to convert cash flow data into an equity calibration has emerged. Therefore, this approach has not been taken into account.

### **Correlation of qualifying infrastructure equity investments with other equities**

Contrary to what was often claimed by stakeholders in response to the CP, infrastructure equity investments do not necessarily have a low correlation with other equities. Regarding the correlation to equity type 1, the analysis of the Public Finance Initiative (PFI) portfolio provided no evidence for a low correlation of infrastructure equity investments with listed equities in general. Although the average correlation of the PFI portfolio to the broad market (represented by the FTSE All Shares) over the complete data sample was around 35%, a more detailed analysis revealed an increasing 1-year correlation up to around 50% in times of severe financial stress. For listed infrastructure indices, the average correlations have been shown to be even higher (up to 85%). Taking into account all these results, a correlation of 75% with equity type 1 is proposed.

In the absence of clear evidence a correlation of 100% with type 2 equities is suggested.

In summary, qualifying infrastructure project equity is treated for correlation purposes like type 2 equities.

### **Symmetric adjustment**

The consultation paper did not cover the topic of the symmetric adjustment. One option is to use the same symmetric adjustment as for type 1 and 2 equities. This has the advantage of being simple.

A second option is to scale the symmetric risk charge linearly according to the selected equity risk charge. If, for example, 35 % was chosen then the symmetric adjustment would be 35 divided by 39 multiplied with the symmetric adjustment for type 1 and type 2 equities. The underlying rationale is that the lower equity risk charge results from lower price volatility, which should be reflected in a reduced symmetric adjustment (especially if a value at the lower end of the range was chosen).

Possible arguments against the second option are that there is no difference in the symmetric adjustment for type 1 and type 2 equities and that the actual difference between the symmetric adjustment before and after scaling may be small.

Based on the considerations described above EIOPA believes that the second option is preferable.

### **Equity risk charge**

EIOPA considered in the consultation paper a range between 30 % and 39 % for the equity risk charge for well-diversified portfolios of qualifying infrastructure equity investments in operational projects. A number of arguments can be made in support of this approach. First, the risk for the PFI portfolio analysed is considerably lower than for listed corporate equity: the empirical data would support an equity risk charge clearly below 20 %.

Moreover, shares of listed infrastructure corporates displayed similar price behaviour to listed shares in general. A risk charge of 39 % can therefore be seen as an "upper bound" as a diversified portfolio of qualifying infrastructure equity should not receive a higher risk charge than type 1 equities. In addition, one of the criteria for qualifying infrastructure projects is that revenues have to be predictable. Examples are an availability based contract with a public off-taker, regulated revenues or the provision of an essential service subject to limited competition. This suggests that the risk profile of qualifying projects, other than those represented by the PFI portfolio, should lie between the PFI portfolio and corporate equity. Finally, the lower sensitivity of cash flows to general economic conditions should translate into lower price volatility.

On the other hand, the available empirical evidence has limitations. It covers only a specific segment of infrastructure that can be expected to display a better risk profile. The argument that the data on PFI projects, which is mainly located in the UK, is indicative for the other qualifying infrastructure set out above is only based on *qualitative* considerations. EIOPA has reflected these limitations by proposing a “safety margin” in the form of a “lower bound” for the range of equity risk charges that is meaningfully higher than a possible risk charge derived from for the PFI portfolio on a stand-alone basis.

Based on these considerations, EIOPA considers that a range between 30 % and 39 % for the equity risk charge for well-diversified portfolios of qualifying infrastructure equity investments in operational projects is justified.

### **Conclusions: equity calibration**

Based on the results presented in the consultation paper, the further work carried out since then and the analysis of the stakeholder comments, EIOPA considers that that a range between 30 % and 39 % for the equity risk charge for well-diversified portfolios of qualifying infrastructure equity investments in operational projects is justified.

EIOPA proposes a correlation of 75% with equity type 1 and 100 % with type 2.

The symmetric adjustment for qualifying infrastructure equity should be determined as the selected equity risk charge divided by 39 % multiplied with the symmetric adjustment for type 1 and type 2 equities.

### **Scope and qualifying criteria**

#### **Infrastructure corporates**

Most respondents, including the IRSG, argued for the inclusion of “infrastructure corporates” within the scope of qualifying infrastructure. It was argued that such corporates have lower volatility and higher recovery rates compared to corporate bonds in general, and that a similar level of protection to investors in project finance structures could be provided, for example via the use of covenants. Stakeholders also pointed out that investments in a number of sectors, such as European airports and utility transactions, would be excluded by the limitation to project finance.

In response to these comments, EIOPA is aware that not all infrastructure investments are structured in a project finance format. However, EIOPA has sought to identify a category of infrastructure investments for which a different treatment within the SCR standard formula can be prudentially justified based on the evidence available. EIOPA identified some convincing evidence to support a different treatment for project finance structures. However, as explained in the consultation paper, EIOPA had a number of reservations regarding “infrastructure corporates”.

EIOPA has considered the comments received and would acknowledge that there is some evidence that “infrastructure corporates” have performed better than other

types of corporates. However, the evidence is much less convincing than for infrastructure projects. In addition, as stated in the consultation paper, there are delineation problems regarding the ability of corporates to enter into other business activities besides infrastructure. EIOPA does not consider that the proposals received from stakeholders adequately address this challenge.

Therefore, bearing in mind EIOPA's deadline for delivering its advice to the European Commission, EIOPA has decided to not advise for the inclusion of "infrastructure corporates" within the scope of qualifying infrastructure. Nevertheless, EIOPA expects to consider this issue further in the medium-term as part of its monitoring of the appropriateness of the SCR standard formula.

### **Predictability of cash flows – application to all revenues, expenses and credit quality of the off-taker**

A number of stakeholders, including the IRSG, responded that the requirements regarding the predictability of cash flows were too restrictive. It was asserted in particular that the requirements did not take into account that a project's revenues may predominantly, but not fully, meet the requirements. Another comment made was that a non-public off-taker of CQS 4 should be permitted. In response to EIOPA's statement in the consultation paper that it was considering the need for requirements on the predictability of expenses, stakeholders also stated that such requirements were not necessary and were implicitly included in the existing proposed requirements.

Whilst EIOPA would highlight the importance of this criterion in demonstrating the suitability of a project, EIOPA has made some changes to its advice based on the comments received. First, EIOPA would acknowledge that it may be possible for a part of the revenues to not meet the requirements specified, while overall the cash flows are still predictable. EIOPA is not comfortable with the wording proposed by stakeholders, for example, 'the majority' or 'predominantly', and has therefore advised that only an immaterial part of the revenues cannot meet the requirements regarding predictability. Second, EIOPA would accept that the reference to 'sufficiently stable' was not appropriate due to the possibility for revenues to vary in a predictable way. The wording has therefore been changed to 'sufficiently predictable'.

Concerning the CQS of the off-taker, EIOPA is not convinced that it should change its draft advice. As stated in the consultation paper, the criteria are designed to ensure a credit quality comparable to ECAI rated qualifying infrastructure with CQS 3. Given the importance of the off-taker where revenues are not paid by a large number of users, and the likelihood of severe losses for the project should the off-taker default, EIOPA considers that its draft advice was appropriate.

Regarding possible requirements on the predictability of expenses, EIOPA would agree with stakeholders that it is not necessary to prescribe specific aspects. However, it is important to underline that the level and predictability of expenses would still need to be considered during an assessment of whether the overall cash flows of the project are predictable. In this respect, EIOPA identified that it was necessary to change the

drafting of the advice, since the version consulted on implied that it may only be necessary to consider the predictability of the revenues and not the expenses.

### **Contractual framework - security interest of debt holders, issuance of new debt and reserve funds**

Numerous stakeholders, including the IRSG, commented that the contractual framework requirements would lead to the unnecessary exclusion of certain types of infrastructure based on current market practices. The main concerns were the proposed prohibition on the issuance of new debt, the coverage period of the reserve funds, and the requirement to have first perfected security interests. Regarding the latter, it was stated that in some countries it is common practice for a lesser degree of security to be taken, for example a promissory mortgage, due to the high costs of acquiring a fully perfected security. It was also pointed out that where the infrastructure assets remain owned by the public sector (and therefore operated on concession), it will not be legally possible for those assets to be pledged as security to investors. As an alternative to first perfected security interests a number of stakeholders mentioned that "share pledges" of the company owning or operating the infrastructure assets provides a sufficient level of security.

EIOPA has addressed some of these comments in its final advice. It is accepted that where public assets are operated, there may be legal restrictions on the pledging of those assets. In this case, it is important for debt providers to be able to take control of the project if it encounters financial difficulties in order to protect their investment. Following the suggestion regarding a "share pledge", EIOPA discussed this point further with stakeholders and considered this to be an appropriate and widely used mechanism for mitigating the risk. This would be particularly relevant where it is not possible for the assets to be pledged to debt providers. However, given the increased risk where there is a lesser degree of security, EIOPA does not accept that the cost should be the determining factor. EIOPA has, therefore, changed the advice to state that security should be taken to the extent permitted by law or regulation, and that equity in the project entity should be pledged to the debt providers.

EIOPA also made some revisions to the advice in view of the comments made concerning the issuance of new debt. EIOPA had considered this to be an important mechanism to protect existing investors and does not agree with stakeholders that a wording such as, 'limitations on the issuance of new debt' provides a sufficient degree of protection. Nevertheless, EIOPA would accept that it may not be appropriate to be fully restrictive on this point, for instance where the project is performing well and is comfortably able to service its debt according to the relevant financial ratios. EIOPA has, therefore, decided that it should be possible for an infrastructure project to issue new debt provided this is with the consent of the existing debt providers. This may also allow for it to be specified in the contractual agreements that the issuance of new debt is permitted where a certain threshold or cap is exceeded.

Finally, the drafting of the advice concerning reserve funds has been revised in order to better capture the intended purpose. EIOPA acknowledges that the requirement for a 'longer than average coverage period' which was based on the Basel "slotting

approach” is suitable as a supervisory indicator, but not as an assessment criteria. In addition, and having discussed this issue further with stakeholders, EIOPA’s aim is to provide that the project has some immediate recourse to funds to pay investors should the project revenues not be as envisaged. The project would not necessarily need to have significant reserves in the form of capital resources. For this purpose, letters of credit or other similar liquidity mechanisms, either from a bank or other counterparty, are expected to be sufficient.

### **Credit quality step 3**

Although one stakeholder supported the restriction to debt investments with a CQS of at least 3, a number of stakeholders challenged this requirement and argued either for a restriction to CQS 4 or no minimum level.

EIOPA believes that it is appropriate to retain its position on this point and not extend the scope to non-investment grade assets given their high credit risk. Furthermore, due to the increased credit risk, the price volatility of lower rated debt may change more rapidly than for higher rated instruments.

### **Political risk**

Respondents provided different views on the proposed restriction to European Economic Area (EEA) and Organisation for Economic Cooperation and Development (OECD) countries, with the majority arguing that it should be possible for investments in non-EEA and OECD countries to be eligible, potentially with some additional restrictions. Also concerning political risk, most respondents considered the requirements regarding a low risk of changes in law, regulation, etc. to be difficult to demonstrate and highlighted that this would exclude some EEA countries that have experienced a degree of regulatory change in recent years.

EIOPA does not agree to change the restriction to EEA and OECD countries, which it still considers provides an important safeguard to limit the degree of political risk. Although the assessment of the political risk will be challenging and largely rely on expert judgement, given the relevance of this risk, EIOPA does not consider this to be a reason not to require such an assessment. Nevertheless, based on the feedback, EIOPA has removed the reference to predictability, since stability is considered to be the more relevant factor.

Regarding the reference to recent regulatory changes made, the requirement was not introduced to specifically exclude infrastructure projects within particular jurisdictions. Nevertheless, EIOPA considers it important to state that a relevant factor in assessing the degree of political risk and the degree to which changes can be expected in the future, is the recent history of such changes within a particular country.

### **Structural requirements - sponsor**

Some stakeholders, including the IRSG, remarked that the requirement for the sponsor may be too restrictive in certain cases. In particular, it was mentioned that the concept of having a sponsor is mainly used in the “greenfield” or construction

phase, and therefore that many projects that are in the “brownfield” or operating phase would not meet the requirement. It was also asserted that country experience may not be relevant if the sponsor has already gathered experience with the same type of project in other countries.

EIOPA has made some amendments to its advice taking into account these comments, with the main change being that the requirement to have a suitable sponsor is applied only to projects during the construction phase. EIOPA also reconsidered the requirement for the sponsor to have a very strong track record, as well as both relevant country and sector experience. In this respect, EIOPA considers that the essential elements are that the sponsor has previously successfully overseen infrastructure projects and that they have expertise that is relevant for the current project. Direct experience in both the country and sector of project is beneficial, for example due to national specific legislation, and this should be taken into account when considering if the sponsor has the relevant expertise. However, it is accepted that it is not appropriate to require this in all cases.

### **Financial strength of the sponsor, construction company and operating company**

EIOPA received representation, including from the IRSG, concerning the financial strength of the sponsor, the construction company and the operating company. The requirement for these parties to be financially strong or of high financial standing was considered to be unnecessarily restrictive and subject to interpretation. In this respect stakeholders referred to the ability to replace these parties.

EIOPA would also accept that the requirement for these parties to be financially standing, which was taken from the Basel “slotting approach”, should be refined to make it more practicable and potentially allow for their replacement. EIOPA still believes that a financially strong sponsor and construction or operating company is beneficial to the project, but where it can be demonstrated that the default of one of these parties is unlikely to result in material losses to the project, their financial strength would be less critical. The final advice therefore recognises this.

### **Financial risk – amortising debt**

EIOPA stated in the consultation paper that it had not yet decided whether to restrict qualifying infrastructure investments to those with amortising debt. Various stakeholders argued against such a restriction, commenting that this would limit the number of qualifying investments, that it would be difficult to define what is meant by amortising, and that there are other ways to mitigate refinancing risk.

In view of the comments received, and having further analysed this issue, EIOPA agrees that it is not appropriate to impose a requirement concerning the nature of amortisation. Refinancing risk depends on a variety of factors and not only on whether the debt is amortising. EIOPA also accepts that it would be difficult to define the appropriate level of amortisation (i.e. fully or only partially). Therefore, EIOPA considers that the requirement proposed in the consultation paper that there is a low

refinancing risk is appropriate, such that the degree of amortisation would be considered as part of this assessment, together with other relevant factors.

### **Construction risk - fixed-price, date-certain contract and appropriate safeguards**

Numerous stakeholders, including the IRSG, commented that the construction risk requirements were unnecessarily restrictive. One of the main comments made was that a fixed-price date-certain turnkey construction engineering and procurement contract is not the only means of effectively mitigating construction risks. It was also argued that a single construction contract is not common practice in various sectors, as well as that the requirement for substantial liquidated damages is unclear and potentially onerous.

EIOPA took these comments into consideration and made a number of changes to its advice, which was originally based in part on the Basel "slotting approach". It is no longer required that the infrastructure project entity fully transfers the construction risks to a construction company through the use of a single fixed-price date-certain turnkey construction engineering and procurement contract. Instead, in order to avoid unnecessarily excluding other sufficiently robust arrangements, EIOPA has in most cases sought to specify the outcome to be met, rather than the specific contract type to be used.

The intention is that the project is not exposed to material risk resulting from a failure to construct the project according to the agreed specification, budget and completion date. To start with, EIOPA considers that although in general it is preferable for the project to enter into a single construction contract to limit any interface issues, it is accepted that projects should not necessarily be excluded on this basis. Secondly, regarding the term substantial liquidated damages, EIOPA is concerned to ensure that the damages are specified in the contractual arrangements and that they are likely to be paid, even if the construction company becomes insolvent. It is not appropriate for EIOPA to specify the level of damages. Consequently, this would need to be judged in the context of the overarching criteria described above that the infrastructure project entity is not exposed to material risks resulting from construction failings. At the same time, although stakeholders referred to other types of more differentiated penalty or incentive schemes, EIOPA is not convinced that the project can effectively transfer the material construction risks without a fixed-price, date-certain contract. This ensures that there are strong incentives to avoid cost overruns and delays, as well as protection mechanisms if the budget or completion date is exceeded.

### **Operating risks - ability for infrastructure project entity to operate the project**

Most stakeholders, including the IRSG, challenged the requirement for the project to transfer material risks relating to the operation of the project to a suitable operating company, on the basis that it is established practice for a project company to not subcontract the operation or maintenance of infrastructure assets.

EIOPA has taken account of the comments made and decided not to preclude the operation and maintenance of the infrastructure asset being done in-house by the infrastructure project entity, provided they have the necessary experience and expertise. However, EIOPA still believes that it is a good practice to transfer the operating risk to a suitable operating company, in particular where the operation and maintenance of the infrastructure asset is complex and the risk material.

## **Risk management requirements**

### **Rationale for additional risk management requirements**

Most respondents, including the IRSG, did not consider the risk management requirements to be justified and made a number of arguments including that the advice was contradictory to the political objective of facilitating the long term financing of infrastructure developments, as well as that the prudent person principle is already the best practice.

EIOPA does not agree with these responses and has not made fundamental changes to the advice that it proposed in the consultation paper. EIOPA's objective is to propose a treatment within Solvency II that is prudentially justified. It is appropriate for EIOPA to address the appropriateness of the treatment for infrastructure investments regarding risk management requirements, as well as regarding the requirements for the SCR. As stated in the consultation paper, due to the complex and varied nature of the risks arising from such investments, which undertakings may not be accustomed to managing, EIOPA believes that it is important to specify and emphasise some elements key to infrastructure projects. Further, whilst EIOPA supports the prudent person principle as the risk based approach to be introduced by Solvency II, it is not contrary to that principle to provide more detailed provisions, where justified. Indeed, there are already provisions in the Delegated Regulation and EIOPA's Guidelines on the System of Governance, which supplement the prudent person principle. In summary, risk management requirements are not considered an "additional layer" to Solvency II provisions but rather a further specification tailored to infrastructure projects and spelt out to clarify supervisory expectations.

### **Independent validation of the financial model and the assessment of the qualifying criteria**

A number of stakeholders, including the IRSG, argued that it was not necessary to require the use of external experts or auditors in order to validate the financial model or the assessment of the qualifying criteria.

In response to this comment, EIOPA has made an amendment to its advice with the intention of clarifying its expectations regarding the validation requirement. In the consultation paper, EIOPA had sought to explain that the important aspect of the validation process was its independence and not whether the persons carrying out the validation were external to the undertaking. EIOPA has revised its advice to state that the validation entails a review by persons who are free from influence from, and have

no conflicts of interest with, the persons responsible for developing the financial model and the assessment of the qualifying criteria. It is not, therefore, required that these persons are external to the undertaking. The ability for an undertaking to use an internal validation process would depend on its governance structure.

### **Regular stress testing**

Various respondents, including the IRSG, expressed concerns regarding the requirement for regular stress testing, which was highlighted as potentially burdensome.

EIOPA has not changed its advice on this point. Article 259(3) of the Delegated Regulation, already requires undertaking to perform stress analyses with regard to all relevant risks. In the consultation paper EIOPA highlighted the importance of stress analysis, both prior to investment and on an ongoing basis, given the nature of infrastructure projects. For this reason, in order to meet the qualifying criteria, a stress analysis needs to be performed. With respect to the risk management requirements, having conducted a stress analysis prior to investment, it is important for the undertaking to continue to assess the ability of the project to withstand adverse events, based for example on its performance to date, as well as the impact of relevant economic conditions. In addition, the requirement for regular stress testing is risk based and it is stated that it shall be commensurate with the nature, scale and complexity of the risks.

### **IRSG opinion**

The IRSG opinion as well as the particular comments can be found on the EIOPA website.<sup>5</sup>

---

<sup>5</sup> <https://eiopa.europa.eu/about-eiopa/organisation/stakeholder-groups/opinions-feedback-from-the-eiopa-stakeholder-groups>

### 3. Final advice

#### Calibration

##### **Debt investments**

From a prudential perspective the **credit risk approach** is the preferred option.

Under the credit risk approach the spread risk charge for debt investments in infrastructure project entities which meet the relevant requirements set out in the following section "Scope and qualifying criteria" shall be determined based on the following table:

Duration	0		1		2		3	
	a	b	a	b	a	b	a	b
up to 5	0.00%	0.68%	0.00%	0.84%	0.00%	1.06%	0.00%	1.75%
5 to 10	3.42%	0.38%	4.18%	0.46%	5.32%	0.53%	8.75%	1.05%
10 to 15	5.32%	0.38%	6.46%	0.38%	7.98%	0.38%	14.00%	0.70%
15 to 20	7.22%	0.38%	8.36%	0.38%	9.88%	0.38%	17.50%	0.70%
20 and more	9.12%	0.38%	10.26%	0.38%	11.78%	0.38%	21.00%	0.35%

The **liquidity approach** is also a possible option but has a number of disadvantages.

Under the liquidity approach the spread risk charge for debt investments in infrastructure project entities which meet the relevant requirements set out in the following section "Scope and qualifying criteria" shall be determined based on the following table provided the conditions set out in the next paragraph are met:

Duration	0		1		2		3	
	a	b	a	b	a	b	a	b
up to 5	0.00%	0.77%	0.00%	0.94%	0.00%	1.20%	0.00%	2.14%
5 to 10	3.85%	0.43%	4.70%	0.51%	5.99%	0.60%	10.69%	1.28%
10 to 15	5.99%	0.43%	7.27%	0.43%	8.98%	0.43%	17.11%	0.86%
15 to 20	8.13%	0.43%	9.41%	0.43%	11.12%	0.43%	21.39%	0.86%
more than 20	10.27%	0.43%	11.55%	0.43%	13.26%	0.43%	25.66%	0.43%

The conditions mentioned above are: The solvency and liquidity position as well as the strategies, processes and reporting procedures of the undertaking concerned with respect to asset-liability management are such as to ensure, on an ongoing basis, that the insurer is able to hold the infrastructure debt to maturity. The undertaking shall be able to demonstrate to the supervisory authority that that condition is verified with the level of confidence necessary to provide policy holders and beneficiaries with a level of protection equivalent to that set out in Article 101 of Directive 2009/138/EC.

The **combined approach** is in principle also a possible option but has as well a number of disadvantages. In case of a combination simply adding up the reductions from both approaches would overestimate the combined effect. Instead a combination parameter of around 75 % should be used.

Under the combined approach the spread risk charge for debt investments in infrastructure project entities which meet the relevant requirements set out in the following section "Scope and qualifying criteria" using 75 % would be:

		0		1		2		3
Duration	a		a		a		a	
up to 5	0.00%	0.64%	0.00%	0.78%	0.00%	1.00%	0.00%	1.67%
5 to 10	3.20%	0.36%	3.92%	0.43%	4.99%	0.50%	8.34%	1.00%
10 to 15	4.99%	0.36%	6.05%	0.36%	7.48%	0.36%	13.34%	0.67%
15 to 20	6.77%	0.36%	7.83%	0.36%	9.26%	0.36%	16.68%	0.67%
20 and more	8.55%	0.36%	9.61%	0.36%	11.04%	0.36%	20.01%	0.33%

The same condition regarding the solvency and liquidity position as well as the strategies, processes and reporting procedures of the undertaking would have to be met.

EIOPA does not consider a treatment of infrastructure debt in the counterparty default risk module as a suitable option.

Debt without ECAI rating that meets the qualifying criteria would be subject to the same treatment as qualifying ECAI rated debt with credit quality step 3.

The treatment of RGLA guarantees should be one element of the foreseen review of the Solvency II standard formula before end 2018.

## **Equity investments**

The equity risk charge for well-diversified portfolios of infrastructure equity investments in operational projects that meet the requirements set out in the following section "Scope and qualifying criteria" shall be between 30 % and 39 %.

The correlations with equity type 1 and equity type 2 shall be 75 % and 100 % respectively.

The symmetric adjustment shall be equity risk charge (in %) divided by 39 % multiplied with the symmetric adjustment for type 1 and type 2 equities.

## **Scope and qualifying criteria**

### ***Definitions***

'Infrastructure assets' means physical structures or facilities, systems, or networks that provide or support essential public services.

'Infrastructure project entity' means an entity which is not permitted to perform any other function than owning, financing, developing or operating infrastructure assets,

where the primary source of payments to debt providers and equity investors is the income generated by the assets being financed.

## ***Requirements for all investments***

### Stress analysis

1. The infrastructure project entity shall be able to meet its financial obligations under sustained stresses that are relevant for the risks of the project and cover a range of different likelihoods.
2. The stress scenarios used to demonstrate that the project can meet its financial obligations shall include the following, to the extent that they are relevant based on the risks of the project:
  - a) adverse refinancing conditions;
  - b) severe economic shock;
  - c) delays in design or construction;
  - d) insolvency of the construction company;
  - e) adverse weather conditions;
  - f) disruptions in operations;
  - g) insolvency of the operating company;
  - h) reduced level of output or usage;
  - i) reduced prices per unit of output or usage.
3. The stress scenarios shall take into account relevant historical experience.

### Predictability of cash flows

1. The cash flows that the infrastructure project entity generates for debt providers and equity investors shall be predictable.
2. The cash flows that the infrastructure project entity generates for debt providers and equity investors shall not be considered predictable, unless the following conditions are satisfied with respect to all but an immaterial part of the revenues:
  - a) one of the following requirements is met:
    - i. revenues are availability-based;
    - ii. revenues are subject to a rate-of-return regulation;
    - iii. revenues are subject to a take-or-pay contract;
    - iv. the following requirements are met:

- a. level of output or usage is either regulated, contractually fixed or sufficiently predictable as a result of low demand risk
- b. the price is either regulated, contractually fixed, or sufficiently predictable as a result of low demand risk.
- b) where the revenues are not funded by payments from a large number of users of the service, the off-taker shall be at least one of the following:
  - i. an entity listed in Article 180(2) of Delegated Regulation 2015/35;
  - ii. a regional government or local authority referred to in point (a) of Article 109(a)(2) of Directive 2009/138/EC;
  - iii. an entity with an ECAI rating with a CQS of at least 3;
- c) where the level of output depends materially on weather conditions, the output can be reliably forecasted;
- d) where the project has been in operation for at least five years, the revenues over this period have not been significantly below projections.

### Contractual framework

The contractual framework shall provide debt providers and equity investors with a high degree of protection including the following:

- a) provisions that effectively protect debt providers and equity investors against losses resulting from the off-taker terminating the project;
- b) debt providers have security to the extent permitted by law or regulation in all assets and contracts necessary to operate the project;
- c) equity is pledged to debt providers such that they are able to take control over the infrastructure project entity prior to default;
- d) the ability of the infrastructure project entity to use financial resources for purposes other than making payments to debt providers is significantly restricted;
- e) a covenant package that effectively restricts the infrastructure project entity from performing activities that may be detrimental to debt providers, including that new debt cannot be issued without the consent of existing debt providers;
- f) the reserve funds of the infrastructure project entity have a sufficient coverage period and are fully funded in cash or letters of credit from a counterparty with a very low risk of default.

## ***Requirements for rated debt investments***

### Credit quality step

The instrument shall have a credit assessment of at least CQS 3.

## ***Requirements for equities and unrated debt***

### Political risk

1. The infrastructure assets and infrastructure project entity shall be located in countries which are members of the European Economic Area or the Organisation for Economic Cooperation and Development and the political and legal environment to which the assets and project are subject shall be stable;
2. The political and legal environment shall not be considered to be stable unless there is a low risk of specific changes in law, unilateral changes in contracts or tariffs, regulatory actions and the imposition of exceptional taxes or royalties that would result in material losses for the infrastructure project entity;
3. For the purpose of paragraph 2, insurance and reinsurance undertakings shall consider recent changes made in the countries where the infrastructure assets and infrastructure project entity are located.

### Structural requirements

1. The assets and cash flows of the infrastructure project entity are effectively separated from other entities.
2. During the construction phase of the project, the infrastructure project entity has a suitable sponsor.
3. The infrastructure project entity shall not be considered as having a suitable sponsor unless the following conditions are met:
  - a) the sponsor has an history of successfully overseeing infrastructure projects and relevant expertise;
  - b) the sponsor has a low risk of default, or there is a low risk of material losses for the infrastructure project entity as a result of the default of the sponsor;
  - c) the sponsor is incentivised to protect the interests of investors, including that it holds a material equity investment in the infrastructure project entity.

### Financial risk

1. The capital structure of the infrastructure project entity allows it to service all its debt under very robust assumptions based on an analysis of the relevant financial ratios.
2. The refinancing risk for the infrastructure project entity is low.
3. The infrastructure project entity shall only use derivatives for risk-mitigation purposes.
4. For debt providers, the debt instrument is senior to all other claims except statutory claims and claims from counterparties to derivative transactions.

### Construction risk

1. The infrastructure project entity shall not be exposed to material risks resulting from a failure to construct the project according to the agreed specification, budget or completion date.
2. The requirement in paragraph 1 shall not be considered met unless the following conditions are satisfied:
  - a) the infrastructure project entity enters into fixed-price date-certain contractual arrangements with one or more construction companies;
  - b) the compensation to be paid to the infrastructure project entity for a construction failure is specified in the contractual arrangements and there is a low risk that the compensation is not paid in a timely manner;
  - c) the construction companies have the necessary expertise and capabilities, and have a history of successfully constructing similar projects;
  - d) the construction companies have a low risk of default, or they can be replaced without material losses for the infrastructure project entity;
  - e) when assessing whether the conditions in points a) to d) are met insurance and reinsurance undertakings shall use technical and legal expertise independent from the sponsor and the construction companies.

### Operating risk

1. Where the operating risks are material, they are properly managed.
2. The requirement in paragraph 1 shall not be considered met unless the following conditions are satisfied:
  - a) the operation of the infrastructure assets is performed by persons who have a history of successfully operating similar projects, and possess the relevant expertise;

b) where operations are outsourced to an operating company, the following conditions shall be met:

i. the operating company is contractually incentivised to perform its tasks according to the agreed specifications;

ii. the operating company shall have a low risk of default, or it can be replaced without material losses for the infrastructure project entity.

#### Design and technology risk

Sufficiently tested technology and design shall be used.

## **Risk management requirements**

For each investment in an infrastructure project entity, insurance and reinsurance undertakings shall be able to demonstrate to their supervisory authorities that all the following are satisfied:

- a) they have a comprehensive understanding of the investment and its risks;
- b) they have assessed the impact of the investment on their risk profile, and on the quality, security, liquidity, profitability and availability of the whole portfolio;
- c) they have assessed the consistency of the investment with the interests of policy holders and beneficiaries, and their liability constraints.

2. Insurance and reinsurance undertakings shall conduct adequate due diligence prior to making an investment in an infrastructure project entity, including the following;

- a) a documented assessment of how the project satisfies the qualifying criteria which has been subject to a validation process;
- b) a confirmation that any financial model for the cash flows of the project has been subject to a validation process.

In order to ensure independence of the validation process, the persons or organisational unit carrying out the validation, shall be free from influence from those responsible for the original assessment of the criteria, or for the development of the financial model and have no potential conflicts of interests.

3. Insurance and reinsurance undertakings investing in infrastructure project entities shall establish written procedures to monitor the performance of their exposures on an ongoing basis. These procedures shall be commensurate with the nature, scale and complexity of the risk inherent in the infrastructure positions. For material positions the procedures shall include provisions for:

- a) more active monitoring during the construction phase of the project;
- b) maximising the amount recovered in the case of a work-out scenario.

4. Insurance and reinsurance undertakings shall regularly perform stress tests on the cash flows and collateral values supporting the infrastructure project entity. Any stress tests shall be commensurate with the nature, scale and complexity of the risk inherent in the infrastructure project. Where the stress tests are based upon an external model, insurance and reinsurance undertakings shall be able to demonstrate to their supervisory authorities that they understand and are able to challenge the assumptions of the model.

## 4. Annex

### Summary of Comments on Consultation Paper EIOPA-CP-15/004

#### on the Call for Advice from the European Commission on the identification and calibration of infrastructure investment risk categories

EIOPA would like to thank IRSG, Actuarial Association of Europe (AAE), AFME ICMA Infrastructure Working Group, AMICE, Association Française de la Gestion financière (AFG), Association of British Insurers (ABI), Assuralia, Better Finance, BlackRock, Bund der Versicherten (BdV – German Association of Insured), Bundesverband Investment und Asset Management e.V. (BVI), European Private Equity and Venture Capital Association (EVCA), FTC Capital GmbH (FTC), German Insurance Association (GDV), Insurance Europe (IE), Legal & General Group Plc (LaG), Long-Term Infrastructure Investors Association (LTIIA), Moodys Investors Service Ltd, NATIXIS, RSA Insurance Group plc, and The Investment Association.

The numbering of the paragraphs refers to Consultation Paper No. EIOPA-CP-15/004.

No.	Name	Reference	Comment	Resolution
1.	AAE	General comments	<p>AAE appreciates EIOPA's efforts on advising the European Commission on the treatment of infrastructure investments under Solvency II. The results of EIOPA's hard work are a good basis for consideration for this asset class under Solvency II.</p> <p>We appreciate that there is a potential large interest from market participants to invest in infrastructure assets, and that this interest is not limited to insurers whose interest is to match their liabilities (i.e. insurers looking for asset and liability matching), but also insurers who seek to maximise returns on their investments (i.e. insurers looking for yield maximisation).</p> <p>But at the same time we have to be aware that infrastructure assets will not be a major part of the asset allocation of insurers. We even do not expect that the majority of insurance companies will invest in infrastructure assets for the next couple of years, and those who do, will select carefully. So we like to comment that the assumption of a well-diversified infrastructure portfolio is not seen to be very realistic.</p> <p>When commenting on the consultation paper as a profession we look at the paper from different angles. Looking from the angle of investment management we see a lot of merits in the work of EIOPA, appreciating a very good collection and analysis of existing material concerning infrastructure investments. Most of the technical comments in this comment letter are based on this view and rather supportive for EIOPA's proposal. Pragmatic investors will find a lot of interesting valuation approaches in the consultation paper.</p> <p>But looking from the systemic angle we deem it necessary to raise concerns about increasing complexity and degrees of freedom of the standard formula based on weak</p>	<p>The capital requirements were derived for a diversified portfolio.</p> <p>EIOPA is aware of the limitations dictated by the available data but considers the</p>

		<p>assumptions and conventions. In this context we have to mention that the model approach of EIOPA would not pass modelling standards for Actuaries. From this angle we see excessive model risks and would like to read more about calibration errors and their consequences in the consultation paper.</p> <p>Also systemic risk stemming from political risk and from catastrophe risk should be given some room in the consultation, what we fully miss is the treatment of enhanced diversification effects due to a new asset category in the standard formula. Infrastructure assets may be correlated to Cat risk and to other asset classes as well.</p> <p>From a valuation point of view, the valuation, pricing and calibration of infrastructure assets will rely on availability of market data. We understand that market data may be scarce to an extent, nevertheless, under the assumption that more institutional investors will take on infrastructure assets, this will only contribute to enriching the market data available. We would also like to comment that it is not uncommon that a bespoke valuation is undertaken to value these projects – this may seem to suggest that partial internal models / internal models approaches may be seen suitable approaches to set capital charges for infrastructure assets.</p> <p>Availability of market data may be a potential significant issue, should there be any major concerns on calibration based on market data. We note the discussion around the split of the spread between credit risk and illiquidity risk. It is important, in our view, to confirm the richness and relevance of available studies which support the credit / liquidity split of the spread.</p> <p>An additional remark here is that considerations on the split of the spread between credit and illiquidity need to be considered in the matching adjustment (fundamental</p>	<p>proposed calibrations adequate.</p> <p>EIOPA has suggested a requirement to limit political risk.</p> <p>Regarding the correlations for qualifying infrastructure equities please see section “Correlation of qualifying infrastructure equity investments with other equities” in Chapter 2. Regarding the correlation with other risks EIOPA considers the treatment set out in the Delegated Regulation as adequate.</p> <p>The exposure to cat risk would depend on the geographical distribution and the insurance coverage for cat losses. It seems worth mentioning that the correlation between market and non-life underwriting risk module are set out in the Solvency II Directive.</p> <p>There seems to be a widespread view that the availability of performance data for infrastructure investments can be improved. EIOPA is aware that there are a number of initiatives under way.</p>
--	--	---	---

		<p>spread) calibration too, and perhaps even wider, in the volatility adjustment calibration.</p> <p>We note in this context the proposals discussed in this paper to calibrating the spread risk charge for infrastructure debt by looking at three options: calibrate the credit risk element of the spread, calibrate the illiquidity risk element of the spread or the initial spread approach, which EIOPA is not yet in a position to present results. We welcome the discussions on the credit risk vs. illiquidity risk calibration of the spread for infrastructure debt, which we found intellectually stimulating. While we agree in principle with EIOPA's analyses, results and comments, we would make the following remarks:</p> <ul style="list-style-type: none"> <li>• An illiquidity risk approach to calibrate spreads may be relevant when looking on a short-term horizon – i.e. on a longer term period, institutional investors may be more concerned with the credit riskiness of their investments, rather with the perceived illiquidity of their holdings. In other words, investors would be less concerned whether their holding is downgraded as a result of illiquidity risk being higher, but more concerned whether their investments are subject to a higher credit (default) risk.</li> <li>• A credit risk approach has the benefit that it can be supported by transition and default data available from rating agencies.</li> <li>• We believe a blended approach (i.e. one that combines the credit risk and illiquidity risk) may be a viable alternative to calibrate the spread risk for infrastructure loans.</li> </ul> <p>We make further comments on these aspects in sections 4.2.3-4.2.5 below. We also note that a number of important assumptions (e.g. 60:40 split of spread by credit risk and illiquidity risk and 10% forced sale assumption) may require robust validation and / or supported by up to date market data.</p> <p>The options available to set capital charges for infrastructure assets remain through a standard formula approach (which is the subject of the consultation paper), or through a partial / internal model approach.</p> <p>We note EIOPA's work on discussing the principle-based approach (under the Solvency II rules) and the list of proposed qualifying criteria for infrastructure assets. We have the following comments on these:</p> <ol style="list-style-type: none"> <li>1) It is important that the calibration for infrastructure assets (and in particular for equity investments) is kept under review, given availability of market data for these assets. The lack of such data is still seen as one of the major obstacles to the adoption of the principle-based approach.</li> <li>2) Small and medium enterprise investors would benefit significantly from the principle of proportionality with regards to risk management. There are other</li> </ol>	<p>Please see resolution of comment 271.</p> <p>Please see the corresponding resolutions.</p> <p>EIOPA considers that the chosen parameters are appropriate.</p> <p>Partially agreed. As with all Solvency II regulations, the principle of proportionality applies. However, where external partnerships are entered into, an undertaking would still have to ensure</p>
--	--	---	---

			<p>options available to them, such as external partnerships (e.g. specialist asset managers).</p> <p>3) We would encourage EIOPA to consider some of the criteria be relaxed.</p> <p>Given the political dimension to this consultation, EIOPA may wish to consider whether it should include in its advice to the Commission possible alternatives for the Commission to consider that would more specifically target the apparent aim of promoting growth (particularly within the EU or wider EEA). Any such wording should highlight that such decisions are ones that should be taken by the Commission and other relevant bodies rather than by EIOPA.</p> <p>For example:</p> <p>(a) The assumption is that the long-term nature of some insurer liabilities might provide support for infrastructure investment. Targeting of such investments might be helped by including a minimum initial (expected) term in the definition of 'infrastructure assets' in 3.3.1. This might in any case be desirable from a prudential perspective. Assets with a very short initial lifetime might be inherently more exposed to competition than those that</p>	<p>that the risk management requirements are met.</p> <p>Partially agreed. Overall, EIOPA considered that it was important to maintain the areas covered by the criteria in most cases to ensure that only those projects which have a materially lower risk than implied by the current standard formula treatment would be captured. Nevertheless, EIOPA has carefully reviewed all of the criteria in view of the comments received. Where concerns about the restrictiveness of the criteria were considered to be reasonable these have led to changes. Further, in some cases EIOPA has adopted a more "outcome-focused" approach instead of requiring a specific arrangement or contract. This is intended in to avoid unnecessarily excluding other sufficiently robust arrangements.</p> <p>In CP 15-004 (hereinafter "the CP"), and the final advice EIOPA has in some cases set out a range of options. Nevertheless, it is worth mentioning that whilst EIOPA is aware of the political context its objective has been to identify a treatment that can be prudentially justified.</p> <p>Not agreed. EIOPA does consider that it is appropriate or necessary to prescribe a minimum lifetime of assets. The approach has been retained of setting the requisite features from a risk perspective (i.e. the qualifying criteria). EIOPA has also retained the definition of 'systems and networks'. As explained in paragraph</p>
--	--	--	---	---

			<p>have longer expected lifetimes. As the definition includes reference to "systems and networks" it could include e.g. computer systems exposed to the risk of rapid technological obsolescence given the current pace of technological change in that industry.</p> <p>(b) Perhaps the requirement in the current definition of 'infrastructure assets' in 3.3.1 that the assets be subject to limited competition may be unhelpful from a wider societal perspective even if it possibly offers better protection to the investor. For example, suppose a toll road meeting the definition of an infrastructure asset becomes clogged up due to high demand. It may be desirable from society's perspective to facilitate the building of another toll road to relieve this demand. It may be undesirable for the second toll road to have to be built or managed by the same entity as the first toll road, to avoid both then failing to satisfy this definition due to the competition each would then face from the other. Instead, perhaps "and are subject to limited competition" could be refined to say "and, either in isolation or in aggregate with other infrastructure assets meeting this definition, are subject to limited competition.</p> <p>(c) The current definition of a 'stable and predictable' political and legal environment in 3.3.4 does not differentiate between EEA countries and those countries in the OECD that are not in the EEA. The advice could indicate that if the aim was to promote just growth in the EU / EEA then a narrower definition might be desirable, although adopting such an approach might have other political ramifications.</p>	<p>1.69 of the CP, it is considered appropriate to have a wide definition which is supplemented by criteria to identify lower risk investments.</p> <p>Partially agreed. The reference to limited competition has been deleted from the definition of infrastructure assets; therefore it is no longer a necessary condition to qualify. However, it may still be an important factor depending on the nature of the project revenues. Thus, the requirements regarding the predictability of cash flows may not be met depending on the level of competition.</p> <p>Not agreed. EIOPA's intention is to identify a category of infrastructure investments where the risk is materially lower than implied by the existing standard formula treatment. The approach is risk based and is not targeted at particular countries.</p>
2.	AFME ICMA	General comments	<p>The WG welcomes the call for advice from the European Commission and recognises that EIOPA has made a valuable contribution in its draft advice. The specific draft proposals are a step in the right direction. However, the proposed definition is too narrow and the capital charges still exaggerate the risk posed by investing in infrastructure. We believe that further work is required on definitions and capital charges in order to remove unnecessary barriers to investment.</p> <p>Although it is difficult to determine the exact risk parameters, there is sufficient evidence that a risk based calibration can be set at significantly lower levels for both infrastructure debt and equity. This should be reflected for individual debt and equity risks, but also looked at from a portfolio perspective in which correlation between infrastructure and other investments should be recognised as being zero or very close to zero. In addition, a number of concerns remain on the proposal for the identification of infrastructure risk categories and should be addressed in EIOPA's final advice to ensure that particular details in the identification requirements do not unnecessarily</p>	<p>Not agreed regarding the definition. Please see the relevant responses on the qualifying criteria.</p> <p>The lower sensitivity of infrastructure debt to general economic conditions is reflected in the credit risk approach. Regarding equities please see section "Correlation of qualifying infrastructure equity investments with other equities" in Chapter 2.</p>

		<p>exclude good infrastructure projects.</p> <p>The following adjustments should be made to the proposed definition:</p> <p>The definition is too restrictive. It should be extended to corporates' operating infrastructure assets provided that the cash flows or assets pertaining to the infrastructure activities are ring-fenced. Notably, in Section 3.1 we provide examples of high quality transactions within the Investment Plan for Europe, that would be excluded from investment eligibility due to the overly restrictive definition proposed by EIOPA.</p> <p>A number of adjustments should be made to the proposed criteria, including:</p> <ul style="list-style-type: none"> <li>- There needs to be more flexibility as the current list of criteria has the potential to disqualify many high quality infrastructure transactions.</li> <li>- The advice should consider internal ratings equivalent to ECAI rating as long as such internal ratings are assigned based upon an appropriate internal credit assessment, consistent with Solvency 2 prudent person principle.</li> </ul> <p>Regarding the recalibration proposals, the WG notes the following:</p> <ul style="list-style-type: none"> <li>- If a recalibration of the risk charges for infrastructure in the spread risk module is chosen, then a combination of EIOPA's liquidity and credit risk approach should be considered.</li> <li>- A proposal for a calibration in the counterparty default risk module should be included in EIOPA's advice if, significantly, loans and securities receive the same calibration (in order to avoid EIOPA regulatory arbitrage between loan and bond format that currently exists in other asset classes such as securitisation), and also if the calibration takes into account at least some level of mark to market risk that assets included in the counterparty default risk module will still need to incur, even though the counterparty default risk module is intended to solely capture credit. An example for a calibration is included in WG's comments to section 5.1.</li> </ul> <p>The advice does not distinguish between listed and unlisted infrastructure equity. The advice should include the latter in a new market risk sub-module with a risk charge of 22% and very low, preferably zero, correlation with other sub-modules.</p>	<p>Please see the response to comment 49.</p> <p>Please see the response to comments 1 and 71.</p> <p>Not agreed. EIOPA sees no need to change the general provisions laid down in the Commission Delegated Regulation (EU) 2015/35 (hereinafter "the Delegated Regulation") regarding an undertaking's own internal credit assessments.</p> <p>Not agreed. Please see the section "Counterparty default risk module" in Chapter 2.</p> <p>Due to a lack of suitable data and the absence of a clear indication in the academic literature, EIOPA does not suggest a different treatment of listed and unlisted infrastructure investments.</p>
--	--	--	---

3.			This comment was submitted as confidential by the stakeholder.	
4.	AMICE	General comments	<p>AMICE welcomes the opportunity to comment on the Consultation Paper on the Call for Advice from the European Commission on the identification and calibration of infrastructure investment risk categories. Our issues of primary concern related to this paper are the following:</p> <ul style="list-style-type: none"> <li>• Infrastructure debt should be treated under the counterparty default risk module and not in the spread risk module as insurance firms are exposed to credit risk and not to short-term volatility of market spreads. A treatment under the counterparty default risk module would recognise the fact that infrastructure assets are not a traded instrument.</li> <li>• We recommend not using listed equity as a proxy for unlisted infrastructure equity, since these assets have proven to be less volatile.</li> </ul> <ul style="list-style-type: none"> <li>• Additional qualitative requirements relating to investments in infrastructure should be avoided. Prescribing additional elements of risk management for a small part of the investment portfolio will refrain firms from investing in infrastructure assets.</li> </ul> <p>The requirement that the insurer should hold a well-diversified portfolio of qualifying infrastructure project debt in order to apply a lower capital charge should be removed; as the supply of infrastructure assets is still scarce it will be difficult to find many assets to invest in. Moreover, a small number of assets can also contribute positively to the risk in the total portfolio.</p>	<p>Not agreed. Please see the section “Counterparty default risk module” in Chapter 2.</p> <p>Please see resolution of comment 304.</p> <p>Not agreed. As stated in paragraph 1.206 of the CP, due to the complex and varied nature of the risk arising from infrastructure investments, which undertakings may not be accustomed to managing, EIOPA believes that it is important to specify to specify and emphasise some elements key to infrastructure projects. These requirements should promote effective risk management. The requirements are based upon the risks arising from infrastructure investments, and not the proportion of the portfolio invested in infrastructure, which may change over time.</p> <p>Not agreed. The capital requirements were derived for a diversified portfolio.</p>

5.	ABI	General comments	<p>The Association of British Insurers (ABI) welcomes the opportunity to respond to EIOPA’s consultation on the Call for Advice from the European Commission on the identification and calibration of infrastructure investment risk categories. Before commenting on the consultation paper, we think it would be helpful to provide some background on the UK insurance industry and the ABI.</p> <p>The UK Insurance Industry</p> <p>The UK insurance industry is the third largest in the world and the largest in Europe. It is a vital part of the UK economy, managing investments amounting to 25% of the UK’s total net worth and contributing £10.4 billion in taxes to the UK Government. Employing around 320,000 people in the UK alone, the insurance industry is also one of this country’s major exporters, with 26% of its net premium income coming from overseas business.</p> <p>Insurance helps individuals and businesses protect themselves against the everyday risks they face, enabling people to own homes, travel overseas, provide for a financially secure future and run businesses. Insurance underpins a healthy and prosperous society, enabling businesses and individuals to thrive, safe in the knowledge that problems can be handled and risks carefully managed. Every day, our members pay out £148 million in benefits to pensioners and long-term savers as well as £58 million in general insurance claims.</p> <p>The ABI</p> <p>The Association of British Insurers is the leading trade association for insurers and providers of long term savings. Our 250 members include most household names and specialist providers who contribute £12 billion in taxes and manage investments of £1.8 trillion.</p> <p>The ABI’s role is to:</p> <ul style="list-style-type: none"> <li>• Be the voice of the UK insurance industry, leading debate and speaking up for insurers.</li> <li>• Represent the UK insurance industry to government, regulators and policy makers in the UK, EU and internationally, driving effective public policy and regulation.</li> </ul>	
----	-----	------------------	---	--

		<ul style="list-style-type: none"> <li>• Advocate high standards of customer service within the industry and provide useful information to the public about insurance.</li> <li>• Promote the benefits of insurance to the government, regulators, policy makers and the public.</li> </ul> <p>Executive Summary</p> <ul style="list-style-type: none"> <li>• Insurers are already investing in infrastructure, and could become an even more important source of funding as the long-term nature of insurance liabilities can be well-suited to the often long-term nature of infrastructure investment. It is imperative to develop a framework that will recognise and encompass the different risk categories for infrastructure investments in order to make such investments attractive to institutional investors. The ABI therefore welcomes EIOPA’s consultation on the identification and calibration of infrastructure investment risk categories.</li> <li>• We are broadly supportive of the infrastructure definitions proposed in the consultation, and acknowledge the challenges involved in developing this. We welcome the fact that EIOPA has opted for the more flexible approach to defining infrastructure, rather than attempting to create an exhaustive list of industries or project types. In our response, we propose some further improvements that could be made to the definition.</li> <li>• We are also, on the whole, supportive of the headline requirements for infrastructure investment, and the additional requirements for unrated debt and equity. However, we find a number of the underlying criteria unduly limiting, and there is a risk that some criteria may unintentional leave jurisdictions or sectors completely out of scope. Our response identifies the elements of the requirements that we think would reduce the pool of potential infrastructure investment without being justified on prudential grounds.</li> <li>• We are supportive of the proposed 30-39% band for infrastructure equity. However, we do not think that the proposed adjustments to infrastructure debt fully reflect the lower risk profiles of infrastructure investment and would continue to overstate the capital charges for this asset class.</li> <li>• Although we are disappointed EIOPA did not put forward a counterparty approach, we believe that an appropriate treatment of infrastructure investment could be achieved through a combination of liquidity and credit risk methodologies within the spread sub-module.</li> <li>• We appreciate the consultation is focussed on technical questions with regard</li> </ul>	<p>Please see the responses to the specific comments.</p> <p>Not agreed. Evidence would be needed.</p> <p>Please see the section “The possibility of combining liquidity and credit risk approach” in chapter 2.</p> <p>Not agreed. This topic would be outside</p>
--	--	---	---

			<p>to calibration, but in addition to looking at the capital charge under the standard formula, some guidance on treatment of infrastructure in internal models would be helpful. This could include exploring whether treatment should differ between projects where investing prior to construction vs investing into projects after construction phase finished, and whether the treatment should differ for (1) availability based projects versus volume based projects and (2) credit quality of users (for example, government departments compared to corporates).</p> <ul style="list-style-type: none"> <li>Finally, we would like to thank EIOPA and the Commission for their work in this area. We stand ready to continue working together to build up the right regulatory and risk framework. If there is any aspect of our response that would benefit from clarification or elaboration, please do not hesitate to contact Julie Shah or Alisa Dolgova.</li> </ul>	the scope of the call for advice.
6.			This comment was submitted as confidential by the stakeholder.	
7.	Better Finance	General comments	<ol style="list-style-type: none"> <li>Better Finance, the European Federation of Investors and Financial Services Users, would like to thank EIOPA for the opportunity to make comments on this consultation. We worked together with our national member organisations, in particular with der Bund der Versicherten, which represents German insurance policy holders.</li> <li>We fully support the general political objectives aiming at using infrastructure investments as well for enhanced economic growth throughout the EU Member States. But particular awareness is needed, if insurers shall participate in these infrastructure investments. Non-life insurers need capital in order to fulfill very different kinds of indemnity claims, and life insurers need particularly much capital in order to meet their long-term obligations related to retirement provision: "82% of European insurers' investment portfolios are used to back life insurance liabilities and the other 18% is backing non-life liabilities" (cf. Insurance Europe: European Insurance in Figures, Statistics No. 50, December 2014, p. 9). We clearly see the danger that two fundamental and necessary political objectives (infrastructure investments for economic growth / long-term capital accumulation for retirement provision) will come into conflict.</li> <li>That is the reason why we fully support EIOPA's proposals on the identification and calibration of infrastructure risk categories, especially related to the scope and the qualifying criteria. If insurers shall be enabled to intensify their investments in infrastructure projects, the terms and conditions of these investments have to be fixed unambiguously and independently of other political objectives, eg. enhancing infrastructure. Future infrastructure investments especially by the life insurers must not endanger the retirement provisions of European consumers, who - when being a pensioner - depend strongly on these additional private pensions financed by their own contributions.</li> <li>The debate on the appropriateness of infrastructure investments by insurers</li> </ol>	Noted.

		<p>should be a public one and not only be confined to some specialists. This is all the more necessary as it has become obvious that there are divergent positions even amongst the insurers. Only recently in July 2015, the German Association of Insurers (GDV Press Release, 7 July 2015) criticized EIOPA's proposals for the equity risk calibration (between 30% and 39%; CP No. 6.3, p. 56) for being too high. Simultaneously a middle-sized insurer stated that it does not see any need for any private infrastructure investments for the state to be made cheaper (Frankfurter Allgemeine Zeitung, 14 July 2015, p. 29). Thus, related to infrastructure investments, we are concerned of a possible conflict of interest between big insurers on the one hand and medium-sized or smaller insurers on the other hand.</p> <p>5. This conclusion was already confirmed by the President of the Federal Financial Supervisory Authority (BaFin), Felix Hufeld, in an interview for the German Association of Actuaries. He strongly underlined the necessity that the regulatory standards must not be "softened" related to infrastructure investments (Aktuar Aktuell, No. 29, April 2015, p. 5; cf. Speech at the BaFin annual press conference, Frankfurt/Main, 12 Mai 2015). This is the reason why we reject any position aiming at "softening" EIOPA's proposals especially for the equity risk calibration and for the stress analysis.</p> <p>6. The lack of practical experiences and of appetite of many insurers (maybe with the exception of some global insurers) in more risky "alternative" investments is additionally proven by the statistics of the supervisory authority. In accordance with the German law ("Anlagenverordnung"), insurance undertakings can invest up to 35% of their restricted assets in investments associated with a higher level of risk. But the insurers put only 11,8% of their capital assets in these investment types (cf. BaFin Annual Report 2014, p. 178: composition of the risk asset ratio).</p> <p>7. At Western European level, insurers have reduced their own risk equity investments from 22 % of their total portfolio to only 8% from 2001 to 2010, while "other investments" (including infrastructure) halved from 10% to 5% of total (cf. Better Finance briefing paper: "An EU Capital Market Union for growth , jobs and citizens", March 2015, p.6), and that is way before Solvency II. So, why would this behaviour change only because of the newly established infrastructure investment category?</p> <p>8. Additionally Insurance Europe, the European insurance and reinsurance Federation, states in its new annual report: "These assets currently represent a relatively small part of insurers' investment portfolio — a report by the Organisation for Economic Co-operation and Development (OECD) estimates infrastructure investment at less than 1% of total investments" (Insurance Europe: Annual Report 2014/2015, p. 7). As this is a European wide issue, any decision on the EU regulatory standards linked to infrastructure investments should take these quantitative assessments into consideration. Only an actually "prudential" regulation regime will be appropriate to reconcile the two fundamental and necessary political objectives (infrastructure investments for economic growth / long-term capital accumulation for retirement</p>	
--	--	---	--

			provision), which both we clearly advocate.	
8.	BdV	General comments	<p>As Germany's most important NGO of consumer protection related to private insurances (with more than 50.000 individual members) we would like to thank EIOPA for the opportunity to publish comments on this consultation.</p> <p>We fully support the general political objectives aiming at using infrastructure investments as well for enhanced economic growth throughout the EU Member States. But particular awareness is needed, if insurers shall participate at this infrastructure investments. Non-life insurers need capital in order to fulfill very different kinds of indemnity claims, and life insurers need particularly much capital in order to meet their long-term obligations related to retirement provision: "82% of European insurers' investment portfolios are used to back life insurance liabilities and the other 18% is backing non-life liabilities" (cf. Insurance Europe: European Insurance in Figures, Statistics No. 50, December 2014, p. 9). As a consumer organization we clearly see the danger that two fundamental and necessary political objectives (infrastructure investments for economic growth / long-term capital accumulation for retirement provision) will come into conflict.</p> <p>That is the reason why we fully support EIOPA's proposals on the identification and calibration of infrastructure risk categories, especially related to the scope and the qualifying criteria. If insurers shall be enabled to intensify their investments in infrastructure projects, the terms and conditions of these investments have to be fixed unambiguously and independently of other political objectives, eg. enhancing infrastructure. Future infrastructure investments especially by the life insurers must not endanger the retirement provisions of European consumers, who - when being a pensioner - depend strongly on these additional private pensions financed by their own contributions.</p> <p>The debate on the appropriateness of infrastructure investments by insurers should be a public one and not only be confined to some specialists. This is all the more necessary as it has become obviously that there are divergent positions even amongst the insurers. Only recently in July 2015, the German Association of Insurers (GDV Press Release, 7 July 2015) criticized that EIOPA's proposals for the equity risk calibration (between 30% and 39%; CP No. 6.3, p. 56) are too high. Simultaneously a middle-sized insurer stated that it does not see any need for any private infrastructure investments, for the state can make it cheaper (Frankfurter Allgemeine Zeitung, 14 July 2015, p. 29). Thus, related to infrastructure investments, we clearly see a conflict of interest between big insurers on the one hand and medium-sized or smaller insurers on the other hand.</p>	Noted.

			<p>This conclusion was already confirmed by the President of the Federal Financial Supervisory Authority (BaFin), Felix Hufeld, in an interview for the German Association of Actuaries. He strongly underlined the necessity that the regulatory standards must not be "softened" related to infrastructure investments (Aktuar Aktuell, No. 29, April 2015, p. 5; cf. Speech at the BaFin annual press conference, Frankfurt/Main, 12 Mai 2015). This is the reason why we strongly reject any position aiming at "softening" EIOPA's proposals especially for the equity risk calibration and for the stress analysis.</p> <p>The lack of practical experiences of many insurers (maybe with the exception of some global insurers) in more risky "alternative" investments is additionally proved by the statistics of the supervisory authority. In accordance with the German law ("Anlagenverordnung"), insurance undertakings can invest up to 35% of their restricted assets in investments associated with a higher level of risk. But the insurers put only 11,8% of their capital assets in these investment types (cf. BaFin Annual Report 2014, p. 178: composition of the risk asset ratio). So, why this behaviour should change only because of the newly established infrastructure investment category?</p> <p>Additionally Insurance Europe, the European insurance and reinsurance federation, states in its new annual report: "These assets currently represent a relatively small part of insurers' investment portfolio — a report by the Organisation for Economic Co-operation and Development (OECD) estimates infrastructure investment at less than 1% of total investments" (Insurance Europe: Annual Report 2014/2015, p. 7). Apparently this lack of particular investment experience is not confined to German insurers, so any decision on the EU regulatory standards linked to infrastructure investments should take these quantitative assessments into consideration. Only an actually "prudential" regulation regime will be appropriate to reconcile the two fundamental and necessary political objectives (infrastructure investments for economic growth / long-term capital accumulation for retirement provision), which both we clearly advocate.</p>	
9.			This comment was submitted as confidential by the stakeholder.	
10.	BlackRock	General comments	<p>BlackRock welcomes EIOPA's proposals to recognise the specific characteristics of infrastructure investments and the buy-to-hold nature of many these investments. As many of these investments are unrated we also support the ability to use internal assessment and evaluation tools to determine the eligibility of infrastructure assets for more favourable capital treatment</p> <p>We do, however, have a number of concerns regarding the scope of eligible investments and the difference in definitions of "infrastructure" when compared</p>	

			<p>with with flagship European initiatives which affect infrastructure investment such as the European Fund for Strategic Investments (EFSI) and the European Fund for Long Term Investment Funds (ELTIF).</p> <p>In particular the definition of infrastructure project entity is in our view drawn too narrowly. This appears to exclude two key areas of infrastructure financing:</p> <ul style="list-style-type: none"> <li>• Projects assets of a type which are generally operated by an operating company such as a transmission grid where operating and asset servicing are operated on an insourced basis</li> <li>• Pooled funds such as closed-ended funds with no or low levels of leverage such as ELTIFs or other national regulated funds which are designed to be bought on a buy-to-hold basis and which provide portfolio diversification benefits. This is particularly important to ensure that the benefits of the infrastructure investment risk categories are not unnecessarily limited. In addition to pooled funds, other types of vehicles such as SPV and balance sheet separately managed accounts (SMAs), which are greatly used by insurers, also seem to be excluded.</li> </ul> <p>More broadly, with the finalisation of the EFSI Regulation, we recommend that EIOPA develop with EIB/EFSI a clear matrix of which EFSI financed projects will be eligible for more favourable capital charges under the Solvency II framework. As insurance companies are expected to be key providers of the long-term capital needed to finance EFSI initiatives, clarity on which types and structure of projects are suitable will be key to product design and developing a long term pipeline of projects.</p> <p>We would also highlight the potential disincentive created by OECD’s Base Erosion and Profit Shifting (BEPS) project for investments in infrastructure projects via investment vehicles (see our <i>ViewPoint</i> “Eliminate Double Non-Taxation Without Impeding Cross-Border Investment”, available <a href="#">here</a>).</p>	<p>Please see the response to comment 87.</p> <p>Please see the response to comments 52 and 54.</p> <p>Not agreed. Undertakings should be responsible for assessing which projects satisfy the qualifying criteria.</p>
11.	BVI	General comments	<p>BVI represents the interests of the German investment fund and asset management industry. Its 90 members manage assets in excess of EUR 2.6 trillion in UCITS, AIFs and assets outside investment funds. As such, BVI is committed to promoting a level playing field for all investors. BVI members manage, directly or indirectly, the assets of 50 million private clients over 21 million households. BVI’s ID number in the EU Transparency Register is 96816064173-47. For more information, please visit <a href="http://www.bvi.de/en">www.bvi.de/en</a>.</p> <p>Insurance companies are one of the major investor groups in the German institutional funds sector. For several years, we have been experiencing an increasing interest of institutional investors in infrastructure portfolios. As we are of the opinion that infrastructure is a distinct asset class that cannot be easily compared with other equity,</p>	

			<p>bond or loan investments, we welcome the Commission's approach to set up a special treatment for this kind of investments under Solvency II.</p> <p>According to this consultation paper, there will be two preconditions that an investment object has to fulfill to profit from the special treatment. First, it must fit within the definition of infrastructure suggested in this paper. In a second step, it must fulfill all the conditions of a qualifying infrastructure investment as outlined in this paper. Consequently, there will be infrastructure investments per definition that do not profit from a special treatment.</p> <p>Though we consider this two step approach an appropriate way to sort out the assets eligible for special treatment, we think that the conditions for qualifying infrastructure investments in the area of non-rated debt and equity investments are somewhat too restrictive. It seems to us that only an "ideal" infrastructure project would be able to meet these conditions. Practically, even very attractive projects might lack some of the preconditions. To avoid that the scope of application of the special infrastructure treatment becomes too narrow, we suggest to introduce a scoring system when assessing the qualifying conditions. This would mean that an asset or project may qualify even if some condition is not met, provided that the majority of conditions is fulfilled.</p>	<p>Please see the response to comments 1 and 71.</p>
12.	GDV	General comments	<p>We welcome the fact that EIOPA's proposals on appropriate capital requirements for infrastructure investments relate to debt and equity investments. We share EIOPA's view that the current treatment of infrastructure debt and equity investments in the standard formula is too conservative. The proposals are a step in the right direction. However, we consider the proposed improvements to be very limited since in our view capital charges in particular for unlisted equity investments in infrastructure are still too high.</p> <p>Moreover, the additional qualitative requirements regarding risk management (section 7) especially requesting additional stress tests contradict the envisaged improvements.</p> <p>Key positions are</p> <ul style="list-style-type: none"> <li>• We welcome that EIOPA takes a broad definition of infrastructure. The set of criteria appear to be suitable to eliminate infrastructure investments where lower risk charges are not appropriate. However the definition of infrastructure and the set of criteria need some further refinements. In particular more flexibility is needed in the area of criteria, since otherwise many suitable projects would not qualify for preferential regulatory treatment.</li> <li>• We believe that a distinction between listed and unlisted equity infrastructure investments is crucial. Listed infrastructure equities could remain in the type 1 category. However, leaving unlisted equity investments in infrastructure in the equity risk sub-module means that its characteristics are not properly reflected. In our view</li> </ul>	<p>Please see the response to comment 4.</p> <p>Please see the responses to comments 1 and 71.</p> <p>Please see resolution to comment 304.</p>

			<p>only a separate market risk sub-module with for example 20 per cent capital charge would appropriately reflect the particularities of this asset class: predictable cash flows which are independent from fluctuations at equity markets and only minor or no correlation to other asset classes.</p> <p>The improvements for infrastructure debt in the spread risk module are too limited and do not sufficiently reflect higher recovery rates as compared to corporate bonds and the existence of risk mitigation pools that reduce the loss given default.</p> <ul style="list-style-type: none"> <li>• For infrastructure debt the preferred solution is a treatment under the counterparty default risk module as type 2 in order to adequately reflect the strong recovery rates and long-term character of infrastructure investments.</li> <li>• Additional qualitative requirements relating to investments in infrastructure projects should be very limited. We believe there is only little need and justification for these requirements. Furthermore, there is the risk, that the higher qualitative requirements will undermine potential benefits due to high complexity and costs. This would contradict political will and efforts to improve the conditions for infrastructure investments.</li> </ul> <p>Given appropriate internal assessments, we believe that the advice should consider internal ratings equivalent to the External Credit Assessment Institutions (ECAI) rating.</p>	<p>Not agreed. Please see the section "Counterparty default risk module" in Chapter 2.</p> <p>Not agreed. EIOPA's objective is to propose a treatment within Solvency II that can be prudentially justified. It is appropriate for EIOPA to address the appropriateness of the treatment regarding risk management requirements, as well as regarding the requirements for the standard formula SCR. Please also see the response to comment 4.</p> <p>Please see the response to comment 2.</p>
13.	IE	General comments	<p>Insurance Europe welcomed the call for advice from the European Commission and recognises that EIOPA has made a valuable contribution in its draft advice. The specific draft proposals are a step in the right direction. However, the proposed <b>definition is too narrow</b> and the <b>capital charges still exaggerate the risk</b> posed by investing in infrastructure. Therefore, the current draft is not sufficient to remove the unnecessary barriers to investment.</p> <p>Although it is difficult to determine the exact risk parameters, there is enough evidence that a risk-based calibration can be set at significantly lower levels for both infrastructure debt and equity. This should be reflected for individual debt and equity risks, but also examined from a portfolio perspective, in which correlation between infrastructure and other investments should be recognised as being zero or very close</p>	<p>Not agreed regarding the definition and calibration. Please see the responses on the individual comments.</p> <p>Due to a lack of suitable data, these claims are difficult to evaluate. The academic literature does also not give clear indications, especially on the topic of low or zero correlation of infrastructure</p>

			<p>to zero. In addition, several concerns remain about the identification of infrastructure risk categories, which should be addressed in EIOPA’s final advice to ensure that particular details in the identification requirements do not unnecessarily exclude good infrastructure projects.</p> <p>The following adjustments should be made to the proposed <b>definition</b>:  The definition is too restrictive. It should be extended to <b>corporates operating infrastructure assets</b>, provided that the cash flows or assets pertaining to the infrastructure activities are efficiently ring-fenced and the infrastructure investors benefit from a privileged access to such cash-flows and/or assets.</p> <p>A number of adjustments should be made to the proposed <b>criteria</b>, including:</p> <ul style="list-style-type: none"> <li>■ There needs to be <b>more flexibility in the area of criteria</b>, since the current list of criteria has the potential to disqualify many projects and, therefore, not remove impediments for infrastructure investments.</li> <li>■ The advice should consider <b>internal ratings</b> equivalent to the External Credit Assessment Institutions (ECAI) rating, as long as such internal ratings are assigned based upon an appropriate internal credit assessment, consistent with Solvency 2’s prudent person principle.</li> </ul> <p>Regarding the <b>recalibration proposals</b>, Insurance Europe notes the following:</p> <ul style="list-style-type: none"> <li>■ If a recalibration of the risk charges for infrastructure in the spread risk module is chosen, then a <b>combination of EIOPA’s liquidity and credit risk approach</b> should be considered.</li> <li>■ A <b>proposal for a calibration in the counterparty default risk module</b> should be included in EIOPA’s advice. An example for a calibration is included in Insurance Europe’s comments to section 5.1.</li> </ul> <p>The advice does not <b>distinguish between listed and unlisted infrastructure equity</b>. The advice should include the latter in a new market risk sub-module with a risk charge of 22% and very low, preferably zero, correlation with other sub-modules.</p>	<p>investments to other asset classes.</p> <p>Please see the response to comment 49.</p> <p>Please see the response to comments 1 and 71.</p> <p>Please see the response to comment 2.</p> <p>Please see section “The possibility of combining liquidity and credit risk approach” in Chapter 2.</p> <p>Not agreed. EIOPA appreciates the constructive approach taken in providing a detailed proposal. For an assessment of the counterparty default risk approach see the section “Counterparty default risk module” in Chapter 2.</p> <p>See resolution of comment 304.</p>
14.	IRSG	General comments	IRSG welcomes EIOPA’s draft advice as a step in the right direction. However, the current draft does not go far enough in order to remove the impediments to	

		<p>infrastructure investments for insurers.</p> <p>The proposed definition refers to project finance and excludes an important part of infrastructure investments.</p> <p>Furthermore, the capital charges are still too high for the risk posed by investments in infrastructure.</p> <p>The framework on criteria proposed by EIOPA appears very restrictive and might exclude even more investments. Therefore, IRSG suggests that EIOPA introduces more flexibility in the criteria.</p> <p>IRSG acknowledges the challenges in calibrating risk charges. However, there is sufficient evidence that the capital requirements can be lowered. This holds true for the risk charges for the individual asset classes, but should also apply in a portfolio context where low correlation factors between infrastructure and other asset classes, preferably zero, should be recognised.</p> <p>IRSG highlights the following regarding the definition:</p> <ul style="list-style-type: none"> <li>- The definition with reference to project finance excludes unnecessarily any infrastructure corporates. This exclusion should be avoided.</li> <li>- Particularly, the definition should be extended so that infrastructure projects that are pre-financed or co-financed by the European Investment Bank (EIB) fall within the proposed definition. In Section 3.1., we provide examples of high-quality transactions within the Investment Plan for Europe, that would be excluded from investment eligibility due to the overly restrictive definition proposed by EIOPA.</li> </ul> <p>IRSG highlights the following regarding the criteria:</p> <ul style="list-style-type: none"> <li>- There needs to be more flexibility in the area of criteria since the current list of criteria has the potential of disqualifying many projects and therefore not removing impediments for infrastructure investments.</li> </ul> <ul style="list-style-type: none"> <li>- IRSG proposes the allowance of internal ratings for the determination of credit</li> </ul>	<p>Please see the response to comment 49.</p> <p>Not agreed – see more detailed responses below.</p> <p>Please see the response to comments 1 and 71.</p> <p>Not agreed. For equity correlations please see section “Correlation of qualifying infrastructure equity investments with other equities” in Chapter 2. Regarding the correlation with other risks EIOPA considers the treatment set out in the Delegated Regulation as adequate.</p> <p>Please see the response to comment 49.</p> <p>Please see the responses to comments 1 and 71.</p> <p>Please see the response to comment 2.</p>
--	--	--	--

			<p>quality steps for infrastructure.</p> <ul style="list-style-type: none"> <li>- Further proposals on the criteria are included in IRSG’s comments below.</li> </ul> <p>IRSG highlights the following regarding the calibration:</p> <ul style="list-style-type: none"> <li>- IRSG suggests that EIOPA includes a calibration proposal for the counterparty default risk module.</li> <li>- If a recalibration in the spread risk module is chosen, then the liquidity and credit risk approach should be combined.</li> <li>- The credit risk approach should not be restricted to CQS 2 and 3.</li> <li>- The probability of sale set at 10% in the liquidity approach is not well justified and leads to too conservative results.</li> <li>- EIOPA should make a separate proposal for unlisted infrastructure equity investments.</li> <li>- Recognition of low, ideally zero, correlation between infrastructure and other assets is key.</li> </ul>	<p>Not agreed. Please see section “Counterparty default risk module” in Chapter 2.</p> <p>Please see section “The possibility of combining liquidity and credit risk approach” in Chapter 2.</p> <p>Not agreed. Please see section “Probability of sale in the liquidity approach” in Chapter 2.</p> <p>Please see resolution of comments to Chapter 6 of the CP.</p>
15.	LaG	General comments	<p>We strongly welcome this consultation from EIOPA, building on both previous consultation and dialogue with market participants. The approach and methodology used, including taking into account principles, as well as qualitative and quantitative data, is very welcome and we would advocate EIOPA and other institutions using this consultation as a template for best practice.</p> <p>We set out below specific points below as requested. In addition our key points are:</p> <p>We believe that there should be a level playing field for long term infrastructure investment between sectors (i.e. banks, insurers and pension funds) as well as within sectors. The creation of a level playing field and the removal of barriers to investment</p>	

			<p>by insurers could greatly assist the level of investment by all insurers in the European infrastructure space. Whilst we recognise this consultation is trying to ensure a more level-playing field between sectors, which is of course welcome, the focus of the consultation is Standard Formula (SF), not the internal model (IM). This has implications for a significant number of insurers which use an Internal Model and therefore their ability to invest in the EU's infrastructure to support growth and jobs without negatively impacting on financial stability.</p> <p>We strongly believe that all insurers should be treated equally in relation to infrastructure investment. This could be achieved through EIOPA's final advice to the Commission setting out that any reduction in the SF stress for infrastructure is directly read across into IM stresses. The final advice to the European Commission should set out the merits of such a proposal and the impact of not allowing IM "users" the same advantages as SF "users" and why such a disparity between the two is deemed desirable.</p>	<p>Not agreed. Defining such discounts would not be consistent with the principle based requirements for internal models.</p>
16.	LTIIA	General comments	<p>LTIIA welcomes the contents of this paper following the previous round of consultations (CP-15-003), noting the recognition by EIOPA of a need for tailored treatment of (low-risk) infrastructure investments in general as well as recommendations for lowering Equity Risk Charge and the introduction of a discount for the Spread Risk Charge for infrastructure debt, specifically.</p> <p>We believe that the EIOPA's analysis and recommendations can benefit from drawing a deeper distinction between listed and unlisted equity investments in infrastructure and from being more explicit about the prevalence of substance over (legal) form in some of the EIOPA definitions and criteria.</p> <p>We believe in particular that regulators should leave some flexibility to insurers in assessing if an infrastructure investment qualifies under the newly created category. In other words, not meeting one criterion as identified by EIOPA should not automatically lead to disqualifying one specific investment if not meeting this criterion does not lead to material deviation from the infrastructure features that EIOPA has intended to capture.</p> <p>This minimal flexibility will be essential, should EIOPA advise maintaining a detailed list of qualification criteria. In our view, the criteria proposed tend to limit the infrastructure space to PPP and renewables, to the exclusion of projects with material demand risk. In terms of new asset finance per year, PPPs and renewables in Europe represent only ca. €20 billion each (sources: Market Update. Review of the European PPP Market in 2014, by EPEC and Global Trends in Renewable Energy Investment 2015, by UNEP/Bloomberg), or less than 20% of the total infrastructure investment needs in Europe estimated by EIB (source: Private Infrastructure Finance and Investment in Europe, EIB Working Paper 2013/02). We therefore suggest a more</p>	<p>Please see response to comments 53 and 304.</p> <p>Please see the responses to comments 1 and 71.</p>

			<p>inclusive approach in setting and implementing the infrastructure criteria by EIOPA to avoid limiting the application scope for this standard to a minor part of the market.</p> <p>Our specific comments on these and other topics are captured below.</p>	
17.	Moody's	General comments	<p>For consistency with the Consultation Paper we adopt the following terminology in our comments further below:</p> <ul style="list-style-type: none"> <li>• "Project Loan Study" refers to Moody's Special Comment: "Default and Recovery Rates for Project Finance Bank Loans, 1983-2013" March 2015</li> <li>• "Infrastructure Addendum Study" refers to Moody's Special Comment: "Default and Recovery Rates for Project Finance Bank Loans, 1983-2011 Addendum" October 2013</li> </ul>	Noted.
18.	NATIXIS	General comments	<p>We consider this consultation paper from EIOPA as a significant step toward an adequate solvency II treatment for Infrastructure debt investment and would like to express our acknowledgement to EIOPA for their work.</p> <p>In order not to be overly restrictive we consider that there is a need to include some flexibility as the cumulative effect of the list of criterias could potentially led to disqualify many projects and to dangerously increase competition in a very narrow investment universe.</p> <p>Regarding the capital charge determination, if the treatment in the spread risk module is confirmed we recommend to combine the liquidity and the spread risk approach.</p>	<p>Please see the responses to comments 1 and 71.</p> <p>Please see section "The possibility of combining liquidity and credit risk approach" in Chapter 2.</p>
19.	RSA	General comments	<p>We welcome this opportunity by EIOPA to provide input on this topic.</p> <p>One of our main comments concerns the definition of "infrastructure". As EIOPA highlights in section 3, the scope of the term can be quite broad; nonetheless, we believe it would be helpful if EIOPA provided some specific examples to assist interested parties in identifying all relevant items.</p> <p>We agree that the generally lower risk profile exhibited by infrastructure investments ought to be reflected in the risk charges and we therefore agree with the reduced charges proposed by EIOPA.</p>	Please see the response to comment 61.

20.	The Investment Association	General comments	<p>The Investment Association represents UK investment managers. We have over 200 members who manage more than £5 trillion for clients around the world. Our aim is to make investment better for clients so that they achieve their financial goals; better for companies so that they get the capital they need to grow; and better for the economy so that everyone prospers. Ultimately much of what they manage belongs to the man in the street through their savings, insurance products and pensions.</p> <p>The Investment Association welcomes EIOPA's proposals on identifying and calibrating infrastructure investment, which take into account the specific characteristics, risk profiles, and long-term nature of infrastructure investment.</p> <p>However, we have a number of concerns with the proposed scope and qualifying criteria as they currently stand.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Taken as a whole, the criteria proposed by EIOPA are overly prescriptive, and may exclude all but a very few projects. To this extent they will act as a barrier to infrastructure investment.</li> <li><input type="checkbox"/> Whilst the definition of infrastructure proposed by EIOPA is reasonable, it deliberately excludes infrastructure corporates. This is despite the fact that the Moody's project loan study (cited in Annex 1) shows there is the same risk for corporates as for private finance, with the drivers of recovery being strong covenants and limited ownership of assets.</li> <li><input type="checkbox"/> By adopting this approach EIOPA: <ul style="list-style-type: none"> <li><input type="checkbox"/> seems to incentivise a private equity model of infrastructure financing versus a corporate model, which is unwelcome; and</li> <li><input type="checkbox"/> excludes corporates, such as utility providers or network operators, therefore considerably constraining the pipeline of infrastructure projects that insurers can invest in.</li> </ul> </li> <li><input type="checkbox"/> The definition of infrastructure project entity is drawn too narrowly. This appears to exclude two key areas of infrastructure financing: <ul style="list-style-type: none"> <li><input type="checkbox"/> Project assets that are operated by an operating company, such as a transmission grid where operating and asset servicing are operated on an insourced basis.</li> <li><input type="checkbox"/> Pooled funds such as closed-ended funds with no or low levels of leverage such as ELTIFs or other similar AIFs which are designed to be bought on a buy-to-hold basis, and which provide portfolio diversification benefits.</li> </ul> </li> <li><input type="checkbox"/> The additional requirements proposed by EIOPA on predictability of revenues,</li> </ul>	<p>Please see the responses to comments 1 and 71.</p> <p>Please see the response to comment 49.</p> <p>Please see the response to comment 87.</p> <p>Please see the response to comments 52 and 54.</p> <p>Please see the response to comment 1</p>
-----	----------------------------	------------------	---	---

			<p>strong sponsors, financial risk and political risks are either unnecessary or too granular. If left unchanged, there is a risk that they would exclude too many projects severely impacting the pipeline of projects that insurers can invest in.</p> <p>In our response we highlight key changes that would be required to ensure that the qualifying criteria are fit for purpose. In addition to these changes, we strongly recommend that EIOPA should make clear that projects are only required to fulfil the qualifying criteria at the time of investment, to avoid future cliff effects.</p>	<p>and responses to the specific comments on the individual criteria below.</p> <p>Not agreed. The requirements need to be satisfied on an ongoing basis in order to ensure that the SCR treatment continues to be appropriate.</p>
21.	AAE	Section 1.1.	<p>We agree that the current structure of the standard formula requires further work to appropriately include infrastructure assets (loans). Given the very bespoke nature of this asset class, and considering the scope of insurance companies' SCR, we recommend that under standard formula appropriate consideration is both given to the specific capital charge for infrastructure assets and, also, to correlation / relationships of this asset class with other asset classes (which, ultimately) and other risk categories as catastrophic risk. The consultation paper doesn't give advice on how to calibrate the diversification effects arising from an additional asset class.</p> <p>Having said this, we note that an internal model or partial internal model approach may be well more suitable to capture the riskiness of this asset class – however, the benefits for insurers as institutional investors of having an enhanced standard formula to incorporate infrastructure assets as a separate asset class should be in balance with the increased model risk which is systemic for the whole industry.</p>	<p>Regarding the correlations for qualifying infrastructure equities please see section "Correlation of qualifying infrastructure equity investments with other equities" in Chapter 2. Regarding the correlation with other risks EIOPA considers the treatment set out in the Delegated Regulation as adequate.</p> <p>The exposure to cat risk would depend on the geographical distribution and the insurance coverage for cat losses. It seems worth mentioning that the correlation between market and non-life underwriting risk module are set out in the Solvency II Directive.</p> <p>Please see Par. 1.219 in the CP.</p>
22.	GDV	Section 1.1.	<p>We share EIOPA's view that Infrastructure investments show a better risk profile than the current treatment in the standard formula of these investments indicates. Since the segment of infrastructure is quite inhomogeneous a set of definitions would be most adequate to identify those investments and categorise them.</p> <p>Non-listed infrastructure projects generally have not so much in common with equities. At least a very low correlation for infrastructure projects to all other standard investments if not zero should be considered.</p>	<p>EIOPA proposes such a set of definitions. Regarding the correlations please see section "Correlation of qualifying infrastructure equity investments with other equities" in Chapter 2.</p> <p>Please see resolution of comment 304.</p>
23.	RSA	Section 1.1.	<p>We note the reasons for this paper; however, as acknowledged by EIOPA, a relatively small proportion of investments are made by insurers into this asset class, so this would appear to be a lot of effort expended for very little result.</p>	<p>See resolution of comment 239.</p>

24.	AAE	Section 1.2.	We welcome consideration of additional requirements for investments and system of governance for infrastructure assets – but would also recommend that consideration is given that the current governance and risk management requirements under Solvency II are of high standards and whether this may be deemed suitable and sufficient for these assets.	Partially agreed. As described in the CP, EIOPA analysed the existing Solvency II requirements and set out where it was considered important to further specify a number of elements. It also clarified where the existing Solvency II requirements were considered to be sufficient.
25.	AAE	Section 1.4.	We note the structure of the consultation paper and believe it addresses the key areas around infrastructure assets. For consideration under Solvency II we miss the analysis of diversification effects with other risk categories (other asset classes, catastrophic risk, etc).	See resolution of comment 21.
26.	RSA	Section 1.3.	We appreciate the fact that EIOPA has consulted the industry on this topic.	Noted.
27.	AAE	Section 1.5.	<p>We note that, as professional actuaries, our standards of practice require us to <i>“consider whether sufficient and reliable data are available to perform the actuarial services. Data are sufficient if they include the appropriate information for the work. Data are reliable if that information is materially accurate.”</i> (European Standard of Actuarial Practice (ESAP) 1).</p> <p>Under these requirements, actuaries will be under pressure to ensure that valuation and capital charges for infrastructure assets adhere to rules and regulations (Solvency II) and professionals standards. We note that Prof. Blanc-Brude’s paper indicates that data quality of infrastructure projects currently is inappropriate – which touches on the topic of sufficiency of data.</p> <p>We also note the mentioning of “well diversified” portfolios (as a working assumption) – and we encourage EIOPA to confirm this assumption and how it has been reached. Further clarification of what a well diversified infrastructure portfolio means would be beneficial.</p> <p>In this context, we also note that a number of classes within infrastructure assets are exposed to NatCat and man made risks – which links back to Cat risk SCR and could be of systemic nature (such that even well-diversified portfolios can not get rid of this risk).</p>	<p>Noted.</p> <p>There seems to be a widespread view that the availability of performance data for infrastructure investments can be improved. EIOPA is aware that there are a number of initiatives under way.</p> <p>EIOPA is not completely clear what is meant by “working assumption”. The data used for the calibration was produced by a broad pool of assets. The detailed description of the approach used for calibration can give an indication how “well diversified” is to be interpreted.</p> <p>The exposure to cat risk would depend on the geographical distribution and the insurance coverage for cat losses. It seems worth mentioning that the correlation between market and non-life underwriting risk module are set out in the Solvency II Directive.</p>

			<p>We also note the intention to require infrastructure debt have a minimum credit rating of 3 – we commented on this in section 3.3.3 below. We appreciate the proposed approach to distinguish between infrastructure debt with an investment credit rating and those with a subinvestment credit rating. While this requirement applicable to qualifying infrastructure debt is meant to ensure a high quality investment, we note that in a standard formula approach, and for pragmatic reasons, this may be better addressed via a “penal” capital charge for subinvestment credit rated infrastructure debt. Further comments on this are available in 3.3.3.</p> <p>We note the proposed treatment for infrastructure equity investments. We also provided comments further down below on the risk management considerations.</p>	<p>Please see the section “Credit quality step 3” in Chapter 2.</p>
28.	AFME ICMA	Section 1.5.	<p>The WG supports an adjustment of the spread risk charges based on a comparison of loss given default rates in order to more adequately reflect the risk characteristics of infrastructure debt instruments, especially lower default rates, higher recovery rates and regular cash flows.</p> <p>Current capital charges as well as the charges currently proposed in EIOPA’s draft advice make infrastructure investment uneconomical. The proposed adjustment for the spread module consists in adjusting the capital charge by the ratio of the loss-given default for infrastructure debt to the loss-given default for corporate bonds.</p> <p>This could be achieved through the following amendment to the Solvency II spread risk sub-module:</p> <p>Article 176</p> <p>(Add) 4 Notwithstanding paragraph 3, bonds or loans to infrastructure shall be assigned a reduced risk factor stressreduced,<i>i</i> as follows:</p> <p><input type="checkbox"/></p> <p>where:</p> <p>(a) <math>\text{stress}_i</math> denotes a function of the credit quality step <i>i</i> and/or of the modified duration of the bond or loan <i>i</i>, as set out in paragraph 3 depending on whether a credit assessment by a denominated ECAI is available or not;</p> <p>(b) <math>\text{LGD}_{\text{specific}}</math>, denotes the loss-given default to the infrastructure bonds or loans;</p> <p>(c) <math>\text{LGD}_{\text{other}}</math>, denotes the loss-given default for bonds.</p>	<p>Not agreed as the proposed approach assumes implicitly that the higher recovery values for infrastructure reduce the liquidity component of the spread.</p>

		<p>For the purposes of this amendment proposal, the following could be used as an example of how to determine the LGD figures:</p> <p>(1) [20%;35%] for the infrastructure bonds or loans LGDspecific based on the Moody’s study “Default rates and recovery rates for project finance bank loans 1983-2008” for the infrastructure and power industry sector;</p> <p>(2) 60% for the LGDothers as it is the expected recovery rate for a BBB bond.</p> <p>Alternatively, the WG believes that the liquidity and credit risk approaches can be combined into a single approach accounting for these two risks. According to paragraph 1.21 EIOPA is still considering whether the two methods should be combined under the spread risk module. Furthermore, under a combined approach, the spreads should reduce by approximately the sum of the respective reductions for the credit risk approach and liquidity approach.</p> <p>The WG supports EIOPA’s proposal that infrastructure debt investments without an ECAI rating may still qualify for a tailored standard formula treatment. This issue is important since infrastructure debt investments are often unrated. The WG supports EIOPA’s proposal of treating qualifying unrated infrastructure debt investments equivalent to rated infrastructure debt with credit quality step 3.</p> <p>Moreover, both internal ratings and ECAI ratings should be allowed.</p> <p>The WG also supports EIOPA’s aim to change the calibration for infrastructure equity investments. For listed equity the WG supports the reduced risk charge of 30 - 39%. However, a separate proposal for unlisted infrastructure equity is needed. The proposal should take into account the low correlation between unlisted infrastructure equity and other asset classes which the EIOPA proposal unfortunately lacks. The WG acknowledges the difficulties of finding a valid data base for unlisted equity. But it also believes that listed equities should not be used as a proxy to calibrate the risk capital charge for unlisted infrastructure equity.</p> <p>The WG is concerned about the additional requirements for risk management, including the requirement on stress testing. With regard to the prudent person principle, these requirements do not seem necessary, but only cause additional efforts and costs. This is contradictory to the political objective facilitating the long term financing of</p>	<p>Not agreed regarding the 100 % combination. Please see sections “Conclusions: debt calibration” and “The possibility of combining liquidity and credit risk approach” in Chapter 2.</p> <p>Please see the response to comment 2.</p> <p>Please see resolution of comment 304.</p> <p>Not agreed. Please see the response to comments 4, 12 and 328. In addition, the requirements are not considered to result in material additional costs as they relate</p>
--	--	--	---

			infrastructure development. Therefore the impact of new requirements and whether they are really necessary should be carefully considered.	to the proposed qualifying criteria for infrastructure investments and the existing Solvency II requirements for investments and risk management.
29.			This comment was submitted as confidential by the stakeholder.	
30.	ABI	Section 1.5.	<p>The ABI believes that it is possible, and preferable, to combine the credit and liquidity approaches as suggested by EIOPA in paragraph 1.21.</p> <p>If, however, EIOPA decides to use only one of the above, the credit risk methodology is more appropriate. This is because one of the distinguishing features of infrastructure debt is higher recovery rates (lower LGD), which results in lower credit risk as compared to corporate debt.</p>	<p>Please see the section "The possibility of combining liquidity and credit risk approach" in Chapter 2.</p> <p>Please see section "Conclusions: debt calibration" in Chapter 2.</p>
31.			This comment was submitted as confidential by the stakeholder.	
32.			This comment was submitted as confidential by the stakeholder.	
33.	GDV	Section 1.5.	<p>We support EIOPA's reconsideration of the calibration of Infrastructure equity investments only regarding listed equity. For listed equity we support the reduced risk charge 30 - 39 per cent. However, we believe that the low correlation between unlisted infrastructure equity and other equity should be taken into account. The EIOPA proposal unfortunately lacks any explicit recognition of lower volatilities and diversification that unlisted infrastructure equity bring to insurers' investment portfolios. We acknowledge the difficulties in finding a valid data base for unlisted equity. But we don't believe that listed equities can be used as a proxy to calibrate the risk capital charge for infrastructure unlisted equity. While a perfect data base is always difficult to find, in our view already existing evidence supports a significantly different regulatory treatment for listed vs. unlisted equity.</p> <p>We are concerned about the additional requirements for risk management e.g. stress tests. We acknowledge that sound risk analysis and controlling of infrastructure investments is crucial. However, with regard to the prudent person principle, these requirements do not seem necessary since appropriate risk analysis is already covered by pillar 2 of Solvency II. Additional requirements could cause significantly higher costs and ultimately contradict the political objective facilitating the long term financing of infrastructure development. Therefore the impact of new requirements and whether they are really necessary should be carefully considered.</p> <p>For infrastructure debt the preferred solution is a treatment under the counterparty default risk module in order to adequately reflect the strong recovery rates and long-</p>	<p>Please see resolution of comment 304.</p> <p>Not agreed, please see the response to comments 4, 12, 24 and 28.</p> <p>Not agreed. Please see section "Counterparty default risk module" in Chapter 2.</p>

			<p>term character of infrastructure investments.</p> <p>We support EIOPA’s suggestion that infrastructure debt investments without an ECAI rating may still qualify for a refined standard formula treatment. We consider this issue as important since infrastructure debt investments are typically unrated. We support EIOPA’s suggestion to treat qualifying unrated infrastructure debt investments with credit quality step 3. Moreover we suggest to allow for internal credit assessments in the classification of these investments given the utilised in-house rating methodology is compliant with Solvency II requirements as well as the use of non-ECAI ratings.</p> <p>Within the asset class of qualifying infrastructure, strong guarantees by RGLA should also benefit from a specific prudential treatment. Due to their lower risk, qualifying infrastructure guaranteed by RGLA should be treated as central government exposures.</p>	<p>Please see the response to comment 2.</p> <p>Please see section “Treatment of RGLA guarantees” in Chapter 2.</p>
34.	IE	Section 1.5.	<p>Insurance Europe already proposed in its response to EIOPA’s first consultation a possible way of adjusting the spread risk charges. This proposal is based on a comparison of loss given default rates which allows more adequate reflection of the risk characteristics of infrastructure debt instruments, especially lower default rates, higher recovery rates and regular cash flows. Current capital charges, as well as the charges currently proposed in EIOPA’s draft advice, make infrastructure investment uneconomical. The proposed adjustment under the Insurance Europe proposal for the spread module consists of adjusting the capital charge by the ratio of the loss-given default for infrastructure debt to the loss-given default for corporate bonds.</p> <p>This could be achieved through the following amendment to the Solvency II spread risk sub-module:</p> <p>Article 176</p> <p>(Add) 4 Notwithstanding paragraph 3, bonds or loans to infrastructure shall be assigned a reduced risk factor <math>stress_{reduced,i}</math> as follows:</p> $stress_{reduced,i} = stress_i \times \frac{LGD_{specific}}{LGD_{other}}$ <p>where:</p> <p>(a) <math>stress_i</math> denotes a function of the credit quality step <math>i</math> and/or of the modified duration of the bond or loan <math>i</math>, as set out in paragraph 3 depending on whether a credit assessment by a denominated ECAI is available or not;</p> <p>(b) <math>LGD_{specific}</math> denotes the loss-given default to the infrastructure bonds or loans;</p>	<p>See resolution of comment 28.</p>

		<p>(c) <math>LGD_{other}</math>, denotes the loss-given default for bonds.</p> <p>For the purposes of this amendment proposal, the following could be used as an example of how to determine the LGD figures:</p> <p>(1) [20%;35%] for the infrastructure bonds or loans <math>LGD_{specific}</math> based on the Moody's study "Default rates and recovery rates for project finance bank loans 1983-2008" for the infrastructure and power industry sector;</p> <p>(2) 60% for the <math>LGD_{other}</math> as it is the expected recovery rate for a BBB bond.</p> <p><b>Alternatively, Insurance Europe believes the two methods proposed by EIOPA for a spread risk calibration (ie liquidity and credit risk approach) can be combined to result in one single approach that takes into account both liquidity effects and a reduced credit risk.</b></p> <ul style="list-style-type: none"> <li>■ Insurance Europe understands that EIOPA is still considering whether the two methods under the spread risk module should be combined (para 1.21).</li> <li>■ The reduction in spreads of such a combined approach should approximatively equal the sum of the reductions under the credit risk approach and the liquidity approach. . In any case, the reduction in spread that is obtained with the first method presented by Insurance Europe above should be considered as a minimum for the reduction.</li> </ul> <p><b>Insurance Europe supports EIOPA's proposal that infrastructure debt investments without an ECAI rating may still qualify for a tailored standard formula treatment.</b> This issue is important since infrastructure debt investments are often unrated. Insurance Europe supports EIOPA's proposal of <b>treating qualifying unrated infrastructure debt investments as equivalent to rated infrastructure debt with credit quality step 3.</b> Moreover, both internal ratings and ECAI ratings should be allowed for.</p> <p>Insurance Europe also supports EIOPA's aim to change the calibration for infrastructure equity investments. <b>For listed equity Insurance Europe supports the reduced risk charge of 30 - 39%.</b></p> <p><b>However, a separate proposal for <i>unlisted</i> infrastructure equity is needed.</b> The proposal should take into account the low correlation between unlisted infrastructure equity and other asset classes, which the EIOPA proposal unfortunately lacks.</p>	<p>Please see resolution of comment 28</p> <p>Noted. For internal ratings please see the response to comment 2.</p>
--	--	--	---

			<p>Insurance Europe acknowledges the difficulties of finding a valid data base for unlisted equity. However, it also believes that listed equities should not be used as a proxy to calibrate the risk capital charge for unlisted infrastructure equity.</p> <p><b>Insurance Europe is concerned about the additional requirements for risk management, including the requirement on stress testing.</b> With regard to the prudent person principle, these requirements <b>do not seem necessary, but only cause additional administrative burdens and costs.</b> This is contradictory to the political objective of facilitating the long-term financing of infrastructure development. Therefore, the impact of new requirements and whether they are really necessary should be carefully considered.</p>	<p>Please see resolution of comment 304.</p> <p>Please see the response to comments 4, 12, 24, 28 and 328.</p>
35.	IRSG	Section 1.5.	<p>The liquidity and credit risk approaches can be combined into a single approach accounting for these two risks. According to paragraph 1.21 EIOPA is still considering whether the two methods should be combined under the spread risk module. Furthermore, under a combined approach, the spreads should reduce by approximately the sum of the respective reductions for the credit risk approach and liquidity approach.</p> <p>IRSG supports an adjustment of the spread risk charges based on a comparison of loss given default rates in order to more adequately reflect the risk characteristics of infrastructure debt instruments, especially lower default rates, higher recovery rates and regular cash flows.</p> <p>Current capital charges as well as the charges currently proposed in EIOPA's draft advice make infrastructure investment uneconomical. The proposed adjustment for the spread module consists in adjusting the capital charge by the ratio of the loss-given default for infrastructure debt to the loss-given default for corporate bonds.</p> <p>This could be achieved through the following amendment to the Solvency II spread risk sub-module:</p> <p>Article 176</p> <p>(Add) 4 Notwithstanding paragraph 3, bonds or loans to infrastructure shall be assigned a reduced risk factor <math>stress_{reduced,i}</math> as follows:</p> $stress_{reduced,i} = stress_i \times \frac{LGD_{specific}}{LGD_{other}}$ <p>where:</p>	<p>Please see resolution of comment 28.</p> <p>Please see resolution of comment 28.</p>

		<p>(d) <math>stress_i</math> denotes a function of the credit quality step <math>i</math> and/or of the modified duration of the bond or loan <math>i</math>, as set out in paragraph 3 depending on whether a credit assessment by a denominated ECAI is available or not;</p> <p>(e) <math>LGD_{specific}</math>, denotes the loss-given default to the infrastructure bonds or loans;</p> <p>(f) <math>LGD_{other}</math>, denotes the loss-given default for bonds.</p> <p>For the purposes of this amendment proposal, the following could be used as an example of how to determine the LGD figures:</p> <p>(3) Approximately 20%;35% for the infrastructure bonds or loans <math>LGD_{specific}</math> based on the Moody's study "Default rates and recovery rates for project finance bank loans 1983-2008" for the infrastructure and power industry sector;</p> <p>(4) 60% for the <math>LGD_{other}</math> as it is the expected recovery rate for a BBB bond</p> <p>Alternatively, IRSG believes that the liquidity and credit risk approaches can be combined into a single approach accounting for these two risks. According to paragraph 1.21 EIOPA is still considering whether the two methods should be combined under the spread risk module. Furthermore, under a combined approach, the spreads should reduce by approximately the sum of the respective reductions for the credit risk approach and liquidity approach.</p> <p>IRSG supports EIOPA's proposal that infrastructure debt investments without an ECAI rating may still qualify for a tailored standard formula treatment. This issue is important since Infrastructure debt investments are often unrated. IRSG supports EIOPA's proposal of treating qualifying unrated infrastructure debt investments equivalent to rated infrastructure debt with credit quality step 3. Moreover, both internal ratings and ECAI ratings should be allowed.</p> <p>IRSG also supports EIOPA's aim to change the calibration for infrastructure equity investments. For listed equity the IRSG supports the reduced risk charge of 30 - 39%. However, a separate proposal for <i>unlisted</i> infrastructure equity is needed. The proposal should take into account the low correlation between unlisted infrastructure equity and other asset classes which the EIOPA proposal unfortunately lacks. The IRSG acknowledges the difficulties of finding a valid data base for unlisted equity. But it also believes that listed equities should not be used as a proxy to calibrate the risk capital charge for unlisted infrastructure equity.</p>	<p>Noted. For internal ratings, please see the response to comment 2.</p> <p>Please see resolution of comment 304.</p>
--	--	--	--

			IRSG is concerned about the additional requirements for risk management, including the requirement on stress testing. With regard to the prudent person principle, these requirements do not seem necessary, but only cause additional efforts and costs. This is contradictory to the political objective facilitating the long term financing of infrastructure development. Therefore the impact of new requirements and whether they are really necessary should be carefully considered.	Please see the response to comments 12, 24, 28 and 328.
36.	LTIIA	Section 1.5.	<p>Para 1.22. Using listed infrastructure equities as a proxy of unlisted infrastructure leads to significantly overstating the volatility of the latter – especially, in the context of long-term hold with a very low probability of a forced sale. While data series on unlisted infrastructure equities are still relatively scarce, in-house research by some of our members based on ca. 10 years of observed performance of Australian unlisted infrastructure assets suggests that unlisted infrastructure features ‘smoothing and lagging effect’ similar to that since long recognized in unlisted real estate (see, for example, an overview in Geltner D, MacGregor BD and Schwann GM. Appraisal Smoothing and Price Discovery in Real Estate Markets, Urban Studies May 2003 40: 1047-1064).</p> <p>LTIIA, together with EDHEC-Risk institute, has been developing a platform that would enable collection and tracking of historic unlisted performance data for long-term investments in infrastructure. Next year, we expect that platform to provide additional quantitative evidence on the volatility of unlisted infrastructure. In the meantime, a ‘rule-of-thumb’ view on the volatility of unlisted infrastructure assets adopted by some of investors has been that it equals half of the volatility of the listed peers. With that assumption in mind, a further reduction in recommended Equity Risk Charge for unlisted infrastructure can be justified – potentially down to the 15-20% range. This rule of thumb approach is not inconsistent with observations of the listed PFI portfolio researched by Dr. Blanc-Brude on a monthly basis (20-25% VaR), and we believe that considering monthly behaviour is already conservative given the above smoothing and lagging effect of unlisted infrastructure.</p>	See resolution to comment 304.
37.	NATIXIS	Section 1.5.	<p>We are supportive of a reduction of the capital charge which reflects the peculiarities of Infrastructure Debt credit characteristics (low default rate, high LGD, stable cash flow).</p> <p>In order to limit the over reliance on ECAI rating we are in the opinion that they should not be a separate calibration for rated vs unrated transactions. The level of analysis and due diligence by the insurer should be the same.</p>	<p>Noted.</p> <p>Not agreed. As stated in paragraph 1.64 of the CP, for ECAI rated debt only the most essential criteria are included because the criteria cover similar aspects to methodologies used by rating</p>

				agencies. EIOPA has sought to allow non-ECAI rated debt to qualify despite the potentially higher level of risk. However, more detailed criteria are then needed for non-ECAI rated debt to provide for a credit quality comparable to ECAI rated qualifying infrastructure debt with credit quality step 3.
38.	RSA	Section 1.5.	As noted by EIOPA, infrastructure investments are highly illiquid. They are also held for a relatively long period of time. For these reasons, we agree with the lower risk charges proposed by EIOPA.	Noted.
39.	The Investment Association	Section 1.5.	<p>EIOPA indicates in this section that it has a preference for calibrating using the spread risk model. However, the treatment of infrastructure debt under the spread-risk module assumes that insurers trade infrastructure investments, and are exposed to short-term volatility of market spreads and the impact this has on the market price of the infrastructure. However, investors will usually hold these illiquid investments over the long-term.</p> <p>Most of the empirical analysis in the consultation paper is based on default/recovery studies, which indicate that it would be appropriate to use the counterparty default risk module.</p> <p>Using the spread or counterparty default module affects not only the stand-alone basic SCR for infrastructure debts (different SCR formulae), but also the overall SCR because:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Under the spread module, the infrastructure debt SCR will be added into the spread module under market risk SCR;</li> <li><input type="checkbox"/> Under the counterparty default module, the infrastructure debts SCR will be added into (presumably) type-2 exposure module under default risk SCR, which benefits from a 25% correlation with the market risk SCR; and</li> <li><input type="checkbox"/> So, even if the stand-alone capital treatment is the same under the spread module and the default module, the overall SCR will be lower under the latter because of the capital diversification.</li> </ul> <p>The Investment Association considers that the counterparty default module should be used, so that the diversification benefits of holding infrastructure (debt and equity) are recognised.</p>	<p>Not agreed. A reduction in the value of the debt in the Solvency II balance sheet results in a loss of basic own funds also if the instrument is not sold.</p> <p>Not agreed. Please see section "Counterparty default risk module" in section 2.</p>

			<p><input type="checkbox"/> If a spread risk sub-module is used, it would be sensible to aggregate the liquidity and credit risk approaches within them to arrive at an appropriate level of capital charge relief. A combination of those approaches at present would lead to a maximum capital relief of 35%. Further relief will be needed, however, to reflect the diversification benefits of holding infrastructure. A capital charge relief in the region of 60% would be appropriate.</p> <p><input type="checkbox"/> Further clarity is needed as to what constitutes a 'well-diversified portfolio', as referred to in paragraphs 1.19 and 1.20.</p>	<p>Not agreed. Please see the section "The possibility of combining liquidity and credit risk approach" in Chapter 2.</p> <p>The method used for calibration can be used as an indication.</p>
40.	AAE	Section 2.3.	<p>We note the conclusions reached in this section with regards to how recovery rates on infrastructure debt compare with that on corporate bonds.</p> <p>We mentioned in our previous comments (a few months ago), in our view it is important to keep these analyses under constant review. Additional considerations when comparing recoveries on infrastructure debt with that on corporate bonds is that it is not uncommon for investors in infrastructure assets to employ specialist underwriters and recovery specialists which could justify the higher recovery rates. The specific sector of the underlying infrastructure asset may also play a key role here.</p> <p>We also note that, while we agree in principle that recovery rates for infrastructure projects are higher on average than on corporate bonds, given the bespoke nature of infrastructure assets this assumption needs to be considered in the context of a granular analysis of infrastructure projects available to insurers. For example in energy infrastructure projects the recovery rate could easily be zero in default.</p>	<p>Noted.</p> <p>EIOPA considers this to be covered by the proposed risk management requirement that undertakings should have procedures to maximise the amount recovered in the case of a work-out scenario.</p> <p>Noted. Based on the available data the analysis has to be performed on an aggregate basis. The conditions that qualifying infrastructure has to meet (in particular the predictability of cash flows) should reduce the risk of a complete loss.</p>
41.	Moody's	Section 2.2.	<p>The Project Loan Study and the Infrastructure Addendum Study can be downloaded by non-subscribers (following registration) from the following link:</p> <p><a href="http://www.moodys.com/Pages/PFSplashPage.aspx">http://www.moodys.com/Pages/PFSplashPage.aspx</a>.</p>	Noted.
42.	GDV	Section 2.3.1.	<p>We share EIOPA's view of the Moody's study that the recovery rates of infrastructure debt investments are significantly higher as compared to corporate bonds. Similar to EIOPA we see a difference in the recovery rates depending on the status of the project (construction vs. operational phase). Especially in the operational phase recovery rates of about 80 per cent + seem absolutely plausible.</p>	Noted.
43.	Moody's	Section 2.3.3.	<p>Minor clarifications with reference to Table 5 (reproduced from Exhibit 10 of the Infrastructure Addendum Study):</p> <ul style="list-style-type: none"> <li>Paragraph 1.36: The average ultimate recovery rate for broad infrastructure</li> </ul>	Noted.

			<p>project finance in the OECD region is 88.2% (not 88.4%).</p> <ul style="list-style-type: none"> <li>Paragraph 1.39: The standard deviation of ultimate recovery rates for broad infrastructure project finance in the OECD region is 21.7% (not 21.2%).</li> </ul>	
44.	Moody's	Section 2.4.1.	<p>While the statement at paragraph 1.40 that "Moody's found no material dependency between the economic cycle at default and at emergence and the recovery rate" is correct, the additional context set out within the Project Loan Study is important.</p> <p>In particular, the data set for the Project Loan Study included 58 defaults (based on the Basel II definition of default) that occurred within the Infrastructure industry sector between 2009-13, of which only a few projects had emerged from default within the study period. When the remaining defaulted projects emerge from default and corresponding ultimate recovery rates can be determined, further evidence will become available about the relationship between default rates and ultimate recovery rates. It is possible that such evidence may reveal a meaningful correlation between default rates and ultimate recovery rates.</p> <p>We reproduce below the following extract from Section 8.2 (Ultimate Recoveries by year of emergence (Basel II Definition of Default)) from the Project Loan Study:</p> <p>QUOTE</p> <p>Exhibit 26 displays average ultimate recovery rates for Ultimate Recoveries (BII) by year of emergence from default.</p> <p>» Average ultimate recovery rates for project finance bank loans emerging from default between 1999-2009 were in the range of 76.7%-100.0% (BII) and 71.6%-100.0% (MDY), but were substantially independent both of the economic cycle at default and the economic cycle at emergence throughout this period. Calendar years 2010-13 and calendar years prior to 1999 are excluded from this observation on the basis that the number of projects emerging from default in each of those years is relatively small, although the average ultimate recovery rate (BII) of 29.4% for 2013 (see Exhibit 27) based on five projects that emerged from default appears to be unusually low.</p> <p>» This observation contrasts with Moody's research on corporate loans and bonds which has previously found that ultimate recovery rates for defaulted corporate debt facilities are negatively correlated with default rates (i.e., ultimate recovery rates fall as default rates rise).</p> <p>» In section 7.4.3 above we highlighted the stress affecting the Infrastructure industry sector between 2009-13, as illustrated by the 58 Defaults (BII) reported during that period. Only a few of these defaulted projects have emerged from default, and we will monitor the relationship between default rates and ultimate recovery rates in this sector with interest.</p> <p>END QUOTE</p>	Noted. EIOPA has based its conclusions on the data currently available.

			<p>This comment also refers to the following sections/paragraphs:</p> <ul style="list-style-type: none"> <li>• Section 2.4.2/Paragraph 1.42</li> <li>• Annex III, Section 3.1/Paragraph 1.256</li> <li>• Annex III, Section 3.2.2/Paragraph 1.269</li> </ul>	
45.	Moody's	Section 2.4.2.	See comments at Section 2.4.1/Paragraph 1.40	Noted.
46.	GDV	Section 2.5.2.	Chart 2 and 3 provide evidence that the uncertainty / default probability is significantly higher in the construction or ramp-up phase. Based on this we suggest to repeat the rating of debt investments – at least once the project enters its operational phase. In this phase the relative risk loading should decrease as compared to the start of the respective project.	There seems to be no need to state this as the proposed treatment would depend on the current situation of the project.
47.	Moody's	Section 2.5.2.	<p>Chart 3 reproduces Exhibit 6 of the Infrastructure Addendum Study. Paragraph 1.48 states that "... In this case, the marginal default rates do not display a generally falling trend."</p> <p>We highlight the following additional context provided within the Infrastructure Addendum Study:</p> <p>QUOTE</p> <p>In Exhibit 6, the slight increase in marginal default rates in year 8 is due to a small number of projects defaulting in that year combined with the small size of the data set.</p> <p>END QUOTE</p>	Noted.
48.	AAE	Section 3.1.	We are supportive of EIOPA's proposal to not widen the scope of infrastructure assets to pooling investors.	The comment is not clear. EIOPA stated in paragraph 1.52 of the CP that investments via collective investment undertakings would be permissible.
49.	AFME ICMA	Section 3.1.	<p>Para 1.52 The WG strongly believes that the risk profile of "infrastructure corporates", i.e. businesses which operate infrastructure assets, but are long dated or perpetual (i.e. not limited-life) businesses, should be included within the scope. Infrastructure project finance is only a subset of infrastructure finance and therefore of available infrastructure debt and equity. Most of such corporates are limited either by licensing or permitting restrictions or by contractual covenants in their financing from engaging in activities outside the scope of operating the infrastructure assets in question and ancillary services. Investors view the risk profile of such corporates as similar to (if not better than) the risk profile of project finance. In many respect these are mature businesses representing what were once large capital projects that now have an established track record during operations. It seems counter-intuitive to exclude infrastructure assets merely because they are a long-way into operations and not</p>	<p>Not agreed. EIOPA is aware that not all infrastructure investments are structured in a project finance format. However, EIOPA has sought to identify a category of infrastructure investments for which a different treatment within the solvency capital requirement standard formula can be prudentially justified based on the evidence available.</p> <p>EIOPA identified some convincing evidence to support a different treatment for project finance structures. However,</p>

		<p>necessarily of time limited duration or fully amortising. Typically these business have the predictable long-dated and stable cash-flows that project finance models are seeking to replicate.</p> <p>Further, for a given asset and cash flows, it is often possible to structure an investment either as a corporate financing or as a project financing, in each case with a similar level of covenants, security and risk profile. Differing regulatory treatment should arise from different risks rather than form over substance.</p> <p>By way of illustration, investments into the following sectors and transactions would fall outside of the proposed definition but are considered by the market to be core infrastructure and could be expected to feature in a diversified infrastructure portfolio:</p> <ol style="list-style-type: none"> <li>1. UK water sector</li> <li>2. UK ports</li> <li>3. European airports such as Heathrow, Gatwick, Brussels and Copenhagen</li> <li>4. Utility transactions outside the UK such as Redexis Gas, Elenia, Net4Gas. For instance, the project "Redexis Gas Transmission and Distribution" (link) pre-financed by the EIB which will receive the backing of the EFSI guarantee in the context of the Investment Plan for Europe, would fall outside the proposed definition.</li> </ol> <p>The WG also believes that the definitions should accommodate infrastructure debt issued by a corporate that owns a portfolio of infrastructure assets (e.g. solar or wind plants or accommodation assets or other smaller bundled projects/assets) where the portfolio of assets has characteristics that are consistent with project finance (whether in construction or operation) or infrastructure corporates.</p> <p>It should be noted that consequential changes, not specifically highlighted in these comments, will be necessary as a result of the WG's comments on paragraph 1.52.</p> <p>It is also worth noting that recital 50 (Articles 243(5) and 244(5), CRR; PRA SS9/13, paragraph 2.2.) of the CRR, should be considered by EIOPA to be added to the definition of eligible infrastructure investments, to make it clear that all forms of infrastructure investment should be eligible based on assets, rather than their corporate form or relative seniority. In principle, the final language on "eligible infrastructure investments" should be wide enough to reflect the need to help promote the financing of the real economy, where the financing is infrastructure in nature and particularly where the credit is viewed as investment grade.</p>	<p>as explained in the CP, EIOPA has a number of reservations regarding "infrastructure corporates".</p> <p>EIOPA considered the comments received on this point and would acknowledge that there is some evidence that "infrastructure corporates" have performed better than other types of corporates. However, since the calibration proposed is based on evidence for project finance, a different calibration approach would need to be developed for infrastructure corporates.</p> <p>In addition as stated in the CP there are delineation problems regarding the ability of corporates to purpose other business activities. EIOPA does not consider that the proposals received by stakeholders adequately address this challenge.</p> <p>Bearing in mind EIOPA's deadline for delivering its advice to the European Commission, EIOPA has decided to not advise for the inclusion of infrastructure corporates within the scope of qualifying infrastructure. Nevertheless, EIOPA expects to consider this issue further in the medium-term as part of its monitoring of the appropriateness of the SCR standard formula.</p> <p>Not agreed. A similar provision to recital 50 of CRR is already included in recital 92 of Commission Delegated Regulation (EU) 2015/35. Further, the empirical evidence indicates that "corporate form" and seniority have a meaningful impact on the risk profile, and this is reflected in the qualifying criteria.</p>
50.		This comment was submitted as confidential by the stakeholder.	

51.	ABI	Section 3.1.	<p>We believe that certain infrastructure corporates should fall within scope. Moody's report cited in Annex I found that infrastructure corporates have lower volatility and higher recovery rates compared to corporate bonds – this should be reflected in how they are treated. Including only infrastructure projects within the scope of eligibility would create an unlevel playing field between infrastructure projects funded through venture capital-type arrangements, who would qualify, and more 'traditional' infrastructure investment through corporate structures, which would not.</p> <p>We understand that EIOPA has a number of reservations about including corporates within scope. However, we do not think that the reasons set out in paragraph 1.52 are insurmountable. For example:</p> <ul style="list-style-type: none"> <li>- As mentioned above, we do not believe that the available evidence points to infrastructure corporates and other corporates having the same risk profiles;</li> <li>- Only the portion of the corporate falling within the infrastructure investment definition as set out by EIOPA would qualify for the corresponding infrastructure investment treatment. We do not think that this creates problematic delineation issues, and would be similar to an infrastructure project potentially consisting of a mixture of eligible and ineligible elements as well;</li> <li>- It is not clear why it is relevant to assess the ease of infrastructure corporates' access to funding. It could also be argued that investment through infrastructure corporates could be improved further, either in terms of ease of access to funding or its terms. In any case, we do not think that corporates should be specifically discouraged from investing in infrastructure by disadvantaging them compared to those investing through infrastructure projects;</li> <li>- Infrastructure corporates are also a well-established format.</li> </ul>	<p>Please see the response to comment 49.</p> <p>Not agreed. In the CP EIOPA explained that it did not recommend including corporate financing within the scope of qualifying infrastructure investments based on its prudential analysis regarding the risk profile of corporates and the range of business activities that they may pursue. To support this position, given the objectives of the call for advice to EIOPA to work on infrastructure, it was considered to be relevant to refer to the funding situation of corporates.</p>
52.	BlackRock	Section 3.1.	<p>In respect of the reference to infrastructure corporates in paragraph 1.52 we note that corporate entities value private debt solutions which can be tailored to their needs as opposed to more standardised fund-raising through public markets. In particular, private debt offerings allow corporates to issue longer maturities and offer sub benchmark size issuances. Longer maturities may be beneficial to investors looking to match maturities of their underlying liabilities.</p> <p>Although some reference is made to diversification and to the benefits of investing in a diversified pool, the Consultation paper does not address a number of practical issues regarding investment in fund structures. Without such clarification, many end investors will avoid the fund structure. We would recommend that EIOPA's work</p>	<p>Please see the response to comment 49.</p> <p>EIOPA considers it to be clear that infrastructure investments can qualify for the different SCR treatment, irrespective of whether they are made directly or via</p>

			<p>covers not only direct investments into Infrastructure Equity and Infrastructure Debt but also the benefits of investment into both these asset classes through pooled vehicles. This should allow EIOPA to consider recognising the benefits of holding pooled portfolios of infrastructure assets managed by teams with dedicated infrastructure expertise. We particularly encourage EIOPA to consider the benefits of investing in infrastructure through ELTIFs (as a closed-ended fund for buy-to-hold investors with limited leverage and a diversified pool of assets), other similar alternative investment funds (AIFs) and other intermediate vehicles through which an insurer may hold the infrastructure assets. In principle, provided risk and returns are passed through to the underlying investor it should not make a difference if the project asset is held through an AIF or a dedicated SPV. This gives insurers greater flexibility to hold their infrastructure investments in the holding structure which best fits their requirements. For example, an insurer might prefer to hold assets through a SPV rather than a AIF for commercial reasons such as tax efficiency e.g. by allowing income flows from different jurisdictions to accurately account for differing tax liabilities. Further, even where the insurer invests in AIF, the AIF might hold the assets indirectly via SPVs for various reasons. This should not per se have an impact on Solvency II treatment. The position would be different if the economic result is markedly different, for example where a fund is permitted to take on significant levels of additional leverage which would result in a different outcome from investing directly in the underlying project – in this case a different treatment for Solvency II purposes may be needed.</p> <p>Otherwise this has the implication that the investor would be required to look through to each individual holding in the fund on a regular and as yet undefined time scale. Either way we recommend that EIOPA address the practicalities of investing in infrastructure through AIF structures and indicate whether certain structures should benefit from a more favourable treatment than others. These comments also apply in respect of Section 3.2.2 below.</p> <p>The attractive risk features of infrastructure could be further enhanced by constructing a global infrastructure fund which benefits from a diversified range of geographies and sectors (social, transportation, power &amp; energy etc.), stages of development (greenfield vs. brownfield) and consideration as to the classification of sectors as essential or non-essential. The construction of portfolios taking these features into account can significantly improve the long term performance of diversified funds under normal and stressed conditions. These benefits should be incorporated in the capital model to encourage appropriate behaviours along with consideration of features of the individual assets such as the degree to which they are essential, regulated, contractually fixed and have low demand risk.</p>	<p>collective investment undertakings. For the latter, the requirements in Article 84 of the Delegated Regulation would apply as they do for all types of investments.</p>
53.	BVI	Section 3.1.	<p>According to this section, corporate entities which can engage in infrastructure activities as well as in other business shall not be seen as qualifying infrastructure assets. On the other hand, insurers shall have the possibility to pool participations in</p>	<p>EIOPA is not able to judge whether particular legal structures will comply with the qualifying criteria. EIOPA has,</p>

			<p>infrastructure project entities e.g. in a fund. Our understandig is that there may be also used other pooling vehicles, especially holding companies. It should be stated more clearly that any holding vehicle that has the sole purpose of managing a portfolio of qualifying infrastructure assets is eligible for the treatment outlined in this paper, regardless of its legal structure (e.g. corporation) or its regulatory status.</p>	<p>however, made some amendments with the intention of simplifying the definition of infrastructure project entity in a way that would allow a “substance over the form” approach to be taken by supervisory authorities.</p>
54.	EVCA	Section 3.1.	<p>I. Introduction</p> <p>1. The European Private Equity and Venture Capital Association (EVCA) welcomes the opportunity to respond to EIOPA’s consultation on its advice on the identification and calibration of infrastructure investment risk categories.</p> <p>2. The EVCA’s membership covers all private equity activity, from early-stage venture capital through to large private equity firms and funds investing in infrastructure. Our members also include institutional investors, such as pension funds and insurance companies, who are a key source of long-term financing in Europe and who invest in private equity, venture capital and infrastructure funds. We represent 650 member firms and 500 affiliate members.</p> <p>3. Our infrastructure members provide much-needed capital for some of Europe’s most important infrastructure companies and developments, helping to fund energy, transport facilities, networks and other essential building blocks for the future. That investment also provides stable long-term and predictable returns for the pensions and savings of millions of Europeans.</p> <p>II. Comments</p> <p>4. The EVCA appreciates EIOPA’s willingness and efforts to explore the possibility of introducing a specific standard formula treatment for infrastructure investments and ensure a more risk-sensitive treatment of the asset class.</p> <p>5. We think however that it is important to stress again that insurers’ exposure to infrastructure can take different forms. Most relevant is that while some insurers undertake direct, project by project investing, they also typically gain exposure to these projects indirectly via unlisted infrastructure funds. For some insurers such funds are the main (or even only) route through which investment in infrastructure projects is made. Although the underlying assets may be the same, gaining exposure through funds (and more specifically through a portfolio of funds) will represent a lower risk to the investor compared with investing directly in individual projects.</p> <p>6. Consequently, any EU definition of infrastructure for the purposes of solvency requirements should not focus solely on direct investments in infrastructure projects but should also take into account indirect investment in projects through infrastructure funds. These funds have an equally important role in the investment strategy of investors and are the vehicles through which significant amounts of capital are channelled into infrastructure projects to build the necessary facilities for the public</p>	<p>Please see the response to comment 52.</p>

		<p>and to boost the EU economy. The specific treatment of infrastructure under Solvency II framework ought to be able to reflect the reality of how investors invest in it.</p> <p>7. There is a second issue to consider in the definition of “infrastructure investments”. Although EIOPA’s advice to the European Commission focuses on debt and equity investments, the proposed criteria for the identification of eligible “infrastructure investments” appears to restrict the scope of infrastructure only to “infrastructure project finance” and excludes, without a convincing rationale, all corporate entities engaged in infrastructure operational activities.</p> <p>8. As a consequence, all equity investments in entities which do not qualify as “infrastructure project entities”, including equity stakes in typical investee companies of an infrastructure fund (toll roads, gas grids, ports, etc.) and in turn in the infrastructure funds themselves, would not be captured by the proposed definition. In turn the infrastructure funds themselves, which provide the finance for these projects will be excluded.</p> <p>9. There is no reason to differentiate between investments in the construction phase and operational phase, or indeed between direct investments in these situations and indirect investment in these projects. The underlying assets make equivalent contributions to the delivery of a service to end-users as investment in the construction of (new) physical assets. Infrastructure should be seen in its broadest context, ensuring that operating companies and the infrastructure funds that invest in them are captured by the definition alongside the direct investment in the construction phase of an infrastructure project.</p> <p>III. Possible solution</p> <p>10. One option to facilitate the much-needed provision of funding to infrastructure via infrastructure funds is to include these unlisted vehicles in the definition of infrastructure and to therefore enlarge the scope of the definition of infrastructure investments beyond “infrastructure project finance”, as explicitly considered by EIOPA itself in paragraph 1.52 and 1.53 of the current consultation paper.</p> <p>11. It would be appropriate for investment at both the construction and operational phases of an infrastructure project to be included in the definition (whether that investment be directly in a specific project, or indirectly in a number of projects via a portfolio of funds, each of which invest in a number of infrastructure projects).</p> <p>12. We would recommend EIOPA extends the specific treatment for infrastructure under Solvency II to closed-end and not significantly leveraged alternative investment funds (AIFs), which make investments exclusively/predominantly in infrastructure assets and the companies operating them, as defined in EIOPA’s advice. This would simply reflect the reality that many investors invest in these defined infrastructure assets both directly and indirectly. We would further recommend that EIOPA included projects at the operational phase of their life in the definition of infrastructures assets.</p>	<p>Please see the response to comment 49.</p> <p>Partially agreed. Investments during both the construction and operating phasing may qualify. However, it is important that there are measures in place to mitigate the construction and operating risks.</p> <p>Partially agreed. Depending on the approach taken by the European Commission an amendment to Article 168(6) of the Delegated Regulation may be necessary to reflect the treatment of equity investments in qualifying infrastructure projects.</p>
--	--	--	--

			<p>13. This would broaden the scope of infrastructure investments that could qualify for the specific standard formula treatment but only in the sense that it would ensure that those insurers who choose to invest in infrastructure via the less risky route of infrastructure funds are not penalized by higher capital charge compared to those who have direct infrastructure investments. Prudential regulation should not differentiate between direct investment and investment via a fund structure unless there is clear evidence to justify a difference in treatment, such as the lower risk of investing via a well-diversified portfolio of funds. It would also ensure that the anomaly was not created in which the treatment of investment in infrastructure assets in the construction and operational phases of their life were treated differently: there would not seem to be a huge benefit of investing to build an infrastructure project, if there were then no investment to enable the facility to operate.</p> <p>IV. Conclusion</p> <p>14. We welcome the recognition that insurers could be an important source of funds for infrastructure investments as their long-term nature makes them highly suitable for their risk profile and we appreciate EIOPA's efforts to develop a separate asset class under the Solvency II framework.</p> <p>15. We regret however that EIOPA's proposed definition of infrastructure is in fact restricted to direct debt and equity investments in infrastructure projects at the construction phase and does not provide sufficient flexibility to cover either investment in projects during the operational phase or indirect investment in the funds which provide the finance for these projects.</p> <p>16. We therefore encourage EIOPA to reconsider its approach and take account of the existence of a range of different investment routes, including infrastructure funds.</p> <p>We stand ready to engage with EIOPA and to provide further information on this subject.</p>	
55.	FTC	Section 3.1.	<p>We would appreciate it if also the following types of infrastructure investments could be considered to qualify for the revised calibrations ("qualifying infrastructure"):</p> <ul style="list-style-type: none"> <li>• ELTIF (according to the Regulation (EU) 2015/760 on European long-term investment funds)</li> <li>• Infrastructure Debt Funds managed by AIFM according to the directive 2011/61/EU on Alternative Investment fund Managers that invest in infrastructure debt assets and/or purchase bank originated loans issued for infrastructure projects (i.e. refinancing bank loans of existing infrastructure projects, take over existing bank infrastructure debt).</li> </ul>	Not agreed. The qualifying criteria need to be met regardless of whether an investment is made directly or via a collective investment undertaking.
56.	GDV	Section 3.1.	<p>We agree that corporate entities engaging in infrastructure activities should not be covered by the Solvency II standard formula. Corporate entities exhibit corporate risk, which has a different profile compared to infrastructure assets. For example, while</p>	Agreed regarding the different risk profile of infrastructure corporates. Please see the response to comment 49.

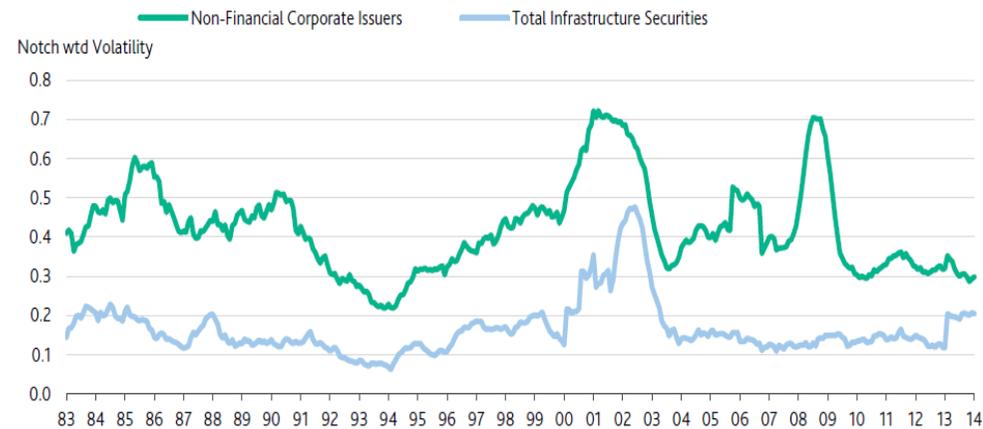
			<p>infrastructure investments have a static behaviour (i.e. there is nearly no change over time), corporates aim to grow and therefore bet on new developments and take on board higher risks. On the other hand following a careful risk analysis some infrastructure corporates could qualify for an infrastructure asset under certain circumstances (e.g. corporates with the majority of their business activities with providing infrastructure services and corporates operating an energy grid). The delineation between such "infrastructure corporates" and project financings in the narrow sense requires very strong internal risk and modelling capacities with an adequate internal risk assessment approach.</p>	
57.	IE	Section 3.1.	<p><b>The inclusion of corporate entities in the identification of infrastructure should be carefully considered (para 1.52).</b></p> <ul style="list-style-type: none"> <li>■ It is in general true that corporate entities exhibit corporate risk, which has a different profile compared to infrastructure assets. For example, while infrastructure investments have a static behaviour (ie there is nearly no change over time), corporates aim to grow and, therefore, bet on new developments and take higher risks. In addition, while pooling of investments brings better diversification within a corporate entity, it can also give rise to more risky human behaviour, such as incentives to subsidize one or the other projects.</li> </ul> <p>However, in the specific case of corporate entities engaging in infrastructure activities, where cash flows or assets pertaining to the infrastructure activities are efficiently ring-fenced and the infrastructure investors benefit from a privileged access to such cash-flows and/or assets, Insurance Europe believes that those particular activities should be included in the scope of the infrastructure definition. The delineation between such "infrastructure corporates" and project financings in the narrow sense requires a strong internal risk assessment approach for such an investment.</p>	Please see the response to comment 49.
58.	IRSG	Section 3.1.	<p>IRSG believes that EIOPA should also consider the inclusion of infrastructure investments in the form of both secured and securitized corporate debt. Otherwise, the definition might miss a lot of the infrastructure universe, including projects that might receive EFSI support.</p> <p>The general approach of excluding "infrastructure corporates" and the narrowing of the analysis to infrastructure project finance appears unjustified. For instance corporates that focus on an operating energy grid will certainly display a different (meaning: better) risk profile than "other corporates". Further, it should be irrelevant whether or not certain market participants, such as corporates operating in the infrastructure sector, have difficulties obtaining funding.</p>	Please see the response to comment 49.

			<p>Basically, 'infrastructure corporates' – and not only single infrastructure projects - could qualify for an infrastructure asset, if the majority of their business activities indeed lie with providing infrastructure services. The delineation between such 'infrastructure corporates' and project financings in the narrow sense, requires an adequate internal risk assessment approach for such a non-routine investment.</p> <p>IRSG strongly believes that the risk profile of "infrastructure corporates", i.e. businesses which operate infrastructure assets, but are long dated or perpetual (i.e. not limited-life) businesses, should be included within the scope. Infrastructure project finance is only a subset of infrastructure finance and therefore of available infrastructure debt and equity. Most such corporates are limited either by licensing or permitting restrictions or by contractual covenants in their financing from engaging in activities outside the scope of operating the infrastructure assets in question and ancillary services. Investors view the risk profile of such corporates as similar to (if not better than) the risk profile of project finance. In many respect these are mature businesses representing what were once large capital projects that now have an established track record during operations. It seems counter-intuitive to exclude infrastructure assets merely because they are a long-way into operations and not necessarily of time limited duration or fully amortising. Typically these businesses have the predictable long-dated and stable cash-flows that project finance models are seeking to replicate.</p> <p>Further, for a given asset and cash flows, it is often possible to structure an investment either as a corporate financing or as a project financing, in each case with a similar level of covenants, security and risk profile. Differing regulatory treatment should arise from different risks rather than form over substance.</p> <p>By way of illustration, investments into the following sectors and transactions would fall outside of the proposed definition but are considered by the market to be core infrastructure and could be expected to feature in a diversified infrastructure portfolio:</p> <ol style="list-style-type: none"> <li>1. UK water sector</li> <li>2. UK ports</li> <li>3. European airports such as Heathrow, Gatwick, Brussels and Copenhagen</li> <li>4. Utility transactions outside the UK such as Redexis Gas, Elenia, Net4Gas. For instance, the project "Redexis Gas Transmission and Distribution" (<a href="#">link</a>) pre-financed by the EIB which will receive the backing of the EFSI guarantee in the context of the</li> </ol>	
--	--	--	--	--

			<p>Investment Plan for Europe, would fall outside the proposed definition.</p> <p>IRSG also believes that the definitions should accommodate infrastructure debt issued by a corporate that owns a portfolio of infrastructure assets (e.g. solar or wind plants or accommodation assets or other smaller bundled projects/assets) where the portfolio of assets has characteristics that are consistent with project finance (whether in construction or operation) or infrastructure corporates.</p> <p>It should be noted that consequential changes, not specifically highlighted in these comments, will be necessary as a result of the IRSG's comments on para 1.52.</p>	
59.	Moody's	Section 3.1.	<p>Paragraph 1.52 (first bullet) states that "The available evidence suggests that the risk profiles of infrastructure corporates and other corporates are similar."</p> <p>We highlight the following extracts from Moody's Special Comment "Infrastructure Default and Recovery Rates, 1983-2014", March 2015, which shows that 10-year credit loss rates for corporate infrastructure debt securities are materially lower than for like-rated non-financial corporates (NFCs), due to the greater stability of infrastructure credit:</p> <ul style="list-style-type: none"> <li>• <i>" ... Exhibit 8 compares the rating volatility for total infrastructure securities with that for global NFC issuers. The rating volatility, the sum of the notch-weighted upgrade and downgrade ratios, measures the gross average number of notches a portfolio of securities has changed over a twelve-month period. ..."</i></li> </ul>	Noted. Please see the response to comment 49.

EXHIBIT 8

Rating Volatility for Total Infrastructure Securities and Non-Financial Corporate Issuers



Source: Moody's

- " ... For much of the study period, total infrastructure security ratings have been relatively stable, when compared with NFC issuers. Rating volatility in the US municipal infrastructure sector has been about one fifth the level exhibited by NFC issuers, while in corporate infrastructure it has been about four fifths the level of NFCs. ..."
- " ... Corporate infrastructure ratings are more stable and in particular less likely to be downgraded than NFC ratings. It is therefore generally not possible to match the entire multiple-year term structure of credit risk. In other words, if NFC and corporate infrastructure ratings are calibrated to achieve similar credit loss rates, on average, over short- or medium-term horizons, then they cannot simultaneously match at longer horizons. Conversely, if they are calibrated to match at very long horizons, then they cannot match at shorter horizons. This, of course, is a general result and not particular to infrastructure. ..."
- " ... Corporate infrastructure debt securities have, on average, higher recovery rates than do NFC issuers. ..."

EXHIBIT 17

**Recovery Rates for Defaulted Corporate Infrastructure Debts**

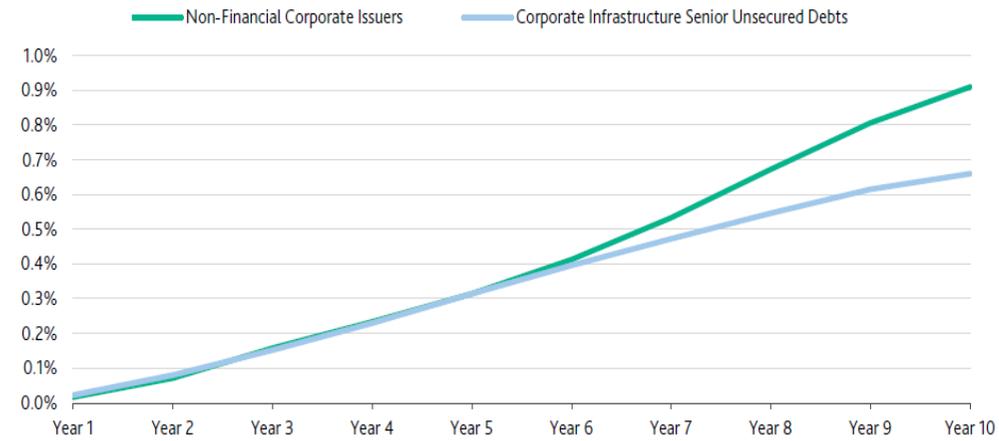
Sector	Senior Secured	Senior Unsecured
Utilities	76%	58%
Regulated E&G Utilities and Networks	83%	63%
Unregulated E&G Utilities and Power	80%	55%
Transportation	74%	n/a
Average Corporate Infrastructure Debt Securities	75%	57%
Average Non-Financial Corporate Issuers	53%	37%

Source: Moody's

- " ... Corporate infrastructure and NFC ratings imply similar credit loss rates for horizons up to about five years. Beyond that, the greater stability of infrastructure credit results in lower loss rates than are observed for like-rated NFC issuers. This, again, is unavoidable: if ratings are set to reflect credit risk over a horizon of about three to five years, and the volatility of two populations is very different, then very long run performances will consequently differ. ..."*
- " ... Exhibit 18 shows that single-A senior unsecured credit loss rates for NFC issuers and corporate infrastructure are very similar. ..."*

Note: Over the study period 1983-2014, on average 30.7% of Moody's-rated corporate infrastructure debt securities were rated single-A

EXHIBIT 18  
Single-A Credit Loss Rates

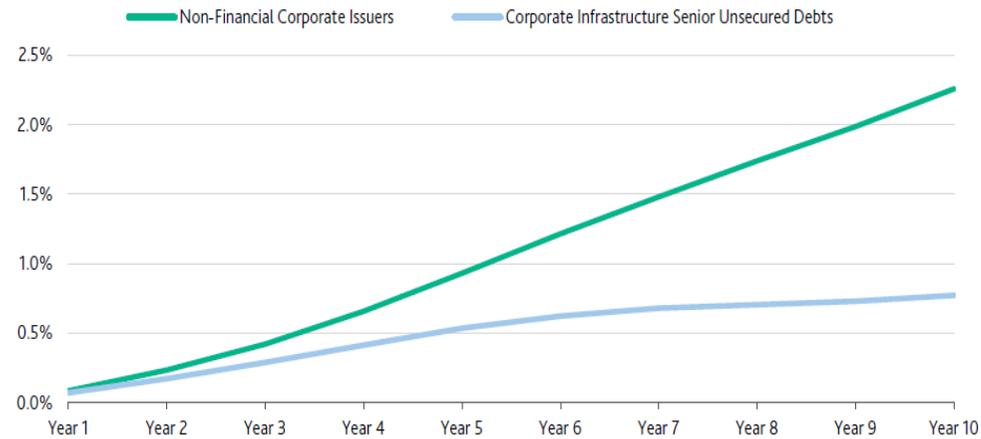


Source: Moody's

- " ... Credit loss rates for senior unsecured Baa-corporate infrastructure debt securities are very similar for short horizons, but start to differ at longer horizons (Exhibit 19). ..."  
Note: Over the study period 1983-2014, on average 39.9% of Moody's-rated corporate infrastructure debt securities were rated Baa

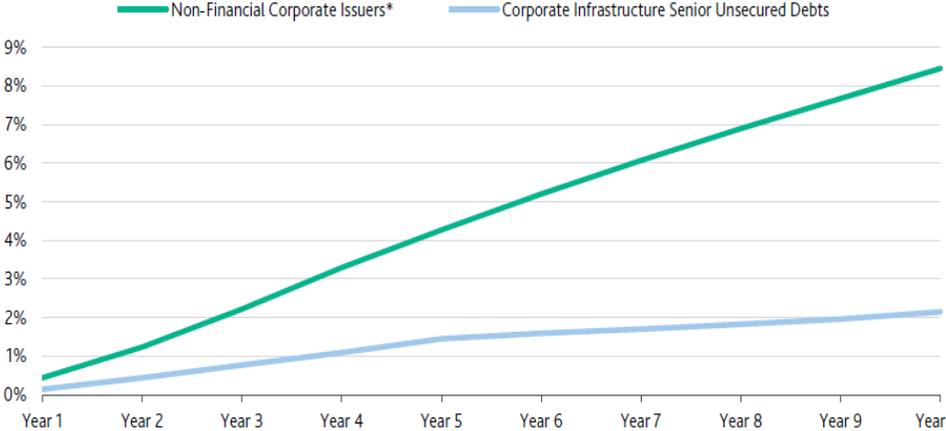
EXHIBIT 19

### Baa Credit Loss Rates



Source: Moody's

- " ... Credit loss rates for Ba-rated overall corporate infrastructure debt securities are lower than similarly rated NFC issuers, driven by both lower default rates and higher recovery rates (Exhibit 20). ..."  
Note: Over the study period 1983-2014, on average only 11.6% of Moody's-rated corporate infrastructure debt securities were rated Ba and therefore caution should be used when drawing conclusions from an analysis of a smaller data set

			<p>EXHIBIT 20 Ba Credit Loss Rates</p>  <p>* Because the rating distributions within the Ba rating class are very different for NFC issuers (44% of all Ba-rated issuers are rated Ba3) and corporate infrastructure senior unsecured debt securities (50% of all Ba-rated debt securities are rated Ba1 and only 24% Ba3), Ba CDRs for NFC have been calculated imposing the alpha-numeric rating distribution of corporate infrastructure senior unsecured debt securities. Source: Moody's</p>	
60.	NATIXIS	Section 3.1.	<p>We agree with the exclusion of “pure” infrastructure corporates as those entities does not comply with Project finance structure definition.</p> <p>It could be clarified that an SPV which bundle multiple projects of the same characteristics (Portfolio of Wind farm or solar plant) and for which the portfolio of projects has characteristics that are consistent with project finance should be eligible.</p>	<p>Partially agreed. EIOPA considers that such a structure may be permitted provided all of the relevant criteria are met and not simply that the portfolio has characteristics that are consistent with project finance.</p>
61.	RSA	Section 3.1.	<p>Our main comment concerns the definition of “infrastructure”. As EIOPA highlights here, the scope of the term can be quite broad; nonetheless, we believe it would be helpful if EIOPA provided some specific examples to assist interested parties in identifying all relevant items.</p> <p>Using some examples, we interpret the proposed scope to mean the following:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> an investment in a public finance initiative (PFI) project would fall within the scope, irrespective of its form (e.g. debt versus equity);</li> <li><input type="checkbox"/> an equity investment in a publicly-listed water/power company would not fall</li> </ul>	<p>Not agreed. EIOPA considers the definitions and explanation in the CP to have been relatively clear and as such further examples are not considered to be necessary. EIOPA has, nevertheless, made some revisions to the definitions and criteria to try to improve the clarity.</p>

			<p>within the scope;</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> debt instruments issued by a publicly-listed water/power company would also not;</li> <li><input type="checkbox"/> an investment in a collective investment fund in turn investing in publicly-listed equity and debt issued by infrastructure-orientated companies would not be an infrastructure asset; and</li> <li><input type="checkbox"/> an investment in a collective investment fund in turn investing directly in infrastructure assets (i.e. not via another entity) would be considered to fall within scope, as an equity investment.</li> </ul> <p>We do note EIOPA deliberately uses the term "infrastructure project"; however, we believe that providing such concrete examples would greatly assist the industry, as well as reinforce and clarify EIOPA's intentions.</p>	
62.	LaG	Section 3.2.1.	<p>With regards to the evidence used to support the proposals made, we wanted to bring to EIOPA's attention analysis by Moody's. As the graph below indicates, unsecured infrastructure debt of Baa has a markedly lower default experience than equivalent rated corporate debt, due in part to more reliable cash flows. We believe that evidence such as this, if not already, should be included as part of the evidence base ahead of you finalising your advice to the Commission.</p> <p>Source: Moody's Investors Service, Infrastructure Default and Recovery Rates, 1983-2014; March 9th 2015.</p>	Please see the response to comments 49 and 59.
63.	AAE	Section 3.2.2.	<p>We are content with EIOPA's conclusion on the inappropriateness of the "slotting approach" used in the banking industry for the insurance industry, under the Solvency II rules.</p>	Noted.
64.	BlackRock	Section 3.2.2.	<p>Our experience supports EIOPA's analysis that a portfolio of infrastructure debt should have meaningfully different risk profile to that of a portfolio of corporate debt. We would welcome further clarification as to how insurers should treat holdings on infrastructure debt held in an investment fund, such as an AIF. See comments on Section 3.1 above. This clarification is important as access to these investment opportunities is increasingly going to be through pooled investment vehicles as these permit a wider range of insurers to invest many of which may prefer to delegate the due diligence of asset selection to specialised managers rather than negotiate individually with each issuer.</p> <p>In capital modelling terms, we recommend considering the three core favourable features of infrastructure debt and equity i.e. the low probability of default, low loss giving default and low default correlation. Taken together these features can significantly lower the long term absolute capital requirements but also the often countercyclical long term behaviour of the asset class which serves as an additional</p>	<p>Please see the response to comment 54.</p> <p>For debt EIOPA has used the empirical evidence regarding default and recovery rates. For the diversification regarding equity investments please see section</p>

			buffer in times of stress. These favourable features of “broad” infrastructure are further improved where infrastructure debt has appropriate subordination. Moody’s historical studies illustrate the concentration of default in infrastructure portfolios during the initial 3 to 5 years. This feature serves as a useful natural diversifier of default in broad based credit portfolios which typically see increases in default risk over time.	“Correlation of qualifying infrastructure equity investments with other equities” in Chapter 2.
65.	AAE	Section 3.2.3.	<p>We note EIOPA’s proposals:</p> <ol style="list-style-type: none"> <li>1) that unrated infrastructure debt, subject to meeting certain qualifying criteria, is treated similarly to an infrastructure debt with a credit rating quality of 3.</li> <li>2) That rated infrastructure debt with a minimum credit rating of 3 need to satisfy the remaining criteria for infrastructure assets.</li> </ol> <p>Assuming these conditions are essential to EIOPA’s process and requirements to enhance the standard formula SCR for infrastructure debt, we are content with EIOPA’s proposed approach.</p>	Noted.
66.	AFME ICMA	Section 3.2.3.	<p>The restriction of the application of credit approach to CQS2 and 3 is not indicative of the actual credit risk of infrastructure for the other CQS categories.</p> <p>The infrastructure debt instruments with high credit quality, i.e. CQS 0 and 1, should also be considered for better treatment than corporate bonds with the same CQS.</p> <p>Infrastructure debt investments are in many cases not rated by ECAI. Therefore, internal ratings in the classification of these investments should be allowed as well. Especially small and medium size projects usually have no rating although they contain low risk. The use of non-ECAI ratings should therefore be allowed.</p>	<p>Partially agreed.</p> <p>EIOPA revised its advice after the public consultation to provide for a discount in the credit component of the spread for the instruments rated CQS 0 and 1.</p> <p>Non-ECAI rated debt can qualify provided the relevant criteria are met.</p> <p>Regarding the use of internal ratings. Please see the response to comment 2.</p>
67.	GDV	Section 3.2.3.	<p>Infrastructure debt investments are in many cases not rated by ECAI. In order to reduce overreliance on external ratings in line with CRA III we suggest to allow for internal ratings in the classification of these investments as well. Especially small/medium size projects usually have no rating but contain low risks. Especially in these cases the use of non-ECAI ratings should be allowed for as well.</p> <p>We are concerned by the limitation of the credit risk approach to CQS2 and 3, which is too restrictive and not reflective of actual credit behaviour of infrastructure for higher CQSs. The infrastructure debt instruments with high credit quality, ie CQS 0 and 1, should also be considered for better treatment than corporate bonds with the same CQS.</p>	<p>Please see the response to comment 2.</p> <p>Please see the response to comment 66.</p>
68.	IE	Section 3.2.3.	<p><b>Insurance Europe is concerned by the limitation of the credit risk approach to credit quality step (CQS) 2 and 3, which is too restrictive and not reflective of actual credit behaviour of infrastructure for lower CQSs.</b> Infrastructure debt instruments with high credit quality, ie CQS 0 and 1, should also be considered for better treatment than corporate bonds with the same CQS.</p>	Please see the response to comment 66.

			<p><b>Infrastructure debt investments are in many cases not rated by ECAI. Therefore, internal ratings in the classification of these investments should be allowed as well.</b> Especially small and medium-size projects usually have no rating, although they contain low risk. The use of non-ECAI ratings should, therefore, be allowed.</p>	
69.	IRSG	Section 3.2.3.	<p>The restriction of the application of credit approach to CQS2 and 3 is not indicative of the actual credit risk of infrastructure for the other CQS categories.</p> <p>Given the high leverage of infrastructure projects (for availability-based often above 90%), the equity share is not a relevant driver of the rating. Rather, the rating is driven by the revenue mechanism, the debt structure or cover ratios.</p> <p>The infrastructure debt instruments with high credit quality, i.e. CQS 0 and 1, should also be considered for better treatment than corporate bonds with the same CQS.</p> <p>Infrastructure debt investments are in many cases not rated by ECAI. Therefore, internal ratings in the classification of these investments should be allowed as well. Especially small and medium size projects usually have no rating although they contain low risk. The use of non-ECAI ratings should therefore be allowed.</p>	Please see the response to comment 66.
70.	RSA	Section 3.2.3.	<p>In consideration of Recital 2 of the Solvency II Delegated Regulation, we do not believe that the absence of an ECAI rating should have adverse consequences. By proposing that debt without an ECAI rating cannot be assigned a credit quality step higher than 3, it would appear to go against the intention of the Recital (written so as to reduce the reliance of firms on ECAIs), as it would provide an incentive for firms to seek an ECAI rating.</p>	<p>Not agreed. EIOPA considers that by allowing for non ECAI rated debt to qualify the aim of reducing reliance on ECAIs is supported. However, a number of safeguards, i.e. criteria, need to be met in order to provide reasonable level of assurance that the projects, whilst not having an ECAI rating, present sufficiently low credit risk. For the standard formula SCR approach, it is not feasible for EIOPA to develop different sets of criteria to differentiate between the credit quality of non-ECAI rated debt.</p>
71.	BlackRock	Section 3.3.	<p>Contrary to the comments made by EIOPA in paragraph 1.68, we believe it is important to look at the average risk across risk factors and allow some strong features to compensate for weaker ones. We would support the use of a more granular assessment to achieve this.</p>	<p>Not agreed. As stated in the CP a relatively simple approach is considered to be appropriate given that no supervisory approval process is provided for by Directive 2009/138/EC.</p>

72.	BVI	Section 3.3.	<p>The treatment outlined in this paper is based on the assumption of investment in a well diversified portfolio of infrastructure assets. As minimum investment sums in infrastructure projects are often high, we think many insurers will pool their funds to set up suitable portfolios. In case infrastructure assets are acquired via a fund vehicle, it should be possible to entrust the assessment and documentation of the qualifying criteria outlined in this section to the fund manager. Section 7.3. indicates this possibility. The fund management company will have direct contact to infrastructure project entities and their sponsors. It is legally responsible for assessing every potential fund asset, having regard to the investment guidelines agreed with its investors.</p>	<p>Partially agreed. However, it is important to underline the requirements of Article 49 of Directive 2009/138/EC, which provide that undertakings remain fully responsible for discharging all of their obligations under that Directive when they outsource.</p>
73.	GDV	Section 3.3.	<p>More flexibility is needed in the area of criteria, since otherwise many suitable projects with low risks would not qualify for preferential regulatory treatment. The criteria identified by EIOPA should be merely indicators. It should be made clear that infrastructure projects that meet certain criteria, but not all of them, should still be eligible. Otherwise the number of projects meeting all criteria is likely to be very limited, rendering the entire exercise obsolete. Risk management and internal assessment requirements (pillar 2) already take into account such assessments of investments on a regular basis. In addition, insurance companies should be given a certain amount of leeway in assessing whether a specific project qualifies for a more favourable treatment. Alternatively the number of criteria has to be reduced materially.</p> <p>We believe that insurers would define certain trigger events to repeat risk assessments in the course of the project. Given that a sound risk governance is established and the requirements are fulfilled, internal model entities should be allowed to make use of an investment-specific treatment of these investments.</p>	<p>Please see the response to comments 1 and 71.</p>
74.	IE	Section 3.3.	<p>As indicated above, the framework of criteria is very prescriptive. The list proposed by EIOPA should, therefore, serve as a list of 'indicators' and it should be made clear that infrastructure projects that meet a significant subset of the indicators are eligible (the number of projects meeting all criteria is likely to be very limited).</p>	<p>Please see the response to comments 1 and 71.</p>
75.	AAE	Section 3.3.1.	<p>We agree with the proposed definitions and recommend that supervising authorities collect infrastructure assets data available, for example, from internal and partial model applications, to supplement data available in the market.</p> <p>Possible definition refinements to offer to the EU Commission that might better address the underlying growth agenda implicit in the EU Commission's call for advice are included in our General Comments.</p> <p>We also note the proposed advice on the definition of infrastructure assets and the inclusion of the phrase "limited competition" which may need to be further discussed and agreed with specialists from economic sciences and lawyers.</p>	<p>Noted. EIOPA is considering all relevant sources of data on infrastructure investments.</p> <p>Please see the response to comment 1.</p>

76.	AFME ICMA	Section 3.3.1.	<p>"Infrastructure Assets" definition: the WG considers that the definition needs further clarification:</p> <ul style="list-style-type: none"> <li>- <b>Equipment and facilities</b> should be considered as infrastructure assets. Otherwise the approach may result in investment in projects such as schools and hospitals not qualifying, as these may not be covered by the reference to "structures".</li> <li>- More clarity should be provided on what would qualify as an "essential service" or "public service". Infrastructure assets also provide or support public services that are <b>desirable</b> but not necessarily essential to the public such as sporting, recreational or social facilities, government accommodation or FTTH (Fiber to the Home) infrastructures.</li> <li>- It is not clear why the definition should be restricted to those with "limited competition", or how "limited competition" would be assessed. In the toll road example given in paragraph 1.72, this flaw would be reflected in the level of predicted income.</li> </ul> <p>In the definition of "Infrastructure Project Entity":</p> <ul style="list-style-type: none"> <li>- Paragraph (a) should only apply where there are debt providers (i.e. the project is not 100% equity funded) and where the investment being assessed for regulatory treatment purposes is a debt investment. No equivalent is needed for equity investments. In relation to the proposal to replace "lenders" with "investors" in the definition of infrastructure project entity (as suggested in paragraph 1.74), please clarify whether the intention is to refer to debt and equity investors, or rather to capture bank lenders and bondholders/private placement note holders, for example? Consider changing the term "lenders" to "debt providers" or similar.</li> <li>- Similarly, paragraph (b) should refer to "debt providers (if any) and equity investors" instead of "lenders and equity investors".</li> </ul> <p>Further, it should be clarified, that infrastructure financing does not require the physical ownership of the mentioned structures, systems and networks, but also for example the concession to operate them.</p>	<p>Partially agreed. Facilities have been added to the definition. It is not considered to be necessary to further specify what was meant by "essential" as this was explained in paragraph 1.70 of the CP.</p> <p>Please see the response to comment 1.</p> <p>Partially agreed. EIOPA has reworded the definition and has deleted the provision in paragraph (a) which is considered to be covered by the provisions on the contractual framework. "Lender" has been replaced by "debt providers and equity investors".</p> <p>EIOPA has reviewed the criteria and believes that according to the revised criteria assets held on concession are not precluded.</p>
-----	-----------	----------------	--	---

			<p>In the definition of "Special Purpose Entity", consider deleting the final sentence "and the structure of which is intended to isolate the special purpose entity from the credit risk of an originator or seller of exposures", or replacing "an originator or seller of exposures" with "other parties" as the current language is a securitisation-style definition.</p> <p>As described in the WG's 15-003 DP response, the WG considers that the following list of the relevant sectors should be part of the definition:  (a) water, electricity, gas, sewage, waste or other related assets, facilities or services;  (b) energy or renewable equipment, assets or facilities; (c) roads (including bridges and tunnels), railways (including rolling stock) and railway facilities, ports, airports or other transportation assets, facilities or services; (d) health or medical equipment and facilities; (e) education, employment or training facilities; (f) courts, prisons or custodial facilities; (g) defence equipment, assets, services or facilities; (h) sporting, recreational or social facilities; (i) governmental assets or facilities; (j) flood defences; (k) housing; (l) telecommunications and broadcast assets or facilities; (m) physical distribution networks including pipelines and network connections and/or (n) fibre to home and other information technology assets.</p> <p>The WG disagrees with the exclusion of e.g. a power plant providing electricity to a single factory from the scope of the infrastructure definition (as suggested in para 1.71). As noted, the risk profile may be similar (depending on the strength of the off-taker in each case) and the criteria should be based on risk rather than whether or not a corporate has "funding problems".</p>	<p>The definition of "special purpose entity" has been deleted, as upon review it was not considered to be necessary in view of the existing requirements regarding the definition of the "infrastructure project entity", and the structural requirements regarding the separation of assets from other entities.</p> <p>Not agreed. As stated in the CP, EIOPA believes that it is more appropriate to provide a broad definition and not specify particular sectors.</p> <p>Not agreed. EIOPA considers that it is an important part of infrastructure that the project is serving a public function.</p>
77.			This comment was submitted as confidential by the stakeholder.	
78.	AMICE	Section 3.3.1.	We believe that the definition of infrastructure project entity should also encompass corporate type exposures as indicated in Annex I. Equity and debt investments in such entities should be treated similarly to "Infrastructure project entities" when their main activity is focused on operating infrastructure assets and when they meet the requirements defined in section 3.3.2 in terms of stress analysis and cash flows predictability. Cf also comments on Annex 1.	Please see the response to comment 49.
79.	AFG	Section 3.3.1.	<p>Comment on the "Advice" section</p> <p>We believe that the definition of Infrastructure project entity shall also encompass</p>	Please see the response to comment 49.

			<p>"corporate type exposures" as discussed in Annex I. Equity and debt investments in such entities shall be treated similarly to "Infrastructure project entities" when their main activity is focused on operating infrastructure assets and when they meet the requirements defined in 3.3.2 in terms of stress analysis and cash flows predictability. Cf also comments on Annex 1.</p>	
80.	ABI	Section 3.3.1.	<p>The ABI acknowledges that infrastructure investment is difficult to define, and appreciates EIOPA's work on this. We welcome that EIOPA has decided to set out a wider definition of infrastructure investment, rather limiting the scope to certain sectors.</p> <p>On the whole, we believe that EIOPA's definition provides a good framework, and would like to suggest a number of elements which could be refined further:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> A number of elements are unclear or involve the use of subjective judgments. For example, what would qualify as an "essential service" or a "public service" is subject to interpretation, and the usefulness of the definition would depend on how it is applied in practice. Nevertheless, we acknowledge that an element of judgement is to a large extent unavoidable and has the upside of providing greater flexibility.</li> <li><input type="checkbox"/> The definition should refer to "facilities" as part of the definition alongside "physical structures, systems and networks". This would remove the ambiguity as to whether investment into projects such as schools and hospitals qualify, as it is not clear whether they would be covered under "structures".</li> <li><input type="checkbox"/> It is not clear why qualification is restricted to areas with limited competition. This is subjective and difficult to verify or implement in practice. It is also not evident why monopolies/oligopolies should be favoured as a matter of public policy. The requirement could exclude many projects that should otherwise be eligible - for example, it could be said that a proposed bridge across a river is subject to competition from a ferry service, even if no other means of crossing the river exists. Similarly, it could always be argued that a new hospital/ power plant etc. are competing against other such ventures, even when the public would benefit from an increase in capacity.</li> <li><input type="checkbox"/> It is unclear what is envisaged by "substantial" degree of control that lenders are required to have over the assets and income.</li> </ul> <p>Paragraph 1.51: while we support the "public services" element of the definition, we disagree with EIOPA's interpretation that this would always exclude from scope situations such as where a power plant provides electricity to a single factory - this would depend on the particular context/circumstances of the project.</p>	<p>Please see the response to comment 76.</p> <p>Please see the response to comment 76.</p> <p>Please see the response to comment 1.</p> <p>Please see the response to comment 76.</p> <p>Please see the response to comment 90.</p>

			<p>As noted above, it is also not clear why only projects which would otherwise have problems attracting funding should be able to fall within the scope of eligibility. If we view the objective of the infrastructure definition and calibration work as ensuring that risk categories are appropriate for their underlying risk profiles, then similar risks should be treated in a similar way. If, however, we examine this from a public policy perspective of the types of projects that should be encouraged by policymakers, there is likewise no rationale for making the eligibility of an 'essential public services' project contingent upon its structural arrangement. Even if it is currently easier for corporates to access funding than for infrastructure projects, this is not a reason to penalise these as a matter of policy.</p> <p>We would also like to question the use of the term "lender" in the definition of "infrastructure project entity" in part a), as this term needs to encompass both equity and debt investors. The definition should either refer to "investors" or it read: "in cases of infrastructure debt, the contractual arrangements give the lender a substantial degree of control over the assets and the income they generate".</p>	<p>Please see the response to comment 51.</p> <p>Please see the response to comment 76.</p>
81.			This comment was submitted as confidential by the stakeholder.	
82.	BdV	Section 3.3.1.	Yes, we fully agree.	Noted.
83.			This comment was submitted as confidential by the stakeholder.	
84.	BlackRock	Section 3.3.1.	<p>While we welcome the intention to provide a broad definition of infrastructure assets we are concerned that that the definition proposed may not be consistent with those being used by the OECD as part of G20 initiatives and elsewhere in EU and national initiatives. In particular the definition is narrower than that adopted in the EFSI Regulation. This potentially has the effect that only a sub-section of EFSI initiatives will qualify for the more favourable treatment. While we appreciate that EIOPA is considering specific risk categorisation, we are concerned that there is insufficient synchronisation between these key European initiatives. A border definition will also avoid the risk of crowding out key projects which might not make the cut of a tightly drawn definition and funnelling investor money into too narrow a range of projects.</p> <p>We believe the definition of 'infrastructure project entity' is too narrowly drawn as it assumes a SPV-style entity where many of the core operating functions are sub-contracted to third party service providers. This type of financing is more applicable to the financing or operation of a clearly definable asset such as a toll road. Other asset more complex, networked assets such as an electricity grid supply do not tend to be operated by an SPV but by a more general operating company where the provision of services is insourced. We see significant corporate style issuance in sectors such as airports and ports, gas and oil pipelines, gas distribution, power and telecoms other than for new build assets. The overall effect of excluding these types of operating</p>	<p>Not agreed. EIOPA's work on infrastructure has a different purpose to the work relating to the EFSI regulation and there may be differences in scope as a result of this.</p> <p>Please see the response to comments 49 and 54.</p>

			<p>entities would be to limit investment to private equity style models of financing, - at a time when investors are considering different - term financing models. We believe that developing a range of financing models is beneficial</p> <p>In addition, as mentioned above, a pooled fund such as a closed-ended AIF or ELTIF or even a SPV would not appear to fit within this definition either. We also believe there are cases where lenders do not require substantial control – for example we could envisage a project being financed by a group of pooled funds, none of which has substantial control. We would recommend the use of a longer, but non-cumulative list of conditions.</p> <p>More generally, it is important to clarify that the requirements meet the qualifying criteria at the time of investment.</p>	<p>Not agreed. The definition has been revised (please see comment 76), but the control of the debt providers is considered to be a critical element of the project finance structures. EIOPA does not consider that the definition precludes multiple debt providers.</p> <p>Please see the response to comment 20.</p>
85.	BVI	Section 3.3.1.	<p>(1)</p> <p>The definition of infrastructure asset suggested here is completely different from the definition of infrastructure investment contained in the Technical Annexes to Draft ITS on Templates for the submission of information to the supervisory authorities, which were sent to the European Commission on 3 July 2015 as part of the 2nd set of draft ITS. There Annex III S.06.02 stipulates a reporting duty on infrastructure investments held by insurance undertakings. When working further on this topic, EIOPA should provide a uniform definition for calibration purposes as well for reporting templates.</p> <p>(2)</p> <p>The criteria of “limited competition” should be deleted from the definition of infrastructure assets. In our view, it is only an element that can influence the predictability of cash flows and therefore better dealt with in section 3.3.2.2. The advice on predictability of cash flows specifies that “the level of output or usage and the price shall be ... sufficiently stable as a result of low demand risk.” This is a description of limited competition. However, if the cash flows are predictable for another reason, e.g. because output and price are contractually fixed, then the level of competition is of no importance.</p>	<p>Partially agreed. The definition of infrastructure within the reporting requirements was designed for a different purpose and it was necessary to develop a different definition in view of the objectives of this work. The ITS on supervisory reporting was finalised by EIOPA based on the existing Solvency II regulations and will apply subject to endorsement by the European Commission. In general, where there are changes to Solvency II either based on this work on infrastructure or any other changes, EIOPA will need to assess whether these changes need to be reflected in the requirements concerning supervisory reporting.</p> <p>Please see the response to comment 1.</p>
86.	GDV	Section	We welcome EIOPA’s approach to take a broad definition for Infrastructure with	

		3.3.1.	<p>suitable criteria to eliminate infrastructure investments where lower risk charges are not appropriate. However, we think that certain definitions are not clear enough:</p> <p>The explanations of “essential” as well as “public services” in defining “infrastructure assets” raise questions which assets would fall into this definition. We see the risk that low risk projects with predictable low volatile cash flows and high credit quality of the off-taker are excluded from tailored treatment. In this context we would disagree with the exclusion of e.g. a power plant providing electricity to a single factory from the scope of the infrastructure definition, because the risk profile of such a utility is quite similar to other eligible projects falling under the scope of the Infrastructure definition (1.71). Generally we believe that infrastructure assets which “support essential public services” are only one indicator amongst others for a low risk profile. A low risk profile could also be achieved, if there are a number of private off-takers with high credit ratings. In our view, it is more important to have a reliable cash flow stream than the type of infrastructure service provided.</p> <p>Furthermore, we recommend the refinement of “subject to limited competition” because it is not an exclusive description of an infrastructure project (e.g. schools, hospitals etc.). In order not to exclude suitable infrastructure investments the “limited competition” should not be a compulsory application condition. It should be clarified, that it doesn’t mean monopolies or oligopolies but rather inelastic demand or long-term contracts/licenses or minimum purchase regulations. Infrastructure facilities are usually not – or only to a small degree – subject to market competition, since their services are difficult to replace. The condition referring to competition should be reworded as “not subject to full competition”.</p> <p>The proposed definition for “Infrastructure project entity” is too restrictive because the degree of control given to lenders will depend on the prevailing market conditions at the time the loan was extended. Requirement to meet either a) or b) should be sufficient.</p> <p>Further, it should be clarified, that infrastructure financing does not require the physical ownership of the mentioned structures, systems and networks, but also for example the concession to operate them.</p>	<p>Please see the response to comment 76.</p> <p>Please see the response to comment 1.</p> <p>Please see the response to comment 76.</p> <p>Please see the response to comment 76.</p>
87.	IE	Section 3.3.1.	<p>Insurance Europe welcomes EIOPA’s approach in taking a broad definition for infrastructure with suitable criteria to eliminate infrastructure investments where lower risk charges are not appropriate. However, certain elements of the definition are very restrictive and not clear enough.</p>	

		<ul style="list-style-type: none"> <li>■ The condition referring to competition should be deleted. <ul style="list-style-type: none"> <li>■ Limited competition will be very difficult to define and verify.</li> <li>■ Competition characteristics are embedded in the criteria for predictability of cash flows.</li> </ul> </li> <li>■ The definition should also include a reference to “facilities”. <ul style="list-style-type: none"> <li>■ This will ensure that investment into projects, such as schools and hospitals, will qualify because the current reference only to “structures” may imply that they are not.</li> </ul> </li> <li>■ In the paragraph referring to substantial control: <ul style="list-style-type: none"> <li>■ It is unclear what is envisaged by a “substantial” degree of control.</li> </ul> </li> <li>■ Insurance Europe agrees with replacing lenders with investors, if this refers to investors in both debt and equity. In addition, a separate paragraph is also needed to reflect the fact that lenders should only gain control if contractual agreements are breached (interest, repayments or covenants). Alternatively, the requirement to meet either a) or b) should be sufficient.</li> <li>■ For the sake of clarity, Insurance Europe recommends introducing the definition of an “infrastructure project entity” as well as “infrastructure operating entity”: <ul style="list-style-type: none"> <li>■ <i>‘Infrastructure project entity’ means an entity which was created specifically to finance infrastructure assets, where the contractual arrangements give the lender a substantial degree of information over the financial performance of the entity and a comprehensive security package.</i></li> <li>■ <i>‘Infrastructure operating entity’ means an entity which operates infrastructure assets, where the contractual arrangements give the lender a comprehensive security package including a substantial degree of information over the financial performance of the entity, and the primary source of payments to creditors and equity investors is the income generated by the assets being financed.</i></li> </ul> </li> </ul> <p>Further, it should be clarified, that infrastructure financing does not require the physical ownership of the mentioned structures, systems and networks, but also, for example, the concession to operate them.</p> <p>Finally, while Insurance Europe agrees that the “separation” concept does work for a</p>	<p>Please see the response to comment 1.</p> <p>Please see the response to comment 76.</p> <p>Please see the response to comment 76.</p> <p>Please see the response to comment 76.</p> <p>Not agreed. It is not clear why a definition of infrastructure operating entity is necessary. Nevertheless, EIOPA has revised the criteria on operating risk and the infrastructure project entity is no longer required to transfer the risks to an operating company.</p> <p>Please see the response to comment 76.</p> <p>Not agreed. EIOPA considers the separation requirements to be an essential element of project finance</p>
--	--	--	--

			project entity during the construction phase, it stresses that the concept of "privileged access" to the underlying assets and/or related cash flows may be more realistic for brownfield type of transactions.	structures.
88.	IRSG	Section 3.3.1.	<p>For the sake of clarity, the IRSG recommends introducing the definition of an "infrastructure project entity" as well as "infrastructure operating entity":</p> <ul style="list-style-type: none"> <li>- 'Infrastructure project entity' means an entity which was created specifically to finance infrastructure assets, where the contractual arrangements give the lender a substantial degree of information over the financial performance of the entity and a comprehensive security package</li> <li>- 'Infrastructure operating entity': An entity which operates infrastructure assets, where the contractual arrangements give the lender a substantial degree of information over the financial performance of the entity, a comprehensive security package and the primary source of payments to creditors and equity investors is the income generated by the assets being financed;</li> </ul> <p>Further, it should be clarified, that infrastructure financing does not require the physical ownership of the mentioned structures, systems and networks, but also for example the concession to operate them.</p> <p>Finally, while the IRSG agrees that the "separation" concept does work for a project entity during the construction phase, it stresses that the concept of "privileged access" to the underlying assets and/or related cash flows may be more realistic for brownfield type of transactions.</p> <p>Further, a number of enhancements to the definitions are needed, for example:</p> <ul style="list-style-type: none"> <li>• More clarity about what would qualify as an "essential service" or a "public service".</li> <li>• It is unclear what is intended by the "substantial" degree of control that lenders need to have over assets and income.</li> <li>• It is unclear why the definition should be restricted to monopolies/oligopolies, or how "limited competition" would be assessed. In the toll road example given in para 1.72, this flaw would be reflected in the level of predicted income. This requirement should instead be reworded to read as "not subject to full competition".</li> <li>• A reference to "facilities" should be introduced. Otherwise the approach may result in investment in projects such as schools and hospitals not qualifying, as these may not be covered by the reference to "structures".</li> </ul>	<p>Please see the response to comment 87.</p> <p>Please see the response to comment 76.</p> <p>Please see the response to comment 87.</p> <p>Please see the response to comment 76.</p> <p>Please see the response to comment 1.</p> <p>Please see the response to comment 76.</p>

			<p>We seek clarification on the proposal to replace “lenders” with “investors” as stated in paragraph 1.74. The replacement would work if the “lenders” are understood to be senior debt or equity investors. However, if “lenders” is meant as “investors in a loan” then the same covenants and security package could be agreed in a project bond.</p> <p>In the definition of “Special Purpose Entity”, consider deleting the final sentence “and the structure of which is intended to isolate the special purpose entity from the credit risk of an originator or seller of exposures”, or replacing “an originator or seller of exposures” with “other parties” as the current language is a securitisation-style definition.</p> <p>IRSG disagrees with the exclusion of some transactions, such as a power plant providing electricity to a single factory from the scope of the infrastructure definition (as suggested in para 1.71). As noted, the risk profile may be similar (depending on the strength of the off-taker in each case) and the criteria should be based on risk rather than whether or not a corporate has “funding problems”.</p>	<p>Please see the response to comment 76.</p> <p>Please see the response to comment 76.</p> <p>Please see the response to comment 76.</p>
89.	LaG	Section 3.3.1.	<p>We support the approach you have taken to defining infrastructure and believe that a broader definition, based on a set of “principles”, is the right way forward. We are, however, concerned that the phrase “provide or support essential public services” (in the advice section on page 23 of the consultation) risks unintended consequences. There is a risk that in the future this could be interpreted as not including infrastructure that builds on or adds to existing provision or support. Therefore, the advice could be made even clearer by saying “ ‘Infrastructure assets’ means physical structures, systems and networks that create, provide or support essential public services and are subject to limited competition”.</p>	<p>Not agreed. “Create” is not considered to be necessary, as “provide or support” is considered to cover the points mentioned.</p>
90.	LTIIA	Section 3.3.1.	<p>Para 1.70. While we support defining infrastructure primarily by its purpose rather than by sector, we think that listing actual infrastructure sectors as they are commonly known, is an important part of the definition. We suggest mentioning the following sector titles: transport, energy, utilities, telecommunications and social infrastructure (such as hospitals and schools).</p> <p>Para 1.71. While we agree that serving the public good is an important differentiating feature of infrastructure, we consider it critical that the form of contracting infrastructure assets does not alone condition the judgement of whether the public good is served or not. For example, in the provided illustration of electricity plant contracted by a single factory, it would be important to establish whether the generation is passed-through to manage disbalances in the public grid.</p>	<p>Please see the response to comment 76.</p> <p>Please see the response to comment 76. The requirement for “essential public service” is retained. However, the example was included in the CP for illustration purposes and the eligibility of</p>

			<p>Para 1.72. We would suggest that this paragraph reads:</p> <p>“For the purpose of defining infrastructure investments with a better risk profile than implied by their current standard formula treatment the requirement of monopolistic or oligopolistic position has to be included.”</p> <p>This wording clarifies the notion of “limited competition” used in the paper without using the example of a parallel toll road, which we find questionable and, potentially, misleading. Given the significant capital outlay involved in the development of infrastructure projects, cases of infrastructure assets competing with each other in the ‘free market’ sense are typically limited to oligopolistic situations facing lower-than-expected demand. In the toll road example, the road would never be built if the existing routing provided multiple alternatives at the expected traffic volume in the corridor. So the competition is not driven by the number of incumbent players or entrants but rather by the fluctuation in demand in the monopolistic or oligopolistic setting.</p> <p>Also, for the sake of good order, many infrastructure projects feature very low operational leverage – including roads, social infrastructure, telecommunication towers, power cables etc.</p> <p>Advice. The meaning of “substantial degree of control” need to be clarified. Lenders tend to apply much tighter controls for greenfield assets (especially, during the construction phase) compared to the brownfield assets.</p>	<p>a particular project would need to be assessed on a case by case basis.</p> <p>Please see the response to comment 1.</p> <p>Please see the response to comment 76.</p>
91.	NATIXIS	Section 3.3.1.	We globally agree with the definition however the reference to public services is too prescriptive in our view and could lead to exclude valuable industrial transactions which relies on private off-takers rather than public ones. As long as the off-taker is solid and the structure is complying with project finance requirements we do not see the rationale for excluding those projects.	Please see the response to comment 76.
92.	RSA	Section 3.3.1.	See section 3.1 above: whilst we understand that EIOPA has proposed a broad definition in order to honour the principles-based approach of Solvency II, some clear examples would be welcome.	Please see the response to comment 76.
93.	The	Section	We welcome EIOPA’s work in developing a broad definition for infrastructure, in	

	Investment Association	3.3.1.	<p>particular the decision not to limit the scope of qualifying infrastructure to certain sectors. However, we have concerns regarding some aspects of the definition for infrastructure assets, infrastructure project entities, and special purpose entities.</p> <p><u>Infrastructure assets</u></p> <ul style="list-style-type: none"> <li>• The requirement that eligible infrastructure assets have “to provide or support essential public services” would seem to rule out investment in longer term infrastructure which are additive to existing structures and which contribute to long term growth and economic development. This narrow definition runs counter to the definition adopted in the EFSI Regulation (article 9) particularly in the area of development and deployment of information and communication technologies and environment and resource efficiency. The definition should be widened to refer to ‘public services’ or ‘public benefit’ and drop the reference to ‘essential’.</li> <li>• It is not clear what is meant by networks, particularly in the transport sector. There seems to be a distinction between core and peripheral infrastructure, for example train track versus rolling stock. Greater clarity on what is meant by networks should be provided and should include peripheral infrastructure.</li> <li>• It will be difficult to define and verify what is meant by “limited competition”. In any case, we are concerned as to whether a policy that encourages monopolies is the right one.</li> <li>• In addition to seeking further clarity on the proposed definition for infrastructure, we propose that the current definition should be restated as:</li> </ul> <p><b>“Infrastructure assets’ means physical structures, systems and networks that provide or support essential public services. <del>and are subject to limited competition.</del></b></p> <p><u>Infrastructure project entity</u></p> <ul style="list-style-type: none"> <li>• EIOPA defines an infrastructure project entity as where:</li> </ul>	<p>Please see the response to comments 76 and 84.</p> <p>Not agreed. EIOPA considers that the revised definition is sufficiently broad.</p> <p>Please see the response to comments 1 and 76.</p>
--	------------------------	--------	---	--

			<p>a) the contractual arrangement give lenders a substantial degree of control over the asset, and</p> <p>b) the primary source of repayment is the income generated by the asset.</p> <ul style="list-style-type: none"> <li>This definition of 'infrastructure project entity' assumes a SPV-style entity where many of the core operating functions are sub-contracted to third party service providers. This type of financing is more applicable to the financing or operation of a clearly definable asset such as a toll road. Other more complex, networked assets such as an electricity grid supply do not tend to be operated by an SPV but by a general operating company where the provision of services is insured. For example in the UK electricity grids are run by Distribution Network Operators.</li> <li>The Investment Association strongly believes that infrastructure corporates (and not only projects) should be included in the definition. According to the Moody's project loan study cited in Annex 1, infrastructure rating and recovery data indicates that there is the same risk for corporates as for private finance, with the drivers of recovery being strong covenants and limited ownership of assets. Lenders to corporates have no direct control over the assets but they have control over debt, leverage, dividend distribution and disposal of asset through covenants. These covenants can enable some recovery of the assets, so corporates should not be excluded. Excluding corporates such as these would considerably reduce the pipeline of investable projects.</li> <li>In addition, we note that in condition (a) as stated above, it is not clear what is meant by "lender" and if this would include equity investors. Not all infrastructure is financed with debt. A narrow definition would limit investments infrastructure projects that are fully equity financed. If the same definition of "infrastructure" applies to debt and equity infrastructure investments then condition (a) should be amended.</li> <li>In order to incorporate corporate entities which engage in infrastructure activities, and address the concerns above, we propose that EIOPA should allow for investment in "infrastructure project entity" or 'infrastructure operating entity'. We propose the following wording:</li> </ul>	<p>Please see the response to comment 49.</p> <p>Please see the response to comment 49.</p> <p>Please see the response to comment 76.</p> <p>Please see the response to comment 49.</p>
--	--	--	---	---

			<p><b>“An entity which finances or operates infrastructure assets, where the following conditions are met:</b></p> <p><b>a) There is a comprehensive security package;</b></p> <p><b>b) The primary source of payments to investors is the income generated by the assets being financed or operated.”</b></p> <p><i>Special purpose entity</i></p> <ul style="list-style-type: none"> <li>• The Investment Association is not supportive of limiting the definition of infrastructure to exclude infrastructure corporates. See ‘<i>Infrastructure operating entity</i>’ above.</li> <li>• There is a concern that the current proposals are seeking to incentivise a private equity model of infrastructure financing versus a corporate model. This is unwelcome.</li> </ul> <p>Overall, the current proposals would also exclude pooled funds such as closed-ended funds with no or low levels of leverage such as ELTIFs or other similar AIFs which are designed to be bought on a buy-to-hold basis and which provide portfolio diversification benefits. Further consideration should be given to ensure that pool funds are including in the qualifying criteria.</p>	<p>Please see the response to comment 49.</p> <p>Please see the response to comments 52 and 54.</p>
94.	AFME ICMA	Section 3.3.2.	While from a high-level perspective the objectives behind general provisions relating to stress analysis, predictability of cash flows and contractual frameworks are understandable, their translation into requirements is overly prescriptive and operationally burdensome and there is a need for greater flexibility.	Please see the response to comments 1 and 71.
95.			This comment was submitted as confidential by the stakeholder.	
96.	ABI	Section 3.3.2.	While the objectives behind stress analysis, predictability of cash flows and contractual framework requirements are understandable, their translation into requirements is overly prescriptive and operationally burdensome. We set out the areas where we think the requirements are unnecessarily restrictive in our responses below.	Please see the response to comments 1 and 71.
			As an overarching comment, we would like to stress that requirements should apply at the point of investment.	Please see the response to comment 20.
97.			This comment was submitted as confidential by the stakeholder.	
98.	BdV	Section	Yes, we fully agree.	Noted.

		3.3.2.		
99.	GDV	Section 3.3.2.	We welcome the approach to define characteristics of relatively low risk infrastructure investments, which do not relate to specific categories of investment objects, but are rather based on a list of general criteria. The set of criteria is necessary in order to identify low risk infrastructure investments. Regarding the number and precise detail of criteria it should be ensured that the list is practical and not too burdensome and eligible investments are not excluded due to higher levels of complexity. There is a need for greater flexibility within the criteria, meaning that not all criteria have to be met in order to qualify for preferential treatment.	Please see the response to comments 1 and 71.
100.	IE	Section 3.3.2.	Insurance Europe welcomes the approach to define characteristics of relatively low risk infrastructure investments, which do not relate to specific categories of investment objects, but are rather based on a list of general criteria. Regarding the number and precise detail of criteria it should be ensured that the list is practical and not too burdensome which might result in investments not being executed due to a high level of complexity. Generally, there is a need for greater flexibility. In addition, the risk management and internal assessment requirements (pillar 2) already take into account this assessment of investments on a regular basis.	Please see the response to comments 1 and 71.
101.	IRSG	Section 3.3.2.	There is a need for greater flexibility when translating the predictability of cash flows and contractual frameworks for stress analysis, since the compliance with the current rigid advice is operationally burdensome.	Please see the response to comments 1 and 71.
102.	LaG	Section 3.3.2.	Stress Analysis: Overall we support the stress analysis approach adopted. We would though add to the advice, as a new section 4, that based on aggregate data, "infrastructure stresses are c80% of bond stresses". This principles based approach would provide a useful additional stress test for infrastructure.	Not agreed. It is not appropriate to prescribe a specific stress level.
103.	NATIXIS	Section 3.3.2.	The list of stress test should be indicative and not mandatory.	Not agreed. The list of stresses should be applied to the extent that they are relevant for the project.
104.	RSA	Section 3.3.2.	We broadly agree with the text as drafted.	Noted.
105.	AAE	Section 3.3.2.1.	We agree with the stress analysis in this section – we note that this analysis, alongside requirements for predictability of cash flows, may be seen as relatively strong, e.g. closer to requirements for an internal model application, which may threaten the underlying intention to support standard formula firms.	Please see the response to comment 1.
106.	AFME ICMA	Section 3.3.2.1.	Where a construction company or operating company is a strong credit, is it intended that there still a requirement to test the ability to meet its obligations in the event of an insolvency of such entity? If there are limited companies which can replace the contractor, it may be that a project will not qualify on this test, which seems inappropriate if this risk of contractor failure is assessed as low risk.	Partially agreed. The stress analysis should be applied in a proportionate manner considering the likelihood of the different scenarios. The drafting has been changed to underline this. Where the

				insolvency of the construction company is judged to be of a low likelihood, then the project is not expected to be excluded depending on the impact of other stresses.
107.	ABI	Section 3.3.2.1.	Stress testing  We are generally supportive of the stress testing requirements proposed by EIOPA, and are pleased to see that EIOPA notes that these should be used to the extent they are relevant based on the risks of the project.	Noted.
108.	BdV	Section 3.3.2.1.	Yes, we fully agree.	Noted.
109.			This comment was submitted as confidential by the stakeholder.	
110.	BlackRock	Section 3.3.2.1.	Stress analysis  We support the aim of allowing the use of stress scenarios where appropriate as this recognises that the relevant scenarios go well beyond scenarios used by rating agencies. Other factors which could be taken into account include indexation and risks related to operating costs.	Partially agreed. The list of stresses provided is considered to cover the main factors to consider during the stress analysis. However, other factors may also be relevant.
111.	IE	Section 3.3.2.1.	Since infrastructure cash flows are expected to be broadly uncorrelated with the overall market, the company should be allowed to refine the severe economic shock in point 2 b) of paragraph 1.79 as a specific economic shock to the infrastructure asset (eg traffic volumes for roads). Generally, the definitions of the stress scenarios are quite generic, which seems appropriate given the variety of projects available. However, it needs to be ensured that companies are allowed to apply the scenarios in a way that is tailored to their specific exposures.	Please see the response to comment 103.
112.	IRSG	Section 3.3.2.1.	Where a construction company or operating company is a strong credit, is it intended that there still a requirement to test the ability to meet its obligations in the event of an insolvency of such entity? If there are limited companies which can replace the contractor, it may be that a project will not qualify on this test, which seems inappropriate if this risk of contractor failure is assessed as low risk.	Please see the response to comment 106.
113.	NATIXIS	Section 3.3.2.1.	On top of historical experience, prescribed stress tests should also take into account mitigants existing in the structure.	Agreed. The requirement is for the project to be able to meet its obligations.
114.	The Investment Association	Section 3.3.2.1.	We welcome EIOPA's approach, which allows insurers to apply the scenarios only where relevant. This takes into account that the stress scenarios set out in the advice go above and beyond what would be required by rating agency methodology for stress testing infrastructure investments, and a requirement to apply them in all scenarios	Partially agreed. The stress scenarios shall be used where relevant.

			would be overly prescriptive and restrictive.	
115.	AAE	Section 3.3.2.2.	Under 2. a) iv. a further point d) "monopolistic/quasi-monopolistic competitive position" (over a sufficiently long part of the holding period) should be added if this criterion is not meant to be addressed under be 2. a) iv. c)	Not agreed. The criterion already includes the element that there should be low demand risk.
116.	AFME ICMA	Section 3.3.2.2.	<p>The predictability of revenues and costs is implicitly included in the predictability of cash flows (which are made up by revenues and costs) so the consideration in paragraph 1.89 appears to be unnecessary.</p> <p>The requirement in the advice on predictability of cash flows, 2.a.iv that "<i>the level of output shall be...sufficiently stable</i>" should focus on predictability rather than stability. Provided the cash flows are predictable, they can be modelled and any risks relating to any instability can be properly assessed. Predictable unstable cash flows that meet all obligations to creditors and, in respect of equity investments, generate returns for equity investors should not be disqualified. The WG believes this requirement should be replaced by another requirement to have, for example, a minimum predictable cash-flow.</p> <p>Regarding greenfield projects, some projects might not be initially in line with the projections, not only on the downside case but also some projects might perform better than expected. As a consequence, EIOPA should not penalise projects that have shown a better performance than expected. EIOPA's proposal does not reflect the fact that some projects might have experienced important changes during the construction or operation phase (e.g. modifications required by the procurement entity, new investments, service enhancement etc.) – which does not imply that these projects are not performing well or that the cash-flows are not predictable. These circumstances should be taken into account when assessing the predictability of cash-flows for greenfield projects.</p> <p>The reference to credit rating requirements (see 2.b.iii of the advice on the predictability of cash flows) should include both an ECAI rating and an internal rating, and the requirement should only apply at the time when the investment is made.</p> <ul style="list-style-type: none"> <li>- An internal credit assessment should also be encouraged given the aim to reduce overreliance on external ratings (as specified by rating regulation CRA</li> </ul>	<p>Partially agreed. EIOPA has not introduced specific requirements on the predictability of expenses. However, the level and predictability of expenses would still need to be considered during an assessment of whether the overall cash flows of the project are predictable.</p> <p>Agreed. "Stable" has been replaced by "predictable".</p> <p>Agreed. The drafting of paragraph 2(d) has been changed to reflect this.</p> <p>Please see the response to comment 2.</p>

			<p>III, Regulation 462/2013). An internal rating can be understood either as an internal rating of a partner company e.g. from a credit institution with an approved internal rating system of the internal rating or an internal rating from the investor.</p> <ul style="list-style-type: none"> <li>- A requirement of a minimum rating should only apply at the time when the investment is made; otherwise it is not clear what would happen in case an off-taker is downgraded. The risk of cliff effects should be avoided. The requirement of CQS 3 for the off-taker seems too restrictive. EIOPA should consider to change the requirement to CQS 4.</li> <li>- The credit rating requirement should read as follows (additions are underlined)  <i>"...ii.i an entity with an ECAI or <u>internal rating</u> with a CQS of at least 3 <u>at time of the investment</u>."</i></li> </ul>	<p>Not agreed regarding the rating requirement only applying at the time of investment. The requirements need to be satisfied on an ongoing basis in order to ensure that the SCR treatment continues to be appropriate. Not agreed regarding the requirement for an off-taker of at least CQS3. The criteria are designed to ensure a credit quality comparable to ECAI rated qualifying infrastructure with credit quality step 3. Given the importance of the off-taker and the likelihood of severe losses for the project should the off-taker default where revenues are not paid by a large number of users, EIOPA considers that its draft advice was appropriate.</p>
117.			This comment was submitted as confidential by the stakeholder.	
118.	ABI	Section 3.3.2.2.	<p>Predictability of cash flows</p> <p>While we are generally supportive of the predictability of cash flows requirement, we note this should allow for some variability, both in terms of revenue and expenses.</p> <p>EIOPA noted that is considering whether any requirements relating to the predictability of expenses are necessary. Cashflows are typically defined as inflows minus outflows, so we believe that expenses should be part of the consideration. The relevant measure should be the predictability of net cashflows available for investors (in the context of debt, this would be net cashflow available for debt service).</p> <p>2. a) ii: this should encompass revenues subject to all types of regulation that set the price, not just rate-of-return regulation.</p>	<p>Please see the response to comment 116.</p> <p>Partially agreed. EIOPA has retained the drafting regarding rate-of-return regulation. Point 2(a)(iv) allows for other types of arrangements where it can be demonstrated that the revenues are sufficiently predictable.</p>

			<p>2. b) iii.: in cases where there is a single (non-government) off-taker, we believe it is too restrictive to limit eligibility to off-takers with an external rating. We suggest that internal ratings should also be allowed.</p> <p>We would also like to emphasise again that the assessment should apply at the point when the investment is made.</p>	<p>Please see the response to comment 116.</p> <p>Please see the response to comment 116.</p>
119.			This comment was submitted as confidential by the stakeholder.	
120.			This comment was submitted as confidential by the stakeholder.	
121.	BlackRock	Section 3.3.2.2.	<p>Predictability of cash flows</p> <p>In the box on draft advice under paragraph 1.89, we recommend allowing partial merchant risks or off take contract renewal risks when the coverage ratios are adequate to absorb the risks.</p> <p>In sub-paragraph of the draft advice we also suggest giving consideration to the cover ratio level.</p> <p>On cash flow predictability the definition of an offtaker rating of BBB- is too restrictive. We share concerns raised by other respondents that if an offtaker with a CQS of at least BBB- is downgraded that there could be significant cliff effects – to avoid this we recommend stating that these and other criteria should be applied at the time of investment.</p>	<p>Partially agreed. EIOPA would acknowledge that it may be possible for a part of the revenues to not meet the requirements specified, but overall the cash flows still be predictable. The requirement has been changed such that only an immaterial part of the revenues cannot met the requirements regarding predictability. The requirements apply irrespective of the cover ratio level.</p> <p>Please see the response to comment 116.</p>
122.	GDV	Section 3.3.2.2.	<p>Regarding the Advice on “Predictability of cash flows” we would like to emphasise that the focus should be rather on predictability and not on stability. The criteria should be a long dated investment with a high degree of predictability regarding cash flows. Stability of cash flows can vary according to the seasoning of the project but within expectations. A stable cash flow is therefore positive but should not be a requirement. The requirement should also not be necessarily met by all cash flows, a majority (2/3) of regulated or locked-in cash flows should also qualify for a tailored treatment. It is important that the requirements on predictability of cash flows remain non-cumulative.</p> <p>The assessment of the predictability of cash flows should not be limited to investments with an ECAI rating but also include internal ratings as a result of companies’ own</p>	<p>Please see the response to comments 116 and 121.</p> <p>Regarding the non-cumulative comment, the drafting of the advice is considered to be clear on the proposed application of the requirements, and the cases in which they need to be satisfied. However, a drafting change has been made to point 2(a)(iv) to clarify its application.</p>

			<p>credit assessments. Non-existence of an ECAI rating is not indicative of low quality. Unrated debt should be included in the analysis next to rated debt. Excluding unrated debt would be unjustified from a risk perspective and reduce the number of eligible investments significantly. Moreover, limiting preferential treatment to investments with external ratings would contradict the intention of the rating regulation CRA III (Regulation 462/2013) since CRA III intends to reduce companies' dependence on external credit ratings. If a public or non-public credit rating by a recognised credit rating agency exists than the external rating should be used together with an internal assessment where appropriate. In case an external rating by a recognised agency does not exist (which will quite often be the case) then only the investor's own credit assessment should be used. Moreover, a requirement for an off-taker ECAI rating with CQS of at least 3 seems too restrictive. We suggest instead an off-taker ECAI rating with CQS of at least 4.</p> <p>We do not consider it necessary to separately mention the forecastability of weather conditions (obviously related to renewable energy investments) as an additional requirement. This requirement is not sector-specific. Change formulation to "reasonably in line", as one never can exactly forecast.</p>	<p>Please see the response to comment 116.</p> <p>Not agreed. Regarding point 2(c) where the revenues depend materially on the weather conditions, the reliability of weather forecasting is a relevant factor.</p>
123.	IE	Section 3.3.2.2.	<p><b>Insurance Europe notes that predictability of revenues and costs is implicitly included in the predictability of cash flows (which are made up by revenues and costs) so there is no need for any additional requirements on predictability of expenses as mentioned in para 1.89.</b></p> <p>Regarding the advice on predictability of cash flows Insurance Europe would like to emphasise that the focus should be on predictability and not on stability. Requirements for cash flows to be "sufficiently stable" could have unintended consequences for transactions with some economic/volume risk like essential infrastructure involving toll roads, airports, as well as renewables. The criteria should be a long dated investment with a high degree of predictability. Predictable unstable cash flows that meet all obligations to creditors and generate returns for equity investors should not be disqualified.</p> <ul style="list-style-type: none"> <li>■ It is also important that the requirements on the predictability of cash flows remain non-cumulative. In particular, EIOPA should make sure merchant infrastructure (eg power plant, road) is not excluded from the scope of the definition.</li> <li>■ Regarding infrastructure projects, it is very well possible that they are not in line with initial projections. However, this does often not mean that the projects performs below expectations but that projects perform better than</li> </ul>	<p>Please see the response to comment 116.</p> <p>Please see the response to comment 116.</p> <p>Please see the response to comments 116 and 122.</p>

expected. Therefore, projects that have shown better performance than expected should not be penalised. EIOPA's proposal does not reflect the fact that some projects might have experienced important changes during the construction or operation phase (eg modifications required by the procurement entity, new investments, service enhancement etc.) – which does not imply that these projects are not performing well or that the cash-flows are not predictable. These circumstances should be taken into account when assessing the predictability of cash-flows for infrastructure projects.

Insurance Europe understands that the requirements demand that, roughly speaking, cash flows have to be either regulated or locked-in. This seems overly restrictive. Regarding the predictability of cash flows, Insurance Europe believes that infrastructure should also qualify where the *majority* of cash flows are regulated, contractually fixed or sufficiently predictable as a result of low demand risk.

**Insurance Europe believes that a reference to credit rating requirements (see 2.b.iii of the advice on predictability of cash flows) should include both an ECAI rating and an internal rating. The requirement should apply only at the time when the investment is made.**

- Often an internal credit assessment is in place. This should also be encouraged given the aim to reduce overreliance on external ratings (as specified by rating regulation CRA III, **Regulation 462/2013**). By internal rating, it should be understood either the internal rating of the investor or an internal rating of a partner company, eg from a credit institution with an approved internal rating system.
- The requirement of CQS 3 for the off-taker seems too restrictive. EIOPA should consider to change the requirement to CQS 4.
- It must be made clear that the requirement only applies at the time of acquisition so that cliff and pro-cyclicality effects are avoided in case of a downgrade after investment.
- The credit rating requirements should, therefore, read as follows (additions are underlined) *"...iii an entity with an ECAI or internal rating with a CQS of at least 3 4"*

It needs to be ensured that the 2.d) condition in paragraph 1.89 is a requirement that does not apply for projects with a duration of less than five years. Furthermore, since

Please see the response to comment 121.

Please see the response to comment 116.

Partially agreed. The drafting of point

			cash flows can never be forecasted exactly, it should read as follows: " <i>...has been reasonably in line with projections.</i> "	2(d) has been changed to 'not been significantly below projections'. In general, the information that is available regarding the performance of the project will be relevant in all cases as part of the overall analysis of whether the cash flows to investors can be considered predictable. This requirement intends to specify that where the project has been in operation for a number of years (i.e. five) cash flows to investors cannot be considered to be predictable if the revenues to date have been significantly below projections.
124.	IRSG	Section 3.3.2.2.	<p>The predictability of cash flows implicitly includes the predictability of revenues and costs (which are made up by revenues and costs) so the consideration in paragraph 1.89 appears to be unnecessary.</p> <p>The requirement in the advice on predictability of cash flows, 2.a.iv that "the level of output shall be..sufficiently stable" should focus on predictability rather than stability. Requirements for cash flows to be "sufficiently stable" could have unintended consequences for transactions with some economic/volume risk like essential infrastructure involving toll roads, airports, as well as renewables. For example, projects in some jurisdictions (e.g. UK) are supported by renewable certificates where there is implicitly more exposure to market prices. The criteria should be a long dated investment with a high degree of predictability. Predictable unstable cash flows that meet all obligations to creditors and generate returns for equity investors should not be disqualified.</p> <p>It is also important that the requirements on the predictability of cash flows remain non-cumulative. In particular, EIOPA should make sure merchant infrastructure (eg power plant, road) is not excluded from the scope of the definition.</p> <p>Regarding greenfield projects, some projects might not be initially in line with the projections, not only on the downside case but also some projects might perform better than expected. As a consequence, EIOPA should not penalise projects that have shown a better performance than expected. EIOPA's proposal does not reflect the fact that some projects might have experienced important changes during the construction or operation phase (e.g. modifications required by the procurement entity, new investments, service enhancement etc.) – which does not imply that these projects are not performing well or that the cash-flows are not predictable. These circumstances</p>	<p>Please see the response to comment 116.</p> <p>Please see the response to comment 116.</p> <p>Please see the response to comments 121 and 122.</p> <p>Please see the response to comment 116.</p>

			<p>should be taken into account when assessing the predictability of cash-flows for greenfield projects.</p> <p>Requirement 2(a) and (b) appear to cover the same point. In relation to 2(b), it is worth noting that market practice in some jurisdictions will mean first perfected security interests over all assets are not taken - for example, it is market practice in Spain to take promissory mortgages, rather than full perfected mortgages, due to stamp duty liabilities which arise on the grant of certain mortgages, and therefore on the current criteria project finance in Spain in accordance with current practices would be excluded.</p> <p>The reference to credit rating requirements (see 2.b.iii of the advice on predictability of cash flows) should include both an ECAI rating and an internal rating, and the requirement should only apply only at the time when the investment is made.</p> <ul style="list-style-type: none"> <li>• An internal credit assessment should also be encouraged given the aim to reduce overreliance on external ratings (as specified by rating regulation CRA III, Regulation 462/2013). An internal rating can be understood either as an internal rating of a partner company eg from a credit institution with an approved internal rating system of the internal rating or an internal rating from the investor</li> <li>• A requirement of a minimum rating should only apply at the time when the investment is made; otherwise it is not clear what would happen in case an off-taker is downgraded. The risk of cliff effects should be avoided.</li> <li>• The requirement of CQS 3 for the off-taker seems too restrictive. EIOPA should consider to change the requirement to CQS 4.</li> <li>• The credit rating requirements should read as follows (additions are underlined) <i>"...ii.i an entity with an ECAI or <u>internal rating</u> with a CQS of at least 3 <u>at the time of investment</u>"</i></li> <li>• It needs to be ensured that the 2.d) condition in paragraph 1.89 is a requirement that does not apply for projects with a duration of less than 5 years. Furthermore, since cash flows can never be forecasted exactly, it should read as follows: "...has been reasonably in line with projections."</li> </ul>	<p>Please see the response to comment 130.</p> <p>Please see the response to comment 116.</p> <p>Please see the response to comment 123.</p>
125.	LaG	Section 3.3.2.2.	<p>Predictability of cash flow: The advice on page 27 states that where the revenues are not funded by payments from a large number of users, a permissible off-taker would be "an entity with an ECAI rating with a CQS of at least 3". There is a risk that if an off-taker were subsequently downgraded this would create a significant risk. We would suggest adding to this that the off-taker is a CQS of at least 3 at the time of investment.</p>	<p>Please see the response to comment 116.</p>

126.	LTIIA	Section 3.3.2.2.	Para 1.89. Requirements regarding predictability of expenses have limited relevance for assets with low operational leverage (unless expected DSCR is very low).	Please see the response to comment 116.
127.	NATIXIS	Section 3.3.2.2.	<p>The requirements on predictability of cash flows should remain non-cumulative (merchant infrastructure should not be excluded).</p> <p>Advice 2 b) iii: a reference to internal rating should be included</p> <p>2 d) this requirement should not exclude refinancing of project where the level of debt is reduced to reflect the reduction in revenues.</p>	<p>Please see the response to comment 122.</p> <p>Please see the response to comment 2.</p> <p>Not agreed. Where the project has performed significantly below projections it is considered reasonable that it would be excluded until the performance has demonstrably improved.</p>
128.	The Investment Association	Section 3.3.2.2.	<p>The predictability of cash flow requirement is overly prescriptive, and does not take into account that a project's revenues may predominantly but not fully meet the requirements. In addition, other factors can impact the predictability of a project's cash flow, such as tax and changes to tax rules.</p> <p>We recommend that this requirement be amended so that it refers <b>to predictability of net cash flows available to investors</b>.</p> <p>In addition we have certain concerns regarding several of the requirement's conditions.</p> <ul style="list-style-type: none"> <li>Condition a) ii): It is not clear if the "rate of return regulation" referred to would capture certain elements of government policy that would have impact an infrastructure projects cash flow eg. feed in tariffs. This requirement should be amended so that it states:</li> </ul> <p>"The revenues are subject to <del>a rate of return</del> <b>regulated return</b>".</p> <ul style="list-style-type: none"> <li>Condition a) iv) a): Requirements for cash flows to be "sufficiently stable" could have unintended consequences for transactions with some economic/volume risk, such as essential infrastructure involving toll roads and airports, as well as renewables. For example, while projects in some jurisdictions (e.g.) France are supported by fixed price agreements, therefore removing price volatility, projects in other jurisdictions (e.g. UK) are supported by renewable certificates where there is implicitly more exposure to market prices.</li> </ul>	<p>Please see the response to comment 116.</p> <p>Partially agreed. The requirement has been amended to state "sufficiently predictable".</p> <p>Please see the response to comment 116.</p>

			<p>This requirement should be deleted.</p> <ul style="list-style-type: none"> <li>Condition b) iii): The Investment Association does not consider this requirement to be necessary particularly where the offtaker is readily replaceable (eg. renewable companies need to sell power through a utility, but can replace the utility). There is also concern that if an off-taker with a CQS of at least 3 is downgraded, this could lead to significant cliff effects.</li> </ul> <p>This requirement should be deleted</p> <ul style="list-style-type: none"> <li>EIOPA should clarify that these and all other criteria will only apply at the point of investment to mitigate these effects.</li> </ul>	<p>Please see the response to comment 116.</p> <p>Please see the response to comment 20.</p>
129.	AAE	Section 3.3.2.3.	<p>A concluding positive list of criteria defining the strong security package seems to be too restrictive, e.g.:</p> <ol style="list-style-type: none"> <li>It may be difficult to guarantee upfront the compliance with all criteria over the entire lifetime of the project/loan.</li> <li>For some PFI frameworks and regulated assets perfected security interests may not be allowed to leave the possibility for the regulator to step in prior to senior lenders executing on their securities.</li> </ol> <p>Therefore, further "compliance in general" with the criteria under 2. should be required.</p>	<p>Please see the response to comment 130.</p> <p>Not agreed. All the requirements in the revised paragraph 2 would need to be met.</p>
130.	AFME ICMA	Section 3.3.2.3.	<p>Point 2.d in the advice on "contractual framework" needs to be further improved to better reflect current market practices and good project management. The requirements that "<i>the project shall not issue new debt</i>" should be replaced with "<i>limitations on leverage and the issuance of new debt</i>".</p> <ul style="list-style-type: none"> <li>While it is generally true that the project entity does not issue new debt, regulated assets that are remunerated on a regulatory asset base (RAB) or are similarly operating under a licensing tariff or other governmental system or support framework in a situation of limited competition should be allowed to raise more debt as long as it increases their RAB and thus their remuneration.</li> <li>An improvement in this requirement is also needed to allow for financings structured to require a refinancing; for instance, in the case of the Australian PPP market tenors are typically up to 10 years compared to a much longer project life.</li> <li>In light of the above, the requirement could be redrafted as follows (additions</li> </ul>	<p>Partially agreed. EIOPA has changed the requirement "shall not issue new debt" to "new debt cannot be issued without the consent of existing debt providers".</p>

			<p>are underlined):</p> <p>"...d) the covenant package to restrict activities of the project company is strong including the <del>provision that the project shall not issue</del> <u>limitations on leverage and issuance of new debt</u>"</p> <p>Requirement 2(a) and (b) appear to cover the same point. In relation to 2(b), it is worth noting that market practice in some jurisdictions will mean first perfected security interests over all assets are not taken - for example, it is market practice in Spain to take promissory mortgages, rather than full perfected mortgages, due to stamp duty liabilities which arise on the grant of certain mortgages, and therefore on the current criteria project finance in Spain in accordance with current practices would be excluded.</p> <p>It does not make sense that in Requirement 2.e regarding the contractual framework that reserve funds have a "longer than average coverage period". It is more appropriate to have a coverage period consistent with market practice. The WG would therefore suggest the following amendment (additions underlined): "<del>All reserve funds have a longer than average coverage period</del> <u>in line with market practice</u> and are fully funded in cash or letter of credit from a <del>bank</del> <u>counterparty of high credit standing</u>".</p>	<p>Partially agreed. Requirements 2(a) and (b) are now covered by only one requirement. EIOPA still considers that it is necessary to have security to the extent permitted by the law or regulation.</p> <p>Agreed. The drafting has been amended to "reserve funds ... have a sufficient coverage period...", and bank has been replaced with counterparty.</p>
131.			This comment was submitted as confidential by the stakeholder.	
132.	AMICE	Section 3.3.2.3.	<ol style="list-style-type: none"> <li>1.</li> <li>2. The concept of contractual framework shall be extended to regulatory framework to encompass the regulated assets which may not benefit from a "contractual" framework as such.</li> <li>3. We therefore propose to amend paragraph 1) of the definition of contractual framework as follows:</li> <li>4. The infrastructure assets and infrastructure project entity are governed by a robust contractual framework including strong termination clauses or operated within a regulated framework.</li> </ol> <p>Furthermore on the security package, the requirements in paragraphs 2a) and 2b) should be qualified to clarify that securities are required to be taken on those contracts, assets and accounts that are material and critical for the lenders. For example, dividend accounts hosting excess cash flows freely distributable to the shareholders are typically not assigned to lenders. In some jurisdictions, assets operated by a concessionaire or a PPP company remain legally owned by the public sector and thus cannot be pledged (e.g. a road operated by a concession company).</p>	<p>Partially agreed. The contractual framework is intended to cover provisions that are legally binding upon the parties and is therefore considered to cover regulations.</p> <p>Please see the response to comment 130. Not agreed, regarding the proposal for taking security only in material or critical contracts, assets or accounts. EIOPA considers the wording of the requirement in the CP that security is needed "in all assets and contracts necessary to</p>

			<p>Finally, we believe that the requirement in paragraph 2d) by which the project should not issue new debt is too restrictive. Lenders often allow additional indebtedness subject to certain conditions (maximum amount, ratios to be met...) and specific lenders' consent procedures.</p>	<p>operate the project" to be appropriate.</p> <p>Please see the response to comment 130.</p>
133.	AFG	Section 3.3.2.3.	<p>1. Comment on the "Advice" section</p> <p>2. 1. The concept of contractual framework shall be extended to regulatory framework to encompass the regulated assets which may not benefit from a "contractual" framework as such.</p> <p>3. We propose then to complete the first paragraph of the definition of contractual framework as follows "the infrastructure assets and infrastructure project entity are governed by a robust contractual framework including strong termination or operated within a regulated framework.</p> <p>2. Security package: the requirements in a) and b) shall be qualified to clarify that securities are required to be taken only on those contracts, assets and accounts that are material and critical for the lenders. For example dividend accounts hosting excess cash flows freely distributable to the shareholders are typically not assigned to lenders. Please also note that in some jurisdictions, assets operated by a concessionaire or a PPP company remain legally owned by the public sector and thus cannot be pledged (e.g. a road operated by a concession company). Finally, we believe that the requirement in d) for a provision that the project shall not issue new debt is unnecessarily too restrictive. Lenders often allow additional indebtedness subject to certain conditions (maximum amount, ratios to be met...) and specific lenders' consent procedures.</p>	<p>Please see the response to comment 132.</p> <p>Please see the response to comments 131 and 132.</p>
134.	ABI	Section 3.3.2.3.	<p>Contractual requirements</p> <p>We are generally supportive of the requirement, but would like to highlight several areas where improvements could be made:</p> <p>- 2: we would like to clarify the use of the term "lender" and whether this would still encompass both debt and equity investors, or whether it should be replaced with "investor";</p> <p>- 2. d): we do not think that it is necessary to preclude all issuance of new debt. There are circumstances where the issuance of new debt may be desirable. For</p>	<p>Agreed. To clarify what is meant by 'lender' a distinction between 'debt providers' and 'equity investors' has been introduced.</p>

			<p>example, the requirement should allow for roll-over refinancing; e.g., in the case of the Australian PPP market, tenors are typically up to ten years, while the project lives are much longer.</p> <p><input type="checkbox"/> Instead, the advice could either require lenders/investors to consent to new debt or for there to be contractual limitations on the issuance of new debt.</p> <p>- 2. e): it is not clear what it meant by the requirement that "all reserve funds have a longer than average coverage period". We suggest that this should instead be in line with market practice. In addition, this can be funded by counterparties other than banks. We therefore propose the following alternative wording:</p> <p>"All reserve funds have a longer than average coverage period in line with market practice and are fully funded in cash or letter of credit from a bank counterparty of high credit standing".</p>	<p>Please see the response to comment 130.</p> <p>Please see the response to comment 130.</p>
135.			This comment was submitted as confidential by the stakeholder.	
136.			This comment was submitted as confidential by the stakeholder.	
137.	BlackRock	Section 3.3.2.3.	<p>Contractual framework</p> <p>There are a number of conditions which we believe to be too restrictive: These include:</p> <ul style="list-style-type: none"> <li>• Strong termination and strong security package requirements. Loss severity can be assessed against other factors / other characteristics of the transaction. In the case of corporate style transactions, the relevant contractual framework may not always need to focus on strong termination clauses.</li> <li>• Restriction in activity and additional debt covenants. These are too rigid and we would recommend a more generic control over the leverage and issuance of additional debt, including the maintenance of certain cover ratios, rather than a blanket prohibition.</li> <li>• Reserve funds having a longer than average cover period – we do not see the need for reserves to be longer than the cover period.</li> <li>• Perfected security interests. In certain cases, investors could consider a strong negative pledge as an acceptable alternative to a direct security interest. In certain cases, it may not be possible to take security over assets that belong to</li> </ul>	<p>Not agreed. Corporate style transactions were not taken into account as the intention is to cover the specific risk profile of project finance.</p> <p>Please see the response to comment 130.</p> <p>Please see the response to comment 130.</p> <p>Partially agreed. A negative pledge is not considered to provide a sufficient level of security. A requirement for a share pledge has been included in the criteria.</p>

			<p>the public domain. In addition, share pledges of companies owning infrastructure assets may also be an effective security in certain financing structures</p> <p>We consider that loss severity can be assessed against other factors and characteristics of the transaction.</p>	
138.	GDV	Section 3.3.2.3.	<p>It is unclear which termination clauses would improve the quality of the project. Change formulation in 1.: 'The infrastructure assets and infrastructure project entity are governed by a robust contractual framework which is consistent with best practice standards (like NEC3 contracts for construction projects) and also includes strong termination clauses'</p>	Partially agreed. The "termination clause" is defined more precisely now by saying 'provisions that protect ... against losses resulting from the off-taker terminating the project.
139.	IE	Section 3.3.2.3.	<p><b>Insurance Europe believes that point 2.d in the advice on contractual framework needs to be changed to avoid unnecessary exclusions and better reflect current market practice. Instead of requiring the covenant package to exclude the issues of new debt, it should set limitations on issuance of new debt.</b></p> <ul style="list-style-type: none"> <li>■ It is true that, in general, the project entity does not issue new debt. However, regulated assets that are remunerated on a regulatory asset base (RAB) should be allowed to raise more debt, as long as it increases their RAB and, therefore, their remuneration.</li> <li>■ A refinement of this requirement is also needed to allow for roll-over refinancings; for example, in the case of the Australian public-private partnership (PPP), market tenors are typically up to 10 years vs. much longer project lives.</li> <li>■ This requirement should, therefore, read as follows (additions underlined):  <i>"...d) the covenant package to restrict activities of the project company is strong including <u>the provision that the project shall not issue limitations on leverage and issuance of new debt"</u></i></li> </ul> <p><b>Requirement 2.e of the advice on the contractual framework that reserve funds have a "longer than average coverage period" does not make sense. A coverage period consistent with market practice would be more appropriate.</b> Insurance Europe would, therefore, suggest the following amendment (additions underlined):  <i>"All reserve funds have <del>a longer than average</del> coverage period <u>in line with market practice</u> and are fully funded in cash or letter of credit from a <del>bank</del> counterparty of high credit standing".</i></p>	<p>Please see the response to comment 130.</p> <p>Please see the response to comment 130.</p>

			Furthermore, the wording in this section refers to "lenders". In order to address both equity and debt investors, the wording could refer to "investors" as in the definition of infrastructure.	Please see the response to comment 134.
140.	IRSG	Section 3.3.2.3.	<p>Point 2.d in the advice on contractual framework needs to be further improved to better reflect current practice and good project management.</p> <ul style="list-style-type: none"> <li>• While it is generally true that the project entity does not issue new debt, regulated assets that are remunerated on a regulatory asset base (RAB) or are similarly operating under a licensing, tariff or other governmental or regulatory system or support framework in a situation of limited competition should be allowed to raise more debt as long as it increases their RAB and therefore their remuneration.</li> <li>• An improvement in this requirement is also needed to allow for roll-over refinancing; for instance, in the case of the Australian PPP market tenors are typically up to 10 years compared to a much longer project life.</li> <li>• In light of the above, the requirement could be redrafted as follows (additions are underlined):</li> </ul> <p><i>"...d) the covenant package to restrict activities of the project company is strong including the <del>provision that the project shall not issue</del> <u>limitations on leverage and issuance of new debt</u>"</i></p> <p>Requirement 2(a) and (b) appear to cover the same point. In relation to 2(b), it is worth noting that market practice in some jurisdictions will mean first perfected security interests over all assets are not taken - for example, it is market practice in Spain to take promissory mortgages, rather than full perfected mortgages, due to stamp duty liabilities which arise on the grant of certain mortgages, and therefore on the current criteria project finance in Spain in accordance with current practices would be excluded.</p> <p>It does not make sense that in <i>Requirement 2.e</i> regarding the contractual framework that reserve funds have a "<i>longer than average coverage period</i>". It is more appropriate to have a coverage period consistent with market practice.</p>	<p>Please see the response to comment 130.</p> <p>Please see the response to comment 130.</p> <p>Please see the response to comment 130.</p>
141.	NATIXIS	Section 3.3.2.3.	The requirement of the provision that the project shall not issue new debt is too restrictive a reference to limitations on leverage and issuance of new debt is more	Please see the response to comment 130.

			<p>appropriate as the project company may need to make investment</p> <p>Advice 2. The requirement on perfected security in all assets is not possible ( or to costly) in some jurisdictions and not necessary in some others ( Brownfield transactions )</p> <p>We don't understand the reference in advice 2. e) to "reserve funds with a longer than average coverage period "</p>	<p>Please see the response to comment 130.</p> <p>Please see the response to comment 130.</p>
142.	The Investment Association	Section 3.3.2.3.	<p>The Investment Association believes it is important that infrastructure finance is governed by a strong contractual framework. However, the contractual framework proposed by EIOPA is overly prescriptive, is inconsistent with market practice and does not recognise that insurer abiding by the Prudent Person Principle will be managing these risks as part of their investment.</p> <p>We therefore propose the following amendments to ensure that the conditions are fit for purpose.</p> <ul style="list-style-type: none"> <li>• It is not clear what is meant by "lenders", and if this would include equity investors.</li> <li>• Requirements d) and e) surrounding covenant packages are overly prescriptive and inconsistent with current market practice.</li> <li>• Requirement d) should be amended so that states:</li> </ul> <p>"The covenant package to restrict activities of the project company is strong including <del>the provision that the project shall not issue new debt</del> <b>investor control over the issuance of new debt.</b>"</p> <ul style="list-style-type: none"> <li>• Requirement e) should be amended so that it states:</li> </ul> <p><del>"All reserve funds have a longer than average coverage period</del> <b>All reserve funds have a coverage period that is consistent with market practice</b> and are fully funded in cash or letters of credit from a <del>bank</del> <b>counterparty</b> of high credit standing."</p>	<p>Please see the response to comment 134.</p> <p>Please see the response to comment 130.</p> <p>Please see the response to comment 130.</p> <p>Partially agreed. 'Bank' was substituted by 'counterparty' as proposed.</p>

			These amendments would provide insurers with the ability to adequately manage the risk in investing in an infrastructure project in a manner that is consistent with the Prudent Person Principle.	
143.	AAE	Section 3.3.3.	<p>We note that this requirement looks akin to that imposed to matching adjustment portfolio, where assets which have a sub-investment credit rating cannot have a matching adjustment higher than that for investment credit rated assets.</p> <p>Also this requirement may be difficult to comply with at all times. (Infrastructure) assets do get upgraded and downgraded, and therefore should an infrastructure asset be downgraded to a sub-investment credit rating during its lifetime, this requirement may be seen as (very) punitive – to the extent that the insurer might be forced to replace the investments to ensure it remains compliant with this qualifying criteria. This also becomes more relevant under a “held to maturity” approach.</p> <p>We note, for example, that for matching adjustment portfolio, this requirement translates via a cost (cost of downgrade) which is subtracted from the matching adjustment available to insurers in their matching adjustment funds. We would suggest that consideration is given for infrastructure debt to be subject to a similar treatment to that of matching adjustment assets, i.e. rather than forcing insurers to effectively remove or sell the assets, an additional cost or capital charge is added to its balance sheet to recognise the downgrade (future) event.</p>	<p>Not agreed. A downgrade from investment grade to non-investment grade highlights that the risk profile of the investment has been deteriorating and is an indication that the other qualifying criteria may no longer be met.</p> <p>In addition, EIOPA is not aware of evidence that that a downgrade from CQS3 to CQS4 will be followed shortly by an upgrade. In that case, the investment should be subject to the Solvency II treatment for general corporate debt since the specific treatment for high quality infrastructure would no longer be warranted. It is not agreed, that in this case the undertaking would be forced to replace the investment. The proposal regarding the similar treatment to the matching adjustment would imply a change to the valuation.</p>
144.	AFME ICMA	Section 3.3.3.	See 3.2.3 above	Please see the response to comment 66.
145.	ABI	Section 3.3.3.	We support the requirement that rated debt should have a credit assessment of at least CQS 3.	Noted.
146.			This comment was submitted as confidential by the stakeholder.	
147.			This comment was submitted as confidential by the stakeholder.	
148.	GDV	Section 3.3.3.	Credit quality requirement should be extended to credit quality step 4 subject to the investing insurance company provides of the capability to monitor and manage such investments.	<p>Not agreed. The requirement for undertakings to be able to monitor and manage their investments applies to the portfolio as a whole irrespective of the credit quality step in accordance with the prudent person principle. Please see also the response to comments 143 and 153.</p>

149.	IE	Section 3.3.3.	Insurance Europe notes that the requirement of a minimum credit quality step is not in line with a principles-based approach under Solvency II.	Not agreed. EIOPA does not agree that the requirement of at least credit quality step 3 is not in line with a principles based approach. The risk of debt instruments with lower credit quality steps is different and therefore the treatment within the standard formula may be different. It can also be mentioned that there are other cases in the delegated regulation where a similar limitation is applied (see Articles 177, 181, and 212).
150.	IRSG	Section 3.3.3.	See 3.2.3 above	Please see the response to comment 66.
151.	NATIXIS	Section 3.3.3.	Advice 2 a) non EEA and OECD country should be allowed if the political risk is properly mitigated through the involvement of a multilateral (i.e IFC, EBRD, EIB ) or through political risk insurance cover.	Not agreed. EIOPA does not agree to change the restriction to EEA and OECD countries, which it still considers provides an important safeguard to limit the degree of political risk.
152.	RSA	Section 3.3.3.	We broadly agree with the text as drafted.	Noted.
153.	The Investment Association	Section 3.3.3.	Sub-investment grade products should not be excluded from the framework. The Moody's project finance study cited by EIOPA in Annex 1 demonstrates that the recovery benefit applies across the project finance spectrum and applies to projects which were generally not externally rated and may often have been rated as non-investment grade through internal models. Limiting qualifying projects to investment grade products only seems therefore to be unnecessarily restrictive.	Not agreed. EIOPA believes that it is appropriate to retain its position on this point and not extend the scope to non-investment grade assets given their high credit risk.
154.	AAE	Section 3.3.4.	Possible definition refinements to offer to the EU Commission that might better address the underlying growth agenda implicit in the EU Commission's call for advice are included in our General Comments.	Noted.
155.	ABI	Section 3.3.4.	<p>Many infrastructure projects are not externally rated, and it is important to get the treatment of unrated debt right.</p> <p>We understand and support EIOPA's intention to ensure that unrated debt is of sufficiently high quality in order to qualify. While the categories of focus are sensible, the underlying requirements are at times too prescriptive and even more stringent than those used by rating agencies. As a point of reference, we believe that the requirements for unrated debt should not go beyond those that apply to rated debt. This is particularly the case if EIOPA is not willing to differentiate between unrated debt</p>	Please see the response to comment 37.

			<p>corresponding to higher categories of ECAI ratings (i.e., above CQS 3).</p> <p>We identify in our responses below the key areas where we think improvements are possible.</p>	
156.	BdV	Section 3.3.4.	Yes, we fully agree.	Noted.
157.			This comment was submitted as confidential by the stakeholder.	
158.	BlackRock	Section 3.3.4.	<p>Political risk</p> <p>We support the scope of jurisdictions included with the draft advice under paragraph 9 (a) namely the EEA and OECD. We agree that a supportive regulatory environment for buy-to-hold investment in infrastructure would exhibit the characteristics mentioned in paragraph (b). Our experience is that recent tariff changes in a number of EEA jurisdictions could in theory mean these jurisdictions failing to meet the low risk test. As part of recent initiatives to encourage greater investment in infrastructure across the EU, it would be helpful for EIOPA and the European institutions to emphasise the importance to members states of avoiding policies which materially affect cash flows for investors, if they wish to meet European and national targets to increase infrastructure investment. For example, would a project cofinanced with a first loss guarantee under the EFSI programme be seen as having a low risk of being subject to retroactive tariff treatment than a purely private initiative and therefore more likely to meet the eligibility requirements?</p> <p>If not, it would be beneficial if EIOPA could publish a list of jurisdictions where it would be acceptable to be located as a safe harbour – otherwise some institutional investors may take a highly conservative view and avoid a number of EU jurisdictions which have introduced retroactive tax or subsidy changes in the past.</p>	Not agreed. It is not appropriate for EIOPA to publish a list of jurisdictions which would satisfy the requirements regarding political risk. This needs to be assessed by the undertaking.
159.	RSA	Section 3.3.4.	We broadly agree with the text as drafted.	Noted.
160.	AAE	Section 3.3.4.1.	<p>We consider the restriction to EEA/OECD countries in 2.a) a bit narrow. The additional analysis required under 2.b) shows that EEA/OECD membership is only considered as a requirement, but not a sufficient criterion. We would therefore suggest to base qualification on the analysis required by 2.b) in general and revise the EEA/OECD requirement.</p> <p>We note that this could be addressed, for example, using the same approach as the requirement for an investment credit rating – i.e. rather than excluding infrastructure assets which do not meet these criteria, a higher capital charge is imposed via</p>	<p>Please see the response to comment 151.</p> <p>Please see the response to comment 70.</p>

			additional costs.	
161.	AFME ICMA	Section 3.3.4.1.	<p>The WG supports the suggested advice on political risk. However, many post-closing changes in rules are in the form of local regulation in addition to laws. Therefore point b) may be redrafted: <i>"there is a low risk of specific changes in law and <u>regulations</u>..."</i></p> <p>Non-EEA and non-OECD jurisdictions should be allowed as long as political risk is mitigated.</p> <p>Point 2.a or the advice on political risk could be redrafted to read:  <i>"the assets of the infrastructure project entity are located in a member state of the EEA or OECD <u>or the risk is sufficiently mitigated (eg guarantee by an international organisation such as the World Bank or the project is insured via credit insurance).</u>"</i></p> <p>It be challenging to prove that there be a low risk of specific changes to law, regulatory actions or the imposition of exceptional taxes.</p> <p>Requirements 2.b and 2.c should be removed:</p> <ul style="list-style-type: none"> <li>- The WG believes that the requirement that there be a low risk of specific changes to law, regulatory actions or the imposition of exceptional taxes may be challenging to prove in practice. In any case, companies are always assessing via their risk management and pillar 2, the valuation of their assets based on their allocation, their investment policies and their strategies.</li> <li>- There is a concern that points 2.b and 2.c of the advice on political risk may potentially exclude Italy, Spain, Czech Republic or Norway from the scope of the identification of infrastructure jurisdictions.</li> <li>- Excluding these countries from the scope of investment into countries is contrary to the wider political objective, that EU countries that would benefit the most from infrastructure investment are able to do so.</li> <li>- Projects should always be assessed on a case-by-case basis.</li> </ul>	<p>Not agreed. EIOPA considers that the current wording captures all relevant political or legal changes, including regulatory changes.</p> <p>Please see the response to comment 151.</p> <p>Not agreed. The factors covered by these requirements can have a significant impact on the risk.</p> <p>Not agreed. The requirement was not proposed to specifically exclude infrastructure projects within particular jurisdictions. Nevertheless, EIOPA considers it important to state that a relevant factor in assessing the degree of political risk and the degree to which changes can be expected in the future, is the recent history of such changes within a particular country.</p>
162.			This comment was submitted as confidential by the stakeholder.	
163.	ABI	Section 3.3.4.1.	While the overarching intention of the requirement is understandable, we believe that a number of elements would be difficult to apply in practice and would unduly restrict the type of projects that may qualify. We would like to highlight the following elements of	

			<p>the draft advice:</p> <ul style="list-style-type: none"> <li>- 2. a): In addition to projects located in OECD and EEA countries, projects located elsewhere should also qualify, provided the political risks are adequately managed.</li> <li>- 2. b): The requirement that there be a low risk of specific changes to law, regulatory actions or the imposition of exceptional taxes may be challenging to prove in practice. Excluding from scope investments in countries with recent changes may run against the wider political objective, that the EU countries that would benefit the most from infrastructure investments are able to do so.</li> <li>- 2.c): Depending on how the requirement is interpreted, considering recent changes in regulation may potentially disqualify investment in projects located in most EEA jurisdictions.</li> </ul>	<p>Please see the response to comment 151.</p> <p>Not agreed. Although the assessment of the political risk will inevitably be subjective and challenging, given the relevance of this risk EIOPA does not consider this to be a reason to not require such an assessment.</p> <p>Please see the response to comment 161.</p>
164.			This comment was submitted as confidential by the stakeholder.	
165.	BdV	Section 3.3.4.1.	Yes, we fully agree.	Noted.
166.	GDV	Section 3.3.4.1.	<p>We believe that the restriction to EEA and OECD countries is generally a reasonable approach. Non-EEA and non-OECD jurisdictions should only be considered as long as the political risk is mitigated e.g. by guarantees of an multinational organisations or via credit insurance.</p> <p>The definition of a stable and predictable political and legal environment should be removed. We believe that the requirement that there should be a low risk of specific changes to law, regulatory actions or the imposition of exceptional taxes may be challenging to prove in practice. In any case, companies are always assessing via their risk management and pillar 2 the valuation of their assets based on their allocation, their investment policies and their strategies. Projects should always be assessed on a case-by-case basis.</p>	<p>Please see the response to comment 151.</p> <p>Please see the response to comments 161 and 163.</p>
167.	IE	Section 3.3.4.1.	Insurance Europe believes that the inclusion of the European Economic Area (EEA) and Organisation of Economic Cooperation and Development (OECD) countries is appropriate however, non-EEA and non-OECD jurisdictions should be allowed under the condition that the political risk is mitigated, eg by a guarantee of a multinational or national development bank (or similar organisation), credit insurance or the adherence	Please see the response to comment 151.

			<p>to international project finance standards.</p> <ul style="list-style-type: none"> <li>■ Point 2.a or the advice on political risk should, therefore, read as follows (additions underlined):  <i>"the assets of the infrastructure project entity are located in a member state of the EEA or OECD or the risk is sufficiently mitigated (eg guarantee by an international organisation such as world bank or the project is insured via credit insurance)."</i></li> </ul> <p><b>Requirements 2.b and 2.c should be removed:</b></p> <ul style="list-style-type: none"> <li>■ Insurance Europe believes that the requirement that there be a low risk of specific changes to law, regulatory actions or the imposition of exceptional taxes may be challenging to prove in practice. In any case, companies are always assessing via their risk management and pillar 2 the valuation of their assets based on their allocation, their investment policies and their strategies.</li> <li>■ Insurance Europe is concerned that points 2.b and 2.c of the advice on political risk could potentially exclude several jurisdictions from the scope of the identification of infrastructure. <ul style="list-style-type: none"> <li>■ Excluding from scope investment into countries with recent changes may run against the wider political objective, that the EU countries that would benefit the most from infrastructure investment are able to do so.</li> <li>■ Projects should always be assessed on a case-by-case basis.</li> </ul> </li> </ul>	<p>Please see the response to comments 161 and 163.</p>
168.	IRSG	Section 3.3.4.1.	<p>The IRSG supports the suggested advice on political risk. However, many post-closing changes in rules are in the form of local regulation in addition to laws. Therefore, point b) may be redrafted: <i>"there is a low risk of specific changes in law and <u>regulations</u>..."</i></p> <p>Non-EEA and non-OECD jurisdictions should be allowed as long as political risk is mitigated.</p> <ul style="list-style-type: none"> <li>• Point 2.a or the advice on political risk could therefore be redrafted to read:  <i>"the assets of the infrastructure project entity are located in a member state of the EEA or OECD or the risk is sufficiently mitigated (e.g. guarantee by an international organisation such as the World Bank or the project is insured via credit insurance)."</i></li> </ul> <p>It will be challenging to prove that there will be a low risk of specific changes to law, regulatory actions or the imposition of exceptional taxes.</p>	<p>Please see the response to comment 161.</p> <p>Please see the response to comment 151.</p> <p>Please see the response to comments 161 and 163.</p>

			<p>Requirements 2.b and 2.c should be removed:</p> <ul style="list-style-type: none"> <li>• The requirement that there will be a low risk of specific changes to law, regulatory actions or the imposition of exceptional taxes may be challenging to prove in practice. In any case, companies are always assessing via their risk management and pillar 2 the valuation of their assets based on their allocation, their investment policies and their strategies.</li> <li>• There is a concern that points 2.b and 2.c of the advice on political risk may potentially exclude Italy, Spain, Czech Republic or Norway from the scope of the identification of infrastructure jurisdictions.</li> <li>• Excluding these countries from the scope of investment into countries with recent changes is contrary to the wider political objective, that EU countries that would benefit the most from infrastructure investment are able to do so.</li> <li>• It is paramount that projects are always assessed on an individual basis.</li> </ul>	
169.	LaG	Section 3.3.4.1.	<p>Political risk: Whilst we are sympathetic to EIOPA taking a principles based approach to its advice on political risk, the current wording could mean that no infrastructure project could ever be undertaken. This is because it requires that the “political and legal environment...is stable and predictable”. Our concern is that as laws and regulations (whether small and technical or significant) can occur at any time in all areas, not just infrastructure. With this definition even countries such as the UK, Germany or France, three of the most stable countries in the world, could be excluded based on the chosen definition. The market practice is to quantify these risks through a rating called a “country ceiling”. Political, legal and macro-economic risks are explicitly addressed by ensuring that the infrastructure rating and the off-taker rating do not pierce the relevant “country ceiling”. Therefore there is no need for additional qualitative restrictions around this specific risk.</p>	<p>Partially agreed. The reference to ‘predictable’ has been removed as EIOPA considers that ‘stability’ is the more relevant factor. The requirement is to identify the risk of changes that would result in material losses for the project, and not simply any kind of legal or regulatory change.</p>
170.	The Investment Association	Section 3.3.4.1.	<p>The political risk criteria are highly subjective. We are concerned that, should insurers be required to consider recent changes made in countries where assets of the project are located, this could exclude infrastructure investments in countries, such as:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> The UK, which made recent changes to the tax regime to the oil and gas sector and announced that it would discontinue the Climate Change Levy that would significantly impact the renewable energy sector.</li> <li><input type="checkbox"/> Norway, which announced it would cut the natural gas pipeline tariffs despite the country previously being considered as one of the most politically stable for infrastructure investment</li> <li><input type="checkbox"/> Spain, which retroactively cut feed in tariffs for solar.</li> </ul>	<p>Please see the response to comments 161 and 163.</p>

			We propose that the political risk criteria be deleted in its entirety.	
171.	AFME ICMA	Section 3.3.4.2.	<p>The WG believes that the advice on structural requirements needs further improvement to recognise that some project finance transactions use another entity as issuer/finance vehicle. The present definition appears to imply that infrastructure debt can only be issued out of the operating entity.</p> <p>Regarding the strength of the sponsor (point 4 in advice box in paragraph 1.98.): the WG suggests the following rewording:  <i>"The project or operating entity has a strong sponsor (for instance a highly reputed and experienced developer, or for operational entities experienced shareholder(s) or a long and diversified list of shareholders (for listed entities))."</i></p> <p>Paragraph 2 should include "financing" of the infrastructure asset. Consider also overlap of paragraph 2 with definition of "Special Purpose Entity" (see 3.3.1 above).</p> <p>Requirement 4.a in the advice of structural requirements causes concern as it would be hard to support a sponsor's new ventures into a new market. At a minimum the following changes should be made to the wording: <del>"very strong track record and relevant country and sector"</del></p> <p>Requirement 4.b on the "high financial standing" of the sponsor is restrictive. Where this refers to sponsors as shareholders, to the extent all funds expected as part of the capital structure have been provided, the financial standing of such shareholders is of limited relevance (and many such sponsors may be financial institutions or infrastructure funds, for that the "financial standing" concept is not very relevant. For</p>	<p>Partially agreed. EIOPA still considers that the separation of the assets and cash flows of the infrastructure project entity from other entities is essential. However, EIOPA has revised the definitions and structural requirements. These are considered to allow some structural differences provided that the essential features of project financing are met (see also the response to comment 53). The changes include that the definition of 'special purpose entity' is no longer considered to be necessary (due to overlap), and some of the wording of paragraph 2 was combined with the definition of infrastructure project entity.</p> <p>Partially agreed. EIOPA agrees that it may not be appropriate to require country and sector experience in all cases. Nevertheless, it may be risky to establish a project in a country where the sponsor does not have experience e.g. due to different legislation. To take into account these aspects the proposal now requires previous successful infrastructure projects and relevant expertise. The appropriate expertise for the investment envisaged will need to be judged on a case by case basis.</p> <p>Partially agreed. EIOPA has made a number of changes to the sponsor requirements including that a suitable sponsor would only be required during the construction phase. It is also recognised that 'high financial standing' may not be necessary if a default of the</p>

			<p>infrastructure in construction, building contractor sponsors are often unrated, but these entities can be accommodated by commensurately stronger security packages / structuring. Their ability and incentive for them to work through difficulties should also be considered. The definition and identity of the “sponsor”, which is derived from the Basel II approach, which is also unclear, should be refined as well.</p> <p>The WG believes paragraph 4(c) is inappropriate. This paragraph effectively seeks to evaluate factors which may result in a sponsor providing more financial support to a project than it is contractually obliged to. This is not consistent with a limited recourse, project finance structure (the contractual obligations of which should be considered on their own merits).</p>	<p>sponsor would very likely not result in material losses. Therefore the new proposal requires a low risk of default of the sponsor or a low risk of material losses in case of a default of the sponsor.</p> <p>Partially agreed. EIOPA believes that the risk of the project will be lower if the sponsor is incentivised to support the project. However, bearing in mind the comments received, it was not considered appropriate to prescribe some of the elements in the CP all cases. It is still considered essential for the sponsor to have a material equity investment in the project.</p>
172.			This comment was submitted as confidential by the stakeholder.	
173.	AMICE	Section 3.3.4.2.	<p>5.</p> <p>6. The sponsor concept is commonly used in projects where the sponsor is the EPC contractor who designs and builds the infrastructure. This structural requirement should only be applied to those projects. The way the structural requirements are drafted exclude de facto brownfield assets. We strongly believe that greenfield financing may only exist if brownfield investments are also encouraged.</p> <p>7. With regard to the criteria to be met by the sponsor to be qualified as “strong”, we recommend to consider the “high financial standing” of the sponsor in relation to its obligations by amending paragraph 4b) as follows</p> <p>8. “The sponsor has the high necessary financial standing to comply with its obligations”.</p> <p>9.</p> <p>10. The EPC/sponsor financial standing to build a small local infrastructure should not be assessed with the same financial standing criteria as those required when it comes to design and build a large and complex infrastructure.</p> <p>We recommend having a flexible approach with regards to the requirement in paragraph 4a) (the sponsor has a very strong track record and relevant country and sector experience), particularly in terms of country experience. Indeed, a sponsor can be very experienced internationally and committed strategically to support a project in a country, while not necessarily having a direct and relevant experience in such country.</p>	<p>Agreed. The requirement to have a suitable sponsor is now applied only to the construction phase.</p> <p>Please see the response to comment 171.</p>

			<p>11. We also recommend having a more flexible approach when it comes to evidence that the sponsor is incentivised to protect the interests of the project (cf 3c.). Note in particular that industrial sponsors may hold relatively small shares in the project equity while proving substantial support and guarantees for the benefit of the project's financial investors and lenders.</p>	
174.	AFG	Section 3.3.4.2.	<p>4. Comment on the "Advice" section</p> <p>5. As already highlighted on the previous consultation paper (Question 17) we do not understand exactly the concept of sponsor. This "sponsor" concept is commonly used in greenfield project where the sponsor is the EPC contractor who designs and builds the infrastructure. This structural requirement shall only be applied to such greenfield projects. The way the structural requirements are currently drafted exclude de facto brownfield assets. Wwe strongly believe that greenfield financing may only exist if brownfield investment is also encouraged.</p> <p>6. With regard to the criteria to be met by the sponsor to be qualified as "strong", we recommend to consider the "high financial standing" of the sponsor in relation to its obligations by amending the b) as follows "the sponsor has a the necessary financial standing to comply with its obligations". The EPC/sponsor financial standing to build a small local infrastructure shall not be assessed with the same "financial standing" criteria as those required when it comes to design and build a large and complex infrastructure.</p> <p>We recommend having a flexible approach with regards to the requirement 4.a (strong track record, relevant country and sector experience), particularly in terms of country experience. Indeed, a sponsor can be very experienced internationally and committed strategically to support a project in a country, while not necessarily having a direct and relevant experience in such country.</p> <p>7. We also recommend having a more flexible approach when it comes to evidence that the sponsor is incentivised to protect the interests of the project (cf 3.c.). Note in particular that industrial sponsors may hold relatively small shares in the project equity while proving substantial support and guarantees for the benefit of the project's financial investors and lenders.</p>	Please see the response to comment 171.
175.	ABI	Section 3.3.4.2.	<p>Structural requirements</p> <p>- 4. a): we are concerned that the requirement for the sponsor to have a "very strong track record and relevant country and sector experience" is unnecessarily restrictive. This would make it hard to support a sponsor's early ventures into a new</p>	Please see the response to comment 171.

			<p>market, even where they have relevant experience. For example, as currently drafted the requirement may exclude investment into road building in Spain, where the sponsor has a record in building roads in France and Italy.</p> <p><input type="checkbox"/> We would propose the following alternative requirement: "... very strong track record and relevant experience".</p> <p>- 4. b): the requirement for the sponsor to have "high financial standing" is also unnecessarily restrictive, and would disqualify many building contractors who are often unrated. In addition, we do not think that financial standing of a sponsor necessarily plays a decisive role in the overall risk profile of a project, and there are a number of other relevant considerations. For example, the credit quality of an investment can be enhanced through a stronger security package or other structural and financing arrangement.</p>	
176.			This comment was submitted as confidential by the stakeholder.	
177.	BlackRock	Section 3.3.4.2.	<p>Structural risk</p> <p>In respect of the draft advice on structural requirements and as noted in our comments on the definition of "infrastructure project entity", we do not support the rigid requirement for separation. It is not clear how essential infrastructure companies such as airports, certain utilities, etc. which are not strictly structured as SPVs could qualify under the proposed drafting.</p> <p>We do not see the added value in the additional requirements of paragraph (c) of the draft advice given that the sponsor has to show a strong track record and high financial standing.</p> <p>There are also cases where we believe consideration should be given to allowing the ability to replace the sponsor/contractor/operator.</p>	<p>Not agreed. Please see the response to comments 49 and 171.</p> <p>Partially agreed. Please see the response to comment 171. In particular the requirement for the sponsor to hold an ownership clause was deleted and therefore the sponsor could be replaced.</p>
178.	GDV	Section 3.3.4.2.	<p>The strength of the sponsor may be irrelevant to the project's quality and stability. For instance, in brownfield projects the quality of the sponsor will not be relevant. Further, other mechanisms exist than those listed in c) of the definition of a strong sponsor that will ensure that the sponsor is sufficiently aligned with the equity investor in completing the project.</p> <p>We are concerned by requirement 4.a in the advice on structural requirements that the sponsor has a "very strong track record and relevant country and sector experience". This would make it hard to support a sponsor's early ventures into a new market and</p>	Please see the response to comment 171.

			<p>so in any case would need to be changed to: “very strong track record and relevant country and sector experience”.</p> <p>Similarly, we believe that requirement 4.b on the “high financial standing” of the sponsor is unnecessarily restrictive. Most equity fund sponsors don’t have much in the way of financial standing, as only a few building contractors are rated, let alone investment grade. These entities can be accommodated by commensurately stronger security packages / structuring. Their ability and the incentive on them to work through difficulties should be considered.</p>	
179.	IE	Section 3.3.4.2.	<p><b>Insurance Europe believes the advice on structural requirements needs refinements to allow for the recognition of the fact that some project finance transactions use another entity as issuer vehicle.</b></p> <ul style="list-style-type: none"> <li>■ The current definition seems to suggest that infrastructure debt can only be issued out of the operating entity. However, in practice some project finance transactions use another entity as issuer vehicle. This is often used because rating agencies require a ring-fenced issuer of the debt. Issuer vehicles are lending the cash to the operating entity and are guaranteed by the operating entity, as well as the holding company. But the issuer vehicle has very limited functions, as it can do nothing else than raise cash.</li> </ul> <p><b>The proof of separation of assets and cash flows should distinguish between greenfield and brownfield transactions.</b> The following concepts could be used in order to simplify structural requirements for brownfield-type investments:</p> <ul style="list-style-type: none"> <li>■ For greenfield projects, the assets and cash flows of the project company shall be considered as effectively separated from other entities, if the project company is a special purpose entity that is not permitted to perform any function other than developing, owning, and operating the infrastructure asset.</li> <li>■ For brownfield projects, the cash-flows generated by the assets owned by the project or operating entity cannot be diverted away from the investors of the project or operating entity (both debt and equity holders).</li> </ul> <p><b>Regarding the strength of the sponsor (point 4 in advice box in paragraph 1.98.):</b> Insurance Europe suggests the following rewording:  <i>“The project or operating entity has a strong sponsor (for instance a highly reputed and experienced developer, or for operational entities solid shareholder(s) or a long and diversified list of shareholders (for listed entities)).”</i></p>	<p>Please see the response to comment 171.</p> <p>Please see the response to comment 171.</p> <p>Partially agreed. The requirement of a ‘strong sponsor’ is substituted by ‘suitable sponsor’ now.</p>

			<p><b>Insurance Europe is concerned by requirement 4.a in the advice on structural requirements that the sponsor has a “very strong track record and relevant country and sector experience”.</b></p> <ul style="list-style-type: none"> <li>■ This would make it hard to support a sponsor’s early ventures into a new market and so in any case would need to be changed to should be changed to: “<del>very strong track record and relevant country and sector experience</del>”.</li> </ul> <p><b>Similarly, Insurance Europe believes that requirement 4.b on the “high financial standing” of the sponsor is unnecessarily restrictive.</b></p> <ul style="list-style-type: none"> <li>■ Most equity fund sponsors don’t have much in the way of financial standing, as only a few building contractors are rated, let alone investment grade. These entities can be accommodated by commensurately stronger security packages / structuring. Their ability and the incentive on them to work through difficulties should be considered.</li> <li>■ Equity sponsors are not necessarily industrial companies, but could be financial institutions or infrastructure funds, for that the “financial standing” concept is not very relevant.</li> <li>■ The definition and identity of the “sponsor”, which is derived from the Basel II approach, which is also unclear, should be refined as well. It should in any case be enlarged for example by changing to “creditor”.</li> </ul> <p><b>Regarding 4.c, a requirement for an ownership clause is too restrictive and not in line with common market practices.</b></p> <ul style="list-style-type: none"> <li>■ The sponsor should have the right to sell its stake to another sponsor, provided this new sponsor has a strong track record and experience.</li> </ul>	<p>Please see the response to comment 171.</p> <p>Please see the response to comment 171.</p> <p>Please see the response to comment 177.</p>
180.	IRSG	Section 3.3.4.2.	<p>The advice on structural requirements needs further improvement to enable the recognition that some project finance transactions use another entity as the issuer vehicle.</p> <ul style="list-style-type: none"> <li>• The present definition appears to imply that infrastructure debt can only be issued out of the operating entity, when in reality some project finance transactions use another entity as the issuer vehicle.</li> </ul> <p>The proof of separation of assets and cash flows should distinguish between greenfield and brownfield transactions. The following concepts could be used in order to simplify</p>	<p>Please see the response to comment 171.</p>

		<p>structural requirements for brownfield-type investments:</p> <ul style="list-style-type: none"> <li>- For greenfield projects, the assets and cash flows of the project company shall be considered as effectively separated from other entities if the project company is a special purpose entity that is not permitted to perform any function other than developing, owning, and operating the infrastructure asset.</li> <li>- For brownfield projects, the cash-flows generated by the assets owned by the project or operating entity cannot be diverted away from the investors of the project or operating entity (both debt and equity holders) .</li> </ul> <p>Regarding the strength of the sponsor (point 4 in advice box in paragraph 1.98.): the IRSG suggests the following rewording: "The project or operating entity has a strong sponsor (for instance a highly reputed and experienced developer, or for operational entities solid shareholder(s) or a long and diversified list of shareholders (for listed entities))."</p> <p>Paragraph 2 should include "financing" of the infrastructure asset. Consider also overlap of paragraph 2 with definition of "Special Purpose Entity" (see 3.3.1 above).</p> <p>Requirement 4.a in the advice on structural requirements causes concern as it would be hard to support a sponsor's new ventures into a new market. At a minimum the following changes should be made to the wording: "<del>very strong track record and relevant country and sector experience</del>"</p> <p>Requirement 4.b on the "<i>high financial standing</i>" of the sponsor is restrictive. Some equity fund sponsors for example do not have significant financial standing, given that few building contractors are rated. These entities can be accommodated by commensurately stronger security packages / structuring. Their ability and incentive for them to work through difficulties should also be considered. Equity sponsors are not necessarily industrial companies, but could be financial institutions or infrastructure funds, for that the "financial standing" concept is not very relevant. The definition and identity of the "sponsor", which is derived from the Basel II approach, which is also unclear, should be refined as well. It should in any case therefore be enlarged for example by changing to "creditor".</p>	<p>Please see the response to comment 179.</p> <p>Please see the response to comment 171.</p> <p>Please see the response to comment 171.</p> <p>Please see the response to comment 171.</p>
--	--	--	---

181.	NATIXIS	Section 3.3.4.2.	<p>1. The proof of separation of assets and cash flows should distinguish between Greenfield and Brownfield transactions. The following concepts could be used in order to simplify structural requirements for brownfield-type investments:</p> <ul style="list-style-type: none"> <li>- For Greenfield projects, the assets and cash flows of the project company shall be considered as effectively separated from other entities if the project company is a special purpose entity that is not permitted to perform any function other than developing, owning, and operating the infrastructure asset.</li> <li>- For Brownfield projects, the cash-flows generated by the assets owned by the project or operating entity cannot be diverted away from the investors of the project or operating entity (both debt and equity holders) .</li> </ul> <p>Requirement 4.a in the advice of structural requirements causes concern as it would be hard to support a sponsor's new ventures into a new market. At a minimum the following changes should be made to the wording: "very strong track record and relevant country and sector experience"</p>	<p>Please see the response to comment 171.</p> <p>Please see the response to comment 171.</p>
182.	The Investment Association	Section 3.3.4.2.	<p>The structural requirements criteria are at present unnecessarily prescriptive and do not take into account more complex infrastructure projects, such as an electricity grid supply, that do not tend to be operated by an SPV but by a general operating company where the provision of services is insourced.</p> <ul style="list-style-type: none"> <li>• Condition 3): The requirement to have a strong sponsor – we do not agree that there needs to be a requirement for a "strong sponsor". As the assets are non-recourse to the sponsor, there is no need for this requirement. Infrastructure debt providers are protected in a number of ways including through a strong security package over the projects assets and strong financial covenants that include step in rights to manage the projects if necessary. To the extent that there is a dependency on the sponsor to inject more money into the project, it should be sufficient that this specific risk is mitigated – for example by a letter of credit.</li> </ul> <p>This condition should be deleted.</p> <ul style="list-style-type: none"> <li>• Condition 4) a): This criteria may limit the ability for sponsors or operators to venture into new markets. We also note that defining sector will be difficult. For investors in infrastructure projects, it is more important that sufficient</li> </ul>	<p>Please see the response to comment 171.</p> <p>Please see the response to comment 171.</p>

			<p>alternatives exist in the event an operator or sponsor needs to be replaced.</p> <p>Conditon 4) a) should therefore be amended so that it states:</p> <p>"The sponsor <b>or operator</b> has a very strong track record and relevant <del>country and sector</del> experience."</p> <ul style="list-style-type: none"> <li>Condition 4) b): It is unclear what the condition "high financial standing" actually implies and if it is at all applicable to infrastructure project sponsors. Sponsors do not always have much in the way of funding. In addition, most financings are non-recourse and so even if the sponsor had a large balance sheet, it may not necessarily choose to support a project in times of trouble. Equally, very few contractors are rated. These shortcomings are overcome by strong security packages that include the ability for the investors to replace the sponsor or operator.</li> </ul> <p>This condition should be deleted or at the very least Condition 4) b) should be amended so that it states:</p> <p>"The sponsor <b>or operator</b> has high financial standing."</p> <ul style="list-style-type: none"> <li>In addition, if conditions 4 a) and b) are met, we do not believe meeting condition 4) c) should be required, as its inclusion would be overly prescriptive.</li> </ul> <p>We recommend that condition 4) c) be deleted.</p>	<p>Please see the response to comment 171.</p> <p>Please see the response to comment 171.</p>
183.	AAE	Section 3.3.4.3.	<p>We note the proposed advice on financial risk.</p> <p>We also note that for "perpetual" infrastructure assets, the amortisation requirement may not be possible (although, in practice this could be achieved through a pragmatic and simplistic approach). We note that the required stress analysis (bullet 1.79 Advice: Stress Analysis) should be sufficient to evaluate the payment schedule with regard to the project lifetime and cash flows.</p>	<p>Partially agreed. EIOPA decided not to include a criterion precluding financial schemes based on bullet repayment. This decision has been made without prejudice to the fact the refinancing risk should still be low and that the financial risk should satisfy the stress test criterion on adverse refinancing conditions.</p>
184.	AFME ICMA	Section 3.3.4.3.	<p>The requirement on amortizing debt should not be part of the framework, as considered in paragraph 1.104. There are some projects where there is a component of</p>	<p>Please see the response to comment 183.</p>

			<p>non-amortizing debt, where a bullet repayment may be guaranteed or adequately covered and controlled before the payment date.</p> <p>It is not clear how 2(b) assists in assuring the ability of the entity to repay debt, nor why 4 or 6 should be strict requirements.</p> <p>In particular on point 6, it is worth noting that in many transactions the “senior debt” may in fact be subordinate to a superior-senior class of debt (such as liquidity facilities or some hedging), and thus may not meet the criteria that it is the “highest level of seniority at all times”, whilst still being considered senior debt.</p> <p>- Further, depending on the structure, it does not necessarily follow that subordinated debt is not a credit-worthy investment. Indeed, such debt could be investment grade.</p>	<p>Partially agreed. Although the generation of cash flows after the maturity of the debt should provide a margin of safety, it is not considered to be an essential element given the other requirements for example regarding stress analysis and capital structure. Paragraphs 2(b) and 4 were therefore removed.</p> <p>Partially agreed. Paragraph 6 has been retained as the seniority of the instrument is necessary to ensure a high recovery rate, justifying a specific treatment in the standard formula. However, the seniority criterion has been amended to take account of the “super-senior” class of debt.</p>
185.			This comment was submitted as confidential by the stakeholder.	
186.	AMICE	Section 3.3.4.3.	<p>While senior debt generally enjoy the highest level of seniority, the detailed financial structuring in some transactions require that swaps counterparties (when the borrower is requested to hedge its interest rate exposure, as an example) enjoy a “super senior” level. Similarly, liquidity reserve facilities that are also sometimes requested by the senior lenders to secure debt service payments can also enjoy a “super senior” status. As these hedging and liquidity facilities are designed to protect the senior lenders and represent small amounts when compared to the quantum of senior debt, it is generally well accepted and agreed that senior lenders are still enjoying a first ranking senior status despite the existence of these marginal “super senior” counterparties.</p>	Please see the response to comment 184.
187.	AFG	Section 3.3.4.3.	<p>Comment on the “Advice” section</p> <p>While senior debt generally enjoy the highest level of seniority, the detailed financial structuring in some transactions require that swaps counterparties (when the borrower is requested to hedge its interest rate exposure, as an example) enjoy a “super senior” level. Similarly, liquidity reserve facilities that are also sometimes requested by the senior lenders to secure debt service payments can also enjoy a “super senior” status.</p>	Please see the response to comment 184.

			As these hedging and liquidity facilities are designed to protect the senior lenders and represent small amounts when compared to the quantum of senior debt, it is generally well accepted and agreed that senior lenders are still enjoying a first ranking senior status despite the existence of these marginal "super senior" counterparties.	
188.	ABI	Section 3.3.4.3.	<p>Financial risk</p> <p>The ABI believes that a requirement on amortising debt should not be part of the framework (as considered in para 1.104). There are projects with an element of non-amortising debt where a bullet repayment might be guaranteed or adequately covered and controlled well before the payment date.</p> <p>Point 6 of the advice requires the debt to have "the highest level of seniority at all time", we question if this is necessary.</p>	Please see the response to comments 183 and 184.
189.			This comment was submitted as confidential by the stakeholder.	
190.	BdV	Section 3.3.4.3.	Yes, we fully agree.	Noted.
191.	BlackRock	Section 3.3.4.3.	<p>Financial risk</p> <p>Amortised debt represents the majority of the pipeline in Europe but we estimate that bullet-type financing can potentially represent between 20-40% of a diversified allocation into European infrastructure debt. We therefore support consideration of allowing bullet payment terms. Regulated assets are often financed with balloon or bullet structures. Balloon or bullet maturities in shorter tenor deals (+/- 10 years and in) involving newer assets with sufficient outstanding economic life and long term predictable cash flows can be readily refinanced.</p> <p>In terms of eligibility, it is unclear whether partially amortising debt would be permissible and consequently we also recommend a wider definition in this respect.</p> <p>As noted above, cash flows do not always need to exceed debt maturities.</p> <p>In terms of seniority there are occasions where inflation or interest-rate swaps can be of the highest seniority but we believe that use of such risk mitigation tools should in of itself disqualify a project.</p>	Please see the response to comments 183 and 184.
192.	IE	Section 3.3.4.3.	<p><b>Insurance Europe does not believe that qualifying infrastructure should be limited to those with amortising debt (as considered in para 1.104).</b></p> <ul style="list-style-type: none"> <li>■ This requirement would exclude from the perimeter of infrastructure investments a significant part of eligible investments, in particular</li> </ul>	Please see the response to comments 183 and 184.

			<p>acquisition debt vehicles.</p> <ul style="list-style-type: none"> <li>■ There are projects where there is an element of non-amortising debt where a bullet repayment might be guaranteed or adequately covered and controlled well before the payment date.</li> </ul> <p><b>Insurance Europe proposes to replace the requirement 6 in paragraph 1.107 with the following:</b></p> <ul style="list-style-type: none"> <li>■ “For debt investment in an infrastructure project or operating entity, the underlying cash flows generated by the project or operating entity cannot be diverted away from the qualifying investors.”</li> <li>■ The exclusion of subordinated debt is not necessary as it can achieve a high level of financial soundness.</li> <li>■ In the event that the requirement for seniority is retained, this should be without prejudice to the existence of super-senior swaps which exist in most infrastructure projects for risk mitigation purposes. It would, therefore, not be possible to ensure that the instrument possess the highest level of seniority at all times.</li> </ul>	
193.	IRSG	Section 3.3.4.3.	<p>The requirement on amortizing debt should not be part of the framework, as considered in paragraph 1.104. There are some projects where there is a component of non-amortizing debt, where a bullet repayment may be guaranteed or adequately covered and controlled before the payment date.</p> <p>It is not clear how 2(b) assists in assuring the ability of the entity to repay debt, nor why 4 or 6 should be strict requirements.</p> <p>IRSG proposes to replace the requirement 6 in paragraph 1.107 with the following:</p> <ul style="list-style-type: none"> <li>- “For debt investment in an infrastructure project or operating entity, the underlying cash flows generated by the project or operating entity cannot be diverted away from the qualifying investors.”</li> <li>- The exclusion of subordinated debt is not necessary as it can achieve a high level of financial soundness.</li> <li>- In the event that the requirement for seniority is retained, this should be without prejudice to the existence of super-senior swaps which exist in most infrastructure projects for risk mitigation purposes. It would therefore not be possible to ensure that the instrument possess the highest level of seniority at all times.</li> </ul>	Please see the response to comments 183 and 184.

194.	LTIIA	Section 3.3.4.3.	<p>Para 1.104. The matching of amortization schedule to the remaining life of the contract governing revenues of an infrastructure asset could be relevant in this context. However, in certain sectors (e.g., port terminals, mobile towers) the revenue contracts are customarily limited to periods much shorter than the expected economic activity of the assets – with a view for both asset owners/operators and asset users to maintain a degree of flexibility and upside at re-contracting. In such circumstances, it is important to assess the remaining economic life of the assets rather than the remaining life of the contract alone, taking into account past customer churn rates amongst other factors.</p> <p>In certain contexts, residual asset value at the end of the contract or expected economic life can be established with a great certainty. For example, in the Danish PPP market the government can commit to a Terminal Value payment. A strong visibility on such residual values can justify partial amortization (if any), with bullet repayment or refinancing in the end carrying limited risk.</p>	Please see the response to comment 183.
195.	NATIXIS	Section 3.3.4.3.	<p>There is in our view no need to include a requirement on amortising debt as flexibility on the financial structure is required to better align the financing to the economic profile of the project. As an example brownfield airport are usually financed on 5 to 7 year bullet maturity as this period match with the tariff regulation and investment cycle of the airport.</p>	Please see the response to comment 183.
196.	The Investment Association	Section 3.3.4.3.	<p>The Investment Association has some concerns regarding the financial risk requirements.</p> <p><input type="checkbox"/> Condition 6): Some infrastructure projects would do super-senior swaps (for risk mitigation purposes). It would therefore not be possible to ensure that the instrument possesses the highest level of seniority at all times. We therefore propose that condition 6) be deleted.</p> <p><input type="checkbox"/> In addition, we note that EIOPA has not yet decided whether to propose restricting qualifying infrastructure projects to those with amortising debt. We are strongly against any criteria that would limit qualifying infrastructure to those with amortising debt. Not only would it be difficult to define what is meant by “amortising debt” but a large number of infrastructure projects have bullet maturities (such as perpetual assets) or are partially amortising (some assets with a finite life). Such an approach would significantly limit the assets available for investment by insurers.</p>	Please see the response to comments 183 and 184.
197.	AAE	Section 3.3.4.4.	<p>We note the proposed advice on construction risk.</p>	Noted.

198.	AFME ICMA	Section 3.3.4.4.	<p>The WG notes that the criteria on construction risk seem to go further than those of rating agencies' methodologies and, in addition, the criteria for non-rated debt are significantly more restrictive than for rated debt.</p> <p>Point 2 (a) of the advice on construction risk (paragraph 1.111) should be removed as an absolute requirement.</p> <ul style="list-style-type: none"> <li>- In various sectors, one contractor does not "wrap" all construction work in this way (e.g. this is often the case in off-shore wind transactions).</li> <li>- There are other contractual arrangements with construction companies than fixed-price/date, certain turn-key contracts that adequately transfer risk and create incentives for the construction company to deliver a project on time and within the applicable specifications.</li> <li>- There are also more differentiated penalty/incentive schemes (cf. NEC3 contracts) that incentivise the right behaviour, while simultaneously avoiding excessive interface problems as in the case of a fixed-price, fixed-date contract, meant to incentivise risk transfer to subcontractors.</li> <li>- If point a) is not removed then it should be supplemented in the following way (additions underlined): "the infrastructure project entity enters into a fixed-price date-certain turnkey construction engineering and procurement contract with a realistic time horizon and estimate of costs <u>or an incentive and risk-sharing mechanism which is based on a detailed bottom-up cost analysis and has adequate risk contingencies.</u>"</li> </ul> <p>Regarding paragraph 1.111 2.b) the requirement of "substantial liquidated damages" is unclear and too restrictive.</p> <p>It should read as "<u>liquidated damages in line with market practices</u>" (additions underlined).</p>	<p>Please note that the criteria are not based solely on rating agencies' methodology. Additional requirements for non-rated debt are necessary to ensure a level of investors' protection similar to qualifying infrastructure debt with credit quality step 3.</p> <p>Partially agreed. Regarding 2(a) the transfer of risk to a single turnkey construction and engineering contract is no longer required. EIOPA has also revised the criteria to state that it is sufficient if the material risks relating to construction failures are transferred. However, EIOPA does not agree that the project can be protected against the material risks if the contractual arrangements are not fixed-price and date-certain.</p> <p>Partially agreed. Since the term "substantial liquidated damages" was not considered to be clear, EIOPA has redrafted the requirement. EIOPA still believes that strong incentives to avoid cost overruns and delays are key to</p>
------	-----------	------------------	---	--

			<p>The WG recommends to modify the requirement in paragraph 1.111 point 2.c) in order to ensure that innovative European projects can also be included in the scope of qualifying infrastructure: <i>"The construction company has the necessary expertise and capabilities, is financially strong, and has a strong track record in constructing similar projects;"</i></p> <p>In point 2.d of the advice on construction risk, the monitoring and management of risks have to be done by the investors and cannot be outsourced to a third party. Investors can have support with technical advice from a third party for example.</p> <p>The requirement in 2(d) could be redrafted to read: <i>"when assessing whether the conditions in points a) to c) are met insurance and reinsurance undertakings shall use independent <del>thirdparty</del> technical and legal expertise."</i></p>	<p>mitigate the construction risk. Therefore, the level of compensation to be paid for a construction failure should be assessed with regard to the overarching criteria that the project should not be exposed to material construction risks.</p> <p>Not agreed. Track records of the construction companies are of utmost importance to mitigate construction risk.</p> <p>Agreed. The reference to "third-party" has been deleted; the expertise should be independent from the sponsor and the construction company in order to avoid conflicts of interest.</p>
199.			This comment was submitted as confidential by the stakeholder.	
200.	AMICE	Section 3.3.4.4.	<p>The Construction and operating risk criteria listed in the consultation document are only relevant for greenfield / pure SPV project. The infrastructure projects which are operated internally by the asset company itself as that in the transportation sector (motorways, airports), in the utility sector (gas&amp;electricity distribution networks) or in the energy sector do not comply with the defined criteria while they are real infrastructure.</p> <p>The outsourcing of operation and maintenance of infrastructure assets should only be a requirement for pure project companies which are not able to demonstrate that they have the internal resources and technical capacities to operate the infrastructure project. Some construction works (deployment of CAPEX to refurbish or develop an existing infrastructure, maintenance and renewals capex over a project's lifetime) may be performed with less strict requirements than the ones listed in section 3.3.4.4.related to construction risk.</p>	<p>Partially agreed. The outsourcing of operating risk is no longer required. However, EIOPA still believes that it is a good practice to transfer the operating risk to an operating company where the operation and maintenance of the infrastructure asset is complex and the risk material. Regarding construction risk, EIOPA has made some revisions to the advice (see the response to comment 198), however EIOPA still considers that the construction risks should be transferred to a suitable external construction company in order to appropriately mitigate the risks.</p>

			We recommend limiting these requirements to the construction risks related to the initial building of greenfield infrastructure.	
201.	AFG	Section 3.3.4.4.	<p>Comment on the Advice sections</p> <p>Construction and operating risks criteria listed in the consultation document are relevant only for greenfield / pure SPV project. Infrastructures which are operated internally by the asset company itself as for instance in the transportation sector (motorways, airports), in the utilities sectors (gas&amp;electricity distribution networks), the energy sector, etc... does not comply with the defined criteria whereas they are real infrastructure. Outsourcing of operation and maintenance shall only be a requirement for pure project companies not able to demonstrate that they have the internal resources and technical capacities to operate the infrastructure..</p> <p>Some construction works (deployment of CAPEX to refurbish or develop an existing infrastructure, maintenance and renewals capex over a project's lifetime) may be performed with less strict requirements as the ones listed in the section related to construction risk in the consultation paper. We recommend limiting these requirements to the construction risks related to the initial building of a greenfield infrastructure.</p> <p>Please also note that third-party technical due diligence may not be systematically required. For example when a large scale construction company is fully undertaking all construction risks related to a simple and small scale project, the strength and extent of such undertaking, together with the creditworthiness of the contractor, may leave lenders comfortable with no external due diligence. The same comment is relevant for third-party legal expertise, which is relevant only when the project requires complex legal structuring, regardless the construction risks aspects.</p>	Please see the response to comments 198 and 200.
202.	ABI	Section 3.3.4.4.	<p>Construction risk</p> <p>While the construction risk criteria seem acceptable when considered individually, the cumulative effect is too prescriptive. For example, the requirement for a construction company to be "financially strong" is unclear and unnecessary. It is more important to consider whether, in case of failure, this can be adequately managed and the construction company can be replaced if needed.</p> <p>In relation to requirement 2.d), technical and legal expertise need not necessarily be external. Requiring the insurer to have external advice goes too far in telling insurers how they should manage their risk, and seems to contravene the prudent person principle.</p>	<p>Partially agreed. The requirement regarding the financial strength of the construction company has been revised such that the ability to replace the construction company has been recognised provided this can occur without material losses for the project.</p> <p>Partially agreed, however EIOPA does not agree that the requirement contravened the prudent person principle. Please see the response to comment 198.</p>
203.			This comment was submitted as confidential by the stakeholder.	
204.	BlackRock	Section 3.3.4.4.	Construction risk	Please see the response to comment 198.

			We do not believe that it is essential that insurers should have to use independent third party technical and legal expertise – it could well be more effective for internal experts who better understand the insurer’s investment needs to conduct this role.	
205.	GDV	Section 3.3.4.4.	<p>The high number of requirements regarding construction risk, in particular regarding risk transfer and completion increases the complexity.</p> <p>Monitoring and managing of risks should be carried out by investors and cannot be outsourced to the assetmanager The insurance will independently form its opinion, but it can of course receive support in the form of eg technical advice from a third party. Therefore point 2.d of the advice on construction risk should be refined as follows:</p> <p>„d.when assessing whether the conditions in points a) to c) are met insurance and reinsurance undertakings shall use independent from the assetmanager thirdparty technical and legal expertise.“</p> <p>Point 2 (a) of the definition of a suitable construction company should be removed. There are other contractual arrangements with construction companies than fixed-price/date, certain turn-key contracts that adequately transfer risk and create incentives for the construction company to deliver a project on time and within the applicable specifications.</p> <p>Fixed-price date-certain turn-key construction engineering and procurement contracts are not the only contractual framework for effectively mitigating construction risk. There are also more differentiated penalty/incentive schemes (cf. NEC3 contracts) which incentivise the right behaviour, while simultaneously avoiding excessive interface problems as in the case of a fixed-price, fixed-date contract which incentivize risk transfer to subcontractors. Therefore, a) should be supplemented by: `the infrastructure project entity enters into a fixed-price date-certain turnkey construction engineering and procurement contract with a realistic time horizon and estimate of costs or an incentive and risk-sharing mechanism which is based on a detailed bottom-up cost analysis and has adequate risk contingencies</p>	Please see the response to comment 198.
206.	IE	Section 3.3.4.4.	<p>Insurance Europe notes that the criteria on construction risk seem to go further than those of rating agencies’ methodologies and, in addition, the criteria for non-rated debt are significantly more restrictive than for rated debt.</p> <p><b>Point 2 (a) of the advice on construction risk (paragraph 1.111) should be removed.</b></p> <ul style="list-style-type: none"> <li>■ There are other contractual arrangements with construction companies</li> </ul>	Please see the response to comment 198.

than fixed-price/date, certain turn-key contracts that adequately transfer risk and create incentives for the construction company to deliver a project on time and within the applicable specifications.

- There are also more differentiated penalty/incentive schemes (cf. NEC3 contracts) that incentivise the right behaviour, while simultaneously avoiding excessive interface problems as in the case of a fixed-price, fixed-date contract, meant to incentivise risk transfer to subcontractors.
- If point a) is not removed then it should be supplemented in the following way (additions underlined): "the infrastructure project entity enters into a fixed-price date-certain turnkey construction engineering and procurement contract with a realistic time horizon and estimate of costs or an incentive and risk-sharing mechanism which is based on a detailed bottom-up cost analysis and has adequate risk contingencies."

**Regarding paragraph 1.111 2.b) the requirement of "substantial liquidated damages" is unclear and too restrictive.**

- It should read as "liquidated damages in line with market practices" (additions underlined).

**Insurance Europe recommends to modify the requirement in paragraph 1.111 point 2.c) in order to ensure that innovative European projects can also be included in the scope of qualifying infrastructure:**

- ~~"The construction company has the necessary expertise and capabilities, is financially strong, and has a strong track record in constructing similar projects;"~~

**Insurance Europe notes that monitoring and management of risks has to be done by the investors. This is valid for all phases (construction, operations etc.) of the infrastructure project. The aforementioned should be reflected in point 2.d of the advice on construction risk.**

- The investor will form its opinion independently from the asset manager, but it can of course receive support eg in the form of technical advice from a third party.
- The requirement under d should be deleted. If it is still maintained, then it should be changed, which could read as follows:
  - *"d. when assessing whether the conditions in points a) to c) are*

			<p><i>met insurance and reinsurance undertakings shall use independent <del>thirdparty</del> technical and legal expertise."</i></p> <ul style="list-style-type: none"> <li>■ Furthermore, if maintained, the requirement for a third party would need to be refined (level of independence, especially whether an asset manager is permissible). In fact, independent experts should be professional experts who are independent from the financing or refinancing project sponsors.</li> </ul>	
207.	IRSG	Section 3.3.4.4.	<p>IRSG notes that the criteria on construction risk seem to go further than those of rating agencies' methodologies and, in addition, the criteria for non-rated debt are significantly more restrictive than for rated debt.</p> <p>In point 2.d on the advice on construction risk, the monitoring and management of risks have to be done by the investors and cannot be outsourced to a third party. Investors can have support with technical advice from a third party for example.</p> <p>The requirement could be redrafted to read: "<i>when assessing whether the conditions in points a) to c) are met insurance and reinsurance undertakings shall use independent <del>thirdparty</del> technical and legal expertise."</i></p> <ul style="list-style-type: none"> <li>• Section (a) of the definition of a suitable construction company shall be removed. There are other contractual arrangements with construction companies than fixed-price/date, certain turn-key contracts that adequately transfer risk and create incentives for the construction company to deliver a project on time and within the applicable specifications.</li> <li>• Fixed-price date-certain turn-key construction engineering and procurement contracts are not the only contractual framework for effectively mitigating construction risk.</li> <li>• There are also more differentiated penalty/incentive schemes (cf. NEC3 contracts) which incentivize the right behaviour, while simultaneously avoiding excessive interface problems as in the case of a fixed-price, fixed-date contract which incentivize risk transfer to subcontractors</li> <li>• Therefore, a) should be supplemented by: 'the infrastructure project entity enters into a fixed-price date-certain turnkey construction engineering and procurement contract with a realistic time horizon and estimate of costs <b>or</b> an incentive and risk-sharing mechanism which is based on a detailed bottom-up cost analysis and</li> </ul>	Please see the response to comment 198.

			<p>has adequate risk contingencies</p> <p>In addition, the requirement that one turnkey EPC contract is entered into should not be an absolute requirement. In various sectors, one contractor does not "wrap" all construction work in this way (e.g. this is often not the case in off-shore wind transactions).</p> <p>Regarding paragraph 1.111 2.b) the requirement of "substantial liquidated damages" is unclear and too restrictive.</p> <p>It should read as "<i>liquidated damages <u>in line with market practices</u></i>" (additions underlined).</p> <p>The IRSG recommends to modify the requirement in paragraph 1.111 point 2.c) in order to ensure that innovative European projects can also be included in the scope of qualifying infrastructure: "The construction company has the necessary expertise and capabilities, is financially strong, <del>and has a strong track record in constructing similar projects;</del>"</p>	
208.	LTIIA	Section 3.3.4.4.	Advice. Suggest widening the language of sub 2(a) to allow entry into construction contracts with "risk-sharing arrangements between contractor and developer that substantially indemnify the developer from financial consequences of construction delays and cost overruns occurring for no developer's fault".	Please see the response to comment 198.
209.	NATIXIS	Section 3.3.4.4.	<p>The requirement that one turnkey EPC contract is entered into should not be an absolute requirement.</p> <p>In various sectors, one contractor does not "wrap" all construction work in this way (e.g. this is often not the case in off-shore wind transactions).</p>	Please see the response to comment 198.
210.	The Investment Association	Section 3.3.4.4.	<p>The construction risk requirements imposes conditions that may be unnecessarily restrictive and go further than the criteria applied by rating agency methodologies. This will make the criteria for unrated debt more prescriptive than for rated debt. This is unwelcome. We propose the following amendments to these requirements:</p> <ul style="list-style-type: none"> <li>• Condition 2) b) should be amended so that it states:</li> </ul>	Please see the response to comments 198 and 202.

			<p>"The contract includes the payment of <del>substantial</del> liquidated damages which are supported by financial substance or there is a strong completion guarantee from sponsors with <del>excellent financial standing</del> or <b>reference to other forms of liquidity.</b>"</p> <ul style="list-style-type: none"> <li>• Condition 2) c): construction companies typically operate volatile business models. This volatility is typically mitigated by the security package over the contractor's obligations. Therefore we do not believe that financial strength should be a consideration.</li> </ul> <p>Condition 2) c) should therefore be amended so that it states:</p> <p>"The construction company has the necessary expertise and capabilities, <del>is financially strong</del>, and has a strong track record in constructing similar projects."</p> <ul style="list-style-type: none"> <li>• Condition 2) d): The Investment Association believes this condition should be deleted entirely, as we do not believe that it is appropriate for the criteria to set out the way in which insurers should undertake their investment analysis. This is contrary to the Prudent Person Principle under Solvency II.</li> </ul>	
211.	AAE	Section 3.3.4.5.	We note the proposed advice on operating risk.	Noted.
212.	AFME ICMA	Section 3.3.4.5.	<p>The requirement for material risks related to the operation of infrastructure assets to be transferred to an operating company should be removed.</p> <ul style="list-style-type: none"> <li>- It is frequently the case that operation and management contracts are shorter than the life of the concession, and thereafter, the project company conducts the operation and management of the infrastructure assets or enters into another similar contract.</li> <li>- It is common practice for the project company to retain the risk budget for lifecycle works – and reserve appropriately rather than have a fixed price contract with a lifecycle contractor.</li> <li>- There are various examples where project companies, such as airports, do not sub-contract the operation. These project companies have gained a lot of experience with the operation and should be allowed to continue doing so.</li> </ul> <p>The condition for the operator to have a "very strong track record", as proposed in 2.c</p>	<p>Please see the response to comment 200.</p> <p>Not agreed. It is necessary for the</p>

			of the advice on operating risk is too restrictive and should be dropped in order to allow for innovative projects.	persons operating the project to have the necessary expertise and experience in order to ensure that operating risk are properly managed.
213.			This comment was submitted as confidential by the stakeholder.	
214.	ABI	Section 3.3.4.5.	<p>Operating risk</p> <p>We have concerns around the requirement for material risks related to the operation of infrastructure assets to be transferred to an operating company. It is in practice common for the project to retain the risk budget for lifecycle works – and reserve appropriately – rather than have a fixed price contract with a lifecycle contractor. There are also instances where both the construction and the operation are carried out by the same company (for example, this is common in the case of airports).</p> <p>Similarly to the construction company scenario, we believe that requiring the operating company to have a “very strong track record” is also potentially restrictive and unnecessary.</p>	Please see the responses to comments 200 and 212.
215.			This comment was submitted as confidential by the stakeholder.	
216.	BlackRock	Section 3.3.4.5.	<p>Operating risk</p> <p>As noted above, there are a number of operations which can be insourced either in full or in part which should qualify for inclusion. This is more often the case for infrastructure companies than for SPV style structures.</p> <p>As in Section 3.3.4.4, we query whether third party expertise should always have to be used, especially where there is internal resource with appropriate experience.</p>	<p>Please see the response to comment 200.</p> <p>Agreed. The requirement relating to third party expertise has been removed.</p>
217.	BVI	Section 3.3.4.5.	<p>Outsourcing of the operations of an infrastructure asset and transfer of the operation risk to an operating company should not be a qualifying criterion. It seems unusual that an operating company that is distinct from the infrastructure project entity will take over all substantial risks linked to the operation of assets. As far as we know, infrastructure project entities often operate their assets themselves through one of their associates. If they outsource this task, the operating company will take over the entire operating risk only if it is paid an adequate risk premium. From a risk and reward perspective, it may be more advantageous for the project entity to keep part of the operating risk.</p>	Please see the response to comment 200.
218.	GDV	Section 3.3.4.5.	<p>The transfer of operating risks to an operating company should not be a pre-requisite. For example, many projects conduct the operation of the project through their own</p>	Please see the response to comment 200.

			<p>staff, thereby increasing their control over the operation of the project, and, more importantly, achieving a certain degree of autonomy from third party operators. For larger projects, such as for instance an energy grid, suitable third party operators may simply not be available.</p> <p>The project company should not be forced to outsource all material O&amp;M obligations to a third party provider, if it provides of sufficient O&amp;M track record (requirements as described in c) for external operating company).</p>	
219.	IE	Section 3.3.4.5.	<p><b>Insurance Europe is concerned by the advice on operating risk, particularly the requirement for material risks related to the operation of infrastructure assets to be transferred to an operating company. This requirement should be removed.</b></p> <ul style="list-style-type: none"> <li>■ Very often operation and management contracts are shorter than the life of the concession, which puts the risk back to the project company. It should be possible for the project company to conduct the operation and management of the infrastructure assets.</li> <li>■ It is in practice common for the project company to retain the risk budget for lifecycle works – and reserve appropriately – rather than have a fixed price contract with a lifecycle contractor.</li> <li>■ There are various examples where project companies, such as airports, do not sub-contract the operation. These project companies have gained a lot of experience with the operation and should be allowed to continue doing so.</li> </ul> <p><b>A condition on "very strong track record" of the operator, as suggested in 2.c of the advice on operating risk is too restrictive.</b></p>	Please see the response to comments 200 and 212.
220.	IRSG	Section 3.3.4.5.	<p>The requirement for material risks related to the operation of infrastructure assets to be transferred to a operating company should be removed from the advice on operating risk.</p> <ul style="list-style-type: none"> <li>• It is frequently the case that operation and management contracts are shorter than the life of the concession, thereby putting the risk back with the project company. Therefore, it is possible that the project company conducts the operation and management of the infrastructure assets.</li> <li>• It is common practice for the project company to retain the risk budget for lifecycle works – and reserve appropriately rather than have a fixed price contract with a lifecycle contractor.</li> </ul>	Please see the response to comments 200 and 212.

			<ul style="list-style-type: none"> <li>There are various examples where project companies, such as airports, do not sub-contract the operation. These project companies have gained a lot of experience with the operation and should be allowed to continue doing so.</li> </ul> <p>The condition for the operator to have a “very strong track record”, as proposed in 2.c of the advice on operating risk is too restrictive and should be dropped in order to allow for innovative projects.</p>	
221.	LTIIA	Section 3.3.4.5.	<p>Advice. In our view, the mitigation of operating risks depends primarily on the expertise and incentives of those handling the operations, whether they are contracted via a separate entity or not. For example, it can be more beneficial for all investors in an infrastructure project entity if the entity self-performs operations and maintenance in a situation when one of the investors has significant expertise in this field. Also, it is a common market practice for gas and electricity grid companies to self-perform O&amp;M, and we do not believe they should be excluded on that basis.</p> <p>We suggest augmenting the advice with an endorsement of self-performance of the operating activities by an infrastructure project entity provided the expertise and incentive requirements have been met.</p>	Please see the response to comment 200.
222.	NATIXIS	Section 3.3.4.5.	<p>Operating risk mitigation is different than construction risk because of the length of the operating period which is much longer than the construction period and makes it difficult to have a long term operating contract which match the operating period. Secondly operating companies can be small companies which do not have a strong balance sheet (ex: facility management). Therefore operating risk criteria’s must be adapted to the “complexity” of the operation of the asset. If the asset is simple to operate (i.e facility management) the requirement must be less stringent as the SPV could substitute the operator if the operator is not performing and many companies are able to deliver the services.</p> <p>It is also customary for the project company to keep some risks, as an example in the road sector the SPV is usually keeping the Heavy maintenance risk which is covered through the constitution of Maintenance Reserve Account.</p> <p>This requirement should also be excluded for brownfield transactions where the operation of the asset can still be performed by the project companies (ex: airport, ports, motorway...)</p>	<p>Partially agreed. Please see the response to comment 200. Also, EIOPA acknowledges that the construction risk and the operating risk are of a different nature and magnitude.</p> <p>Partially agreed regarding the requirement on the financial strength of the operating company. The advice has been revised such that, where operations are outsourced, the ability to replace the operating company has been recognised provided this can occur without material losses for the project.</p>
223.	The Investment	Section 3.3.4.5.	These criteria assume that following construction all the risk is passed on from the construction company to the operating company. However, it is common for the cost	Please see the response to comment 200.

	Association		<p>risk associated with major maintenance to be retained by the project company (with appropriate reserving mechanics), rather than passed down to a subcontractor. Therefore, the criteria should be amended.</p> <ul style="list-style-type: none"> <li>Condition 2) c): Infrastructure debt providers are protected in a number of ways including through a security package over the contractor's obligations. It is therefore not necessary to require that the operator be financially strong. It is more important there are sufficient alternatives to allow the operator to be easily replaced.</li> </ul> <p>We therefore believe condition 2) c) should be amended so that it states:</p> <p>"The operating company has a very strong track record in operating similar projects, the necessary expertise and capabilities <del>and is financially strong.</del>"</p> <ul style="list-style-type: none"> <li>We consider that condition 2) f) should be deleted entirely, as this requirement would contravene the Prudent Person Principle under Solvency II.</li> </ul>	<p>Please see the response to comment 222.</p> <p>Please see the response to comment 216. Not agreed that the requirement contravened the prudent person principle.</p>
224.	AAE	Section 3.3.4.6.	We note the proposed advice on design and technology risk.	Noted.
225.	AFME ICMA	Section 3.3.4.6.	The requirement to document "fully proven technology and design" would be difficult and exclude innovative projects. This could limit investment and innovation relating to both new and existing technologies. For example, it is not clear whether a variation on an existing design would still meet the "fully proven technology and design" requirement.	Partially agreed. EIOPA has replaced "fully proven" by "sufficiently tested". However, even new technology or updated technology should be carefully tested before it is used.
226.	AMICE	Section 3.3.4.6.	<p>We recommend that the design risk is treated as part of the construction risk as project stakeholders in charge of construction normally assume the design and construction risks of a project in a bundled manner.</p> <p>With regards to technology risks, we believe that excluding projects featuring new</p>	Not agreed. While it is acknowledged that design mainly pertains to construction risk, it could also be relevant for the operation and maintenance of the infrastructure asset. It is therefore preferable to retain the separate criterion.

			technologies that are key to improve the quality and efficiency of infrastructure in certain European countries (e.g. broadband networks) should be avoided. The qualifying criteria should be that unproven technology risks are assumed either by the project's industrial sponsor or the public sector counterparty.	Please see the response to comment 225.
227.	AFG	Section 3.3.4.6.	<p>Comment on the "Advice" section</p> <p>We believe that the design risks shall be treated as part of the construction risks, as project stakeholders in charge of construction usually assume the design and construction risks of a project in a bundled manner.</p> <p>With regards to technology risks, we believe it is important to avoid excluding projects featuring new technologies that are key to improve the quality and efficiency of infrastructure in certain European countries (e.g. broadband networks). The qualifying criteria should be, in our view, that unproven technology risks are assumed either by the project's industrial sponsor or the public sector counterparty.</p>	Please see the response to comments 225 and 226.
228.	ABI	Section 3.3.4.6.	<p>The ABI notes that a need to document "fully proven technology and design" would be problematic. This could limit investment and innovation relating to both new and existing technologies. For example, it is not clear whether a variation on an existing design would still meet the requirement, even in case of very established technology.</p> <p>In addition, these types of risks would be captured under the other requirements (for example, technological risk would impact the predictability of cash flows).</p>	Please see the response to comments 225 and 226.
229.	BlackRock	Section 3.3.4.6.	<p>Design and technology risk</p> <p>As mentioned above, this seems to run counter to the aims of EFSI to encourage innovation via new technologies. A project which is based entirely on new technology exhibits a very different profile to the application of new technology to existing processes. We recommend allowing insurers to continue to apply a risk-based approach to their investments.</p>	Please see the response to comment 225.
230.	IE	Section 3.3.4.6.	<p><b>The restriction allowing only "fully proven technology and design" would be problematic to verify, as well as too restrictive and should be removed.</b></p> <ul style="list-style-type: none"> <li>■ This could limit investment and innovation relating to both new and existing technologies. For example, it is not clear whether a variation on an existing design would still meet the "fully proven technology and design" requirement.</li> </ul>	Please see the response to comment 225.
231.	IRSG	Section 3.3.4.6.	The requirement to document " <i>fully proven technology and design</i> " would be difficult and exclude innovative projects. This could limit investment and innovation relating to both new and existing technologies. For example, it is not clear whether a variation on	Please see the response to comment 225.

			an existing design would still meet the “fully proven technology and design” requirement.	
232.	LTIIA	Section 3.3.4.6.	Ramifications of design and technology risk can be broader than operational non-delivery. Another important aspect – imposing a revenue risk – is the development of new technologies. For example, mobile telecommunications infrastructure, such as telecommunication towers, is exposed to the risk of new technologies for provisioning digital bandwidth rendering the tower networks obsolete.	Agreed that technology risks can affect different aspects of the project and for this reason EIOPA included design and technology risk as a separate criterion.
233.	The Investment Association	Section 3.3.4.6.	<p>There is a risk that this design and technology risk criteria could limit investment and innovation both in new and existing technologies. For example, it is not clear whether a variation on an existing design would be meet the “fully proven technology and design” requirement.</p> <p>We propose deleting this requirement as this would allow insurers to adopt a risk based approach to their investment in infrastructure assets.</p>	Please see the response to comment 225.
234.	AAE	Section 4.1.	We note EIOPA’s proposed approach to infrastructure debt which is to have the capital requirement SCR set within the spread risk module	Noted
235.	AFME ICMA	Section 4.1.	<p>1.117. The discussion about whether to apply or not to the spread risk module should not be triggered by the lack of empirical spread data but rather by the appropriateness to consider spread risk coming from a prudent risk identification process. Not the availability of data but the relevance of the risk factor should be dominant.</p> <p>1.118. The WG does not agree with EIOPA’s argument for treating infrastructure projects in the spread risk module. Price quotation is a common practice amongst banks as bank loans bear mainly floating rate interest rates referenced to a short term money market index, e.g. LIBOR. This pricing practice does not express the existence of spread risk volatility of an infrastructure project. In comparison as we have seen in the financial crisis the index, e.g. LIBOR reflect the banks’ default risk which is empirically proven by the different Interest Rate Swap rates depending on the floating leg index, .i.e. EIONA, 3-M-EURIBOR etc. (please refer to the risk-free interest rate discussion).</p> <p>1.119. Infrastructure debt will be most often categorized as level 3 assets. This is why there are most similarities of its balance sheet value with other level 3 assets rather than with corporate bonds which are more of level 1 or level 2 types. This is why the conclusion would support the counterparty default risk approach. A drop of value even without default does not need to be the consequence of spread movements but of impairment which is driven by default risk and does not express a different risk aversion as a spread change.</p>	<p>The following paragraphs in the CP provide a number of reasons why the spread risk sub-module should be considered.</p> <p>Not agreed. Notwithstanding the potential problems with a reference rate like the LIBOR the changes in spreads over the reference rate indicate that the “prices” of new loans fluctuate.</p> <p>Not agreed. As indicated in the comment there are different reasons why the value could drop (different risk aversion, different credit risk, default). All of them have to be captured to quantify the volatility of basic own funds over 12 months.</p>

			<p>1.120. The economic loss only materialises with default or “forced-sale”. Most insurers tend to place infrastructure investments into portfolios matched by stable liabilities due to the relative illiquidity of the investment. The likelihood of a forced fire sale of this asset class is very low. This is why a possible deterioration in credit quality does not cause a loss per se (when a loss becomes really predictable the debt needs to be impaired anyhow). The argument that the risk is much higher for a sufficiently highly rated diversified pool of long-term debt is again just the repetition of the assumption that there is spread risk when focussing on the one-year horizon. The response to that argument is not to assume a trading motive and therefore consider default risk via cumulative default rates while ignoring the one-year spread risk.</p> <p>1.121. If the existing approach is not appropriate for that type of risk - which is obviously the case - it is the duty of a prudent regulation to come up with alternative methodology especially when they are already applied for comparable risks. The risk here is rather to overestimate the risk and eliminate reasonable and prudent investments.</p>	<p>Not agreed. According to Article 101 Par. 3 Solvency II the SCR is the 99.5. VaR of basic own funds over 12 months. If the value of the debt instrument decreases this means a loss in basic own funds even without a sale.</p> <p>Not agreed. EIOPA does not agree with the first part of the first sentence. The comparable risks refer probably to mortgage loans where the situation due to the underlying property as collateral is very different from infrastructure.</p>
236.	ABI	Section 4.1.	The ABI believes that EIOPA should consider combining the credit and liquidity approaches within the spread sub-module. This would allow for the calibration to appropriately reflect the risk profile of infrastructure investment both in terms of its lower exposure to short-term fluctuations in liquidity and better default and recovery rates.	Please see the section “The possibility of combining liquidity and credit risk approach” in chapter 2.
237.			This comment was submitted as confidential by the stakeholder.	
238.	IRSG	Section 4.1.	<p>1.117. The discussion about whether to apply or not the spread risk module should not be triggered by the lack of empirical spread data but rather by the appropriateness to consider spread risk coming from a prudent risk identification process. Not the availability of data but the relevance of the risk factor should be dominant.</p> <p>1.118. We do not agree with EIOPA’s argument for treating infrastructure projects in the spread risk module. Price quotation is a common practice amongst banks as bank loans bear mainly floating rate interest rates referenced to a short term money market index, e.g. LIBOR. This pricing practice does not express the existence of spread risk volatility of an Infrastructure project. In comparison as we have seen in the financial crisis the index, e.g. LIBOR reflect the banks’ default risk which is empirically proven by the different Interest Rate Swap rates depending on the floating leg index, .i.e. EIONA, 3-M-EURIBOR etc. (please reference to the risk-free interest rate discussion)</p> <p>1.119. Infrastructure debt will be most often categorized as level 3 assets. This is why there are most similarities of its balance sheet value with other level 3 assets rather</p>	Please see resolution of comment 235.

			<p>than with corporate bonds which are more of level 1 or level 2 types. This is why the conclusion would support the counterparty default risk approach: A drop of value even without default does not need to be the consequence of spread movements but of impairment which is driven by default risk and does not express a different risk aversion as a spread change.</p> <p>1.120. The economic loss only materializes with default or „forced sale“. Most insurers tend to place infrastructure investments into portfolios matched by stable liabilities due to the relative illiquidity of the investment. The likelihood of a forced fire sale of this asset class is very low. This is why a possible deterioration in credit quality does not cause a loss per se absent from the fear and the fact this is will be more likely (when a loss becomes really predictable the debt needs to be impaired anyhow). The argument that the risk is much higher for a sufficiently highly rated diversified pool of long-term debt is again just the repetition of the assumption that there is spread risk when focussing on the one-year horizon. The response to that argument is not to assume a trading motive and therefore consider default risk via cumulative default rates while ignoring the one-year spread risk.</p> <p>1.121. This is an argument coming from a rather dogmatic approach and not a prudent approach of solvency management. If the existing approach is not appropriate for that type of risk - which is obviously the case - it is the duty of a prudent regulation to come up with alternative methodology especially when they are already applied for comparable risks. The risk here is rather to overestimate the risk and eliminate reasonable and prudent investments.</p>	
239.	RSA	Section 4.1.	Whilst we broadly agree with what has been drafted, given the relatively small proportion of investments held in this asset class, having an additional set of charges and calculations will simply increase complexity for relatively little benefit in return.	Noted. The suggestions are based on the evidence for a different risk profile. The overall effect depends among other things on the amounts insurers will invest in infrastructure.
240.	AFME ICMA	Section 4.2.	It is worth noting that spread risk, unlike default risk, is not an integral part of a financial instrument but a consequence of the specific and individual asset-liability position of each insurer.	Not agreed. A reduction in the value of the debt in the Solvency II balance sheet results in a loss of basic own funds also if the instrument is not sold. According to Article 101 Par. 3 of Solvency II the SCR is the 99.5 VaR of the basic own funds over one year.
241.	IRSG	Section 4.2.	It is worth noting that spread risk is not an integral and general part of a financial instrument, i.e. infrastructure investments but a consequence of the specific and	See resolution of comment 240.

			individual asset-liability position of each insurer. This is in contrast to default risk which is a function of a financial instrument.	
242.	AFME ICMA	Section 4.2.1.	<p>If EIOPA decides to leave infrastructure calibration within the credit spread module, the WG supports EIOPA's view that as a result of lower credit risks of the infrastructure asset class, there is a justification for reducing the spread risk charges.</p> <p>The WG would favour the adjustment of the charge based upon the Loss Given Default in comparison to corporates (as seen on response to Section 1.5).</p> <p>In connection with paragraph 1.24, th WG confirms that insurers tend to have matching long-term liabilities and therefore the probability of a force sale should be very limited. Infrastructure investments are ideal from an ALM-perspective and stabilise the solvency of insurers. Matching liabilities with appropriate assets is a key requirement for a prudent investor.</p>	<p>Noted.</p> <p>Please see the resolution to this comment.</p> <p>Noted. Please see section "Probability of sale in the liquidity approach" in chapter 2.</p>
243.			This comment was submitted as confidential by the stakeholder.	
244.	GDV	Section 4.2.1.	<p>We share EIOPA's view that for infrastructure debt investments the spread risk can be reduced as it largely results from the illiquidity of these investments. The consultation paper proposes two alternatives for the treatment in the spread risk module - the liquidity approach and the credit risk approach in section 4. The comparison of both alternatives shows that the liquidity approach leads to only minimal improvements for infrastructure debt with high credit quality. The credit risk approach leads to more significant improvements for investments with lower credit quality and seems more appropriate. Due to the fact that a high percentage of infrastructure debt have lower credit quality, the credit risk approach would entail bigger improvements than the liquidity approach.</p> <p>In relation to EIOPA's calibration of the liquidity approach, there is no reason to assume a 10 per cent probability of sale.</p> <p>We are critical of the proposed requirement that the insurer must demonstrate that it can hold the instrument to maturity (no. 2 advice liquidity approach). We believe that while in most cases insurers will be willing and able to hold their long-term investments to maturity there is no need and justification for an explicit requirement. Due to their predictable long-term liabilities, insurance companies are able to invest in a relatively large portion of illiquid assets. For this reason insurers are exposed to liquidity risks to a much lesser extent than for example banks. Solvency II encourages insurers to match assets and liabilities. Matching assets and liabilities allows insurers to avoid</p>	<p>Please see section "Conclusions: debt calibration" in Chapter 2.</p> <p>Not agreed. Please see the section "Probability of sale in the liquidity approach" in Chapter 2.</p> <p>Not agreed. For losses resulting from changes in the liquidity component of the spread to be transitory the insurer must be able to hold the debt to maturity. This maturity can be several decades into the future.</p>

			<p>exposure to forced sales of assets and also allows insurers to hold the assets that they acquire throughout the lifetime of these assets. The existence of illiquidity premiums further improves insurers' portfolio performance.</p> <p>Moreover, the risk management requirements of Solvency II already ask insurers to reflect on liquidity risks in their written policy on risk management and in their ORSA reports. Any further requirements in order to address liquidity risk are not necessary. For insurers' investments under Solvency II the prudent person principle applies, which ensures adequate framework conditions for investment decision-making to serve the interests of policyholders.</p>	<p>Already existing evidence and material can of course where relevant be used to demonstrate that the requirement is met.</p>
245.	IE	Section 4.2.1.	<p>Insurance Europe shares EIOPA's view that for infrastructure debt investments the risk charges can be reduced as the (current) spread risk charges assume that the assets are held with a trading motive.</p> <p>If the calibration of infrastructure Solvency Capital Requirement (SCR) is to remain in the spread risk module, then Insurance Europe supports EIOPA's view that there is justification for reducing the spread risk charges both because of the lower liquidity and lower credit risk of this asset class.</p> <p>Insurance Europe would favour the adjustment of the charge based upon the loss given default in comparison to corporates (see also the comments to section 1.5).</p> <p>If this approach cannot be pursued, then it has to be noted that the reduced spread and liquidity risk of infrastructure investments are not in any way mutually exclusive. Therefore, as an alternative, both effects should be added up to arrive at the overall adjusted calibration, which EIOPA indicated it is considering in paragraph 1.126.</p> <p>In relation to EIOPA's calibration of the liquidity approach, there is no reason to assume a 10% probability of sale. In paragraph 1.124. EIOPA confirms that infrastructure assets are normally highly illiquid and the probability of a forced sale of these assets should be very limited and could be nil if the entity has other liquid investments. This should be recognised in the liquidity method calibration with 0% probability of sale.</p> <ul style="list-style-type: none"> <li>■ Insurers have currently allocated less than 1% of their assets to infrastructure investments. This proportion of illiquid assets, even if significantly increased, would not impose a threat due to the long-term</li> </ul>	<p>Please see the sections "Liquidity approach" and "Conclusions: debt calibration" in Chapter 2.</p> <p>Not agreed regarding the possibility to add up. Please see the section "The possibility of combining liquidity and credit risk approach" in Chapter 2.</p> <p>Not agreed. Please see section "Probability of sale in the liquidity approach" in Chapter 2.</p>

			<p>business model of insurers. Furthermore, pillar 2 requirements on liquidity management would already apply, irrespective of a tailored treatment of infrastructure in the standard formula.</p> <p>Insurance Europe welcomes recognition that the ability (and not the obligation) of insurers to hold infrastructure to maturity should actually be translated into a provision to avoid forced sales of assets. EIOPA should be consistent on this interpretation and, therefore, the proposed wording in paragraph 1.138 (also 1.151 point 2 of the advice box) should read as follows:</p> <ul style="list-style-type: none"> <li>■ The solvency and liquidity position as well as the strategies, processes and reporting procedures of the undertaking concerned with respect to asset-liability management are such as to ensure, on an ongoing basis, that the insurer is able to <del>hold the</del> <u>avoid forced sales of</u> infrastructure debt <del>to maturity</del>. The undertaking shall be able to demonstrate to the supervisory authority that that condition is verified with the level of confidence necessary to provide policy holders and beneficiaries with a level of protection equivalent to that set out in Article 101 of Directive 2009/138/EC.63</li> </ul>	<p>Not agreed. EIOPA does not see the danger that the requirement proposed in the CP is understood as an obligation to hold the instrument to maturity.</p>
246.	IRSG	Section 4.2.1.	<p>1.123 There are good reasons for the non-existing or limited data on prices and spreads during the lifetime of an infrastructure financial instrument. It is neither prudent nor justified to assume that corporate bonds and infrastructure investments will have the identical risk perceptions and risk aversion. This assumption is by no means supported by statistical evidence.</p> <p>1.124 This is correct. Insurers tend to have long-term liabilities and they are not in a position of a forced selling to cover liabilities which have come due. Infrastructure investments are ideal from an ALM-perspective and stabilise the solvency of an insurer. Matching liabilities with appropriate assets is a key requirement for a prudent investor.</p> <p>1.126 Given the previous discussion this is a wrong approach and the basic assumption of coherence between corporate bond risk and infrastructure given spread movements is statistically not evident.</p> <p>1.127 As there are no market prices - as stated previously in the paper - how can they act as an anchor?</p>	<p>EIOPA proposes a risk charge for qualifying infrastructure debt that is lower than for corporate debt with the same CQS.</p> <p>Noted.</p> <p>Noted. EIOPA has pointed out the limitations of the approach.</p> <p>Noted. This refers to the market prices for corporate debt. The resulting risk</p>

				charges are then adjusted to account for the particularities of infrastructure.
247.	AAE	Section 4.2.2.	We note and are content with the advantages and disadvantages listed in this section. In particular we note the point that illiquidity (or liquidity) of a bond or loan is not taken into account in the spread risk sub-module.	Noted.
248.	AFME ICMA	Section 4.2.2.	<p>1.128 Advantages - bullet points: (one) is not an advantage but only a description of a fact. Cumulative default rates do also capture implicitly the risk by its marginal default rates.</p> <p>(two) is a complete wrong anchoring of infrastructure investments to the world of corporate bonds. There is no statistical evidence of any coherence with regard to spread risk.</p> <p>(three) is an argument which is not justified by any statistical analysis. This is natural as one needs to compare short-term investments with a potential risk of forced-selling with investments that are held with a trading motive and that are therefore not endangered to be sold as the 1 in 200 market price.</p> <p>(four) is questionable as the current proposal can heavily overestimate own funds volatility which is also not in line with the prudent person principle.</p> <p>Disadvantages - bullet points: (one) this is correct and the problem of the approach.</p> <p>(two) this is correct as a BIS study from 2004 has clearly shown – there are no similarities between infrastructure and corporate debt.</p> <p>(three) correct and moreover the so called liquidity risk is derived from a wrongly chosen set of corporate bonds.</p>	<p>Not agreed. EIOPA considers this as an advantage given the requirement set out in Article 101 Par. 3 of Solvency II.</p> <p>Not agreed. EIOPA has pointed out the limitations of the approach but deems it vastly superior to the alternative of using the counterparty default risk module. EIOPA is not clear what is meant by “statistical evidence of any coherence with spread risk”.</p> <p>Not agreed. According to Article 101 Par. 3 Solvency II the SCR is the 99.5. VaR of basic own funds over 12 months. If the value of the debt instrument decreases this means a loss in basic own funds even without a sale.</p> <p>Not agreed. EIOPA is not aware of evidence for this alleged substantial overestimation.</p> <p>Noted.</p> <p>Noted.</p> <p>Noted.</p>

249.	IRSG	Section 4.2.2.	<p>1.128 Advantages - bullet points: (one) is not an advantage but only a description of a fact. Cumulative default rates do also capture implicitly the risk by its marginal default rates. (two) is a complete wrong anchoring of infrastructure investments to the world of corporate bonds. There is no statistical evidence of any coherence with regard to spread risk. (three) is an argument which is not justified by any statistical analysis. This is natural as one needs to compare short-term investments with a potential risk of forced selling with investments that are not held with a trading motive and that are therefore not endangered to be sold at the 1 in 200 market price. (four) is questionable as the current proposal can heavily overestimate own funds volatility which is also not in line with the prudent person principle.</p> <p>Disadvantages - bullet points: (one) this is correct and the problem of the approach. (two) this is correct as a BIS study from 2004 has clearly shown there are no similarities between infrastructure and corporate debt. (three) correct and moreover the so called liquidity risk is derived from a wrongly chosen set of corporate bonds</p>	See resolution of comments 248.
250.	AAE	Section 4.2.3.	<p>We note the references made in this section to various sources analysing spread as a function of credit risk and illiquidity risk. As indicated in the general comments section, we encourage EIOPA to consider the relevance of conclusions available in the available literature and experience built to date on similar assets (e.g. corporate bonds) in the context of infrastructure assets.</p> <p>We also note that existing calibrations of the (il)liquidity risk of corporate bonds and loans do exist under standard formula in the calibration of the standard formula (Article 181 in Level 2).</p> <p>We also note that some of the sources quoted to justify the proposed 60:40 split between credit and liquidity risk may be out of date (e.g. Bank of England 2007 study), and this would require more up to date information.</p>	<p>EIOPA has looked at a wide range of literature on the composition of spreads. EIOPA pointed out in the report the limitations when transferring results for corporate bonds to infrastructure debt.</p> <p>EIOPA looked at a large set of sources (not necessarily all quoted in the CP) and considers that the 60:40 split is appropriate.</p>
251.	AFME ICMA	Section 4.2.3.	<p>1.131 The description of the facts are correct. But the relevant data sets for deriving conclusions should not be identical for corporate bonds and infrastructure investment.</p> <p>1.132 The element of judgment is heavily coming from existing data sets on infrastructure. The so called pragmatic approach which is considered to be backed by studies is suffering from the unjustified assumption of coherence between corporate bonds and infrastructure investments. There is no study on infrastructure which could back the pragmatic approach of EIOPA.</p>	<p>Not agreed. EIOPA has pointed out the limitations of the approach.</p> <p>Not agreed. EIOPA considers the approach as appropriate.</p>
252.	ABI	Section 4.2.3.	The 60:40 split between credit and liquidity risk is derived from studies on corporate bond spreads (the majority of the studies were before the financial crisis during which the split has experienced significant regime change so 60:40 is not entirely convincing).	Not agreed. EIOPA looked at a large set of sources (not necessarily all quoted in the CP) and considers that the 60:40 split is appropriate.

			However, infrastructure debts are highly illiquid and therefore a 60% credit component looks overly prudent.	The impact of the split on the calibration depends on the applied reduction factor(s).
253.			This comment was submitted as confidential by the stakeholder.	
254.	IRSG	Section 4.2.3.	<p>1.131 The description of the facts is correct. But the relevant data sets for deriving conclusions should not be identical for corporate bonds and infrastructure investment.</p> <p>1.132 The element of judgment is heavily coming from existing data sets on infrastructure. The so called pragmatic approach which is considered to be backed by studies is suffering from the unjustified assumption of coherence between corporate bonds and infrastructure investments. There is no study on infrastructure which could back the pragmatic approach of EIOPA.</p>	See resolution of comment 251.
255.	AAE	Section 4.2.4.	<p>We note the key points highlighted in this section, and are content with the key messages, and in particular we note the underlying assumptions for insurers investing in infrastructure debt that these assets are held to maturity. These rationale do indeed align well with principles underlying the matching adjustment.</p> <p>We are content with the EIOPA's rationale that in a matching adjustment portfolio there is no need to consider additional factors in the calibration, given the underlying assumption of "held to maturity".</p> <p>We also note that a key input in EIOPA's proposed calibration of the spread risk sub-module for infrastructure debt resembles on the 10% forced sale assumption. We agree with one of the disadvantages listed in this section that should an insurer increase materially its infrastructure assets holding, then underlying assumptions (e.g. 10% forced sale) may need revisiting.</p>	<p>Noted.</p> <p>The calibration of the matching adjustment is outside the scope of the CP.</p> <p>Noted.</p>
256.	AFME ICMA	Section 4.2.4.	For the liquidity approach, a probability of sale of 10% is assumed. The WG would argue that this probability should be set at a number closer to 0% given that insurers are usually able to avoid forced sales, ie especially when it is not possible to receive an appropriate price in the market. Based on the known illiquidity of this asset class, insurers typically only include infrastructure assets into portfolios which match liabilities with very low lapse risk. Also, insurers typically purchase a mix of assets to be matched against a portfolio of liabilities. Infrastructure assets, typically being amongst the lowest of secondary market liquidity, will be the "stickiest" asset class e.g. the last asset class to be chosen to be sold due to the long time required to sell the asset to another buyer due to the complexity of the documentation.	Not agreed. Please see the section "Probability of sale in the liquidity approach" in Chapter 2.

257.	GDV	Section 4.2.4.	The advice states that infrastructure assets are normally illiquid and the probability of a forced sale of these assets should be very limited and could be zero if the entity has other liquid corporate bonds. Indeed, if the liquidity approach is chosen for the calibration the ability to avoid forced sales should be recognised in the calibration for the liquidity approach with 0 per cent probability of sale (compare with table 6 in paragraph 1.146.) instead of 10 per cent as assumed in the advice (compare with table 7 in paragraph 1.148.).	Not agreed. Please see the section "Probability of sale in the liquidity approach" in Chapter 2.
258.	IE	Section 4.2.4.	The advice states that infrastructure assets are normally illiquid and the probability of a forced sale of these assets should be very limited and could be nil if the entity has other liquid corporate bonds. Indeed, if the liquidity approach is chosen for the calibration, the ability to avoid forced sales should be recognised in the calibration for the liquidity approach with 0% probability of sale (compare with table 6 in paragraph 1.146.) instead of 10% as assumed in the advice (compare with table 7 in paragraph 1.148.).	Please see resolution of comment 257.
259.	IRSG	Section 4.2.4.	For the liquidity approach, a probability of sale of 10% is assumed. IRSG would argue that this probability should be set at or near 0% given that insurers are usually able to avoid forced sales, ie especially when it is not possible to receive an appropriate price in the market. Based on the known illiquidity of this asset class, insurers typically only include infrastructure assets into portfolios which match liabilities with very low lapse risk. Also, insurers typically purchase a mix of assets to be matched against a portfolio of liabilities. Infrastructure assets, typically being amongst the lowest of secondary market liquidity, will be the "stickiest" asset class e.g. the last asset class to be chosen to be sold due to the long time required to sell the asset to another buyer due to the complexity of the documentation.	Please see resolution of comment 256.
260.	AFME ICMA	Section 4.2.4.1.	1.133 This might be right but is not of relevance where assets are not held with a trading motive as for most infrastructure investments.	EIOPA is not clear where the disagreement about this paragraph actually lies.
261.	IRSG	Section 4.2.4.1.	1.133 This might be right but is not of relevance where assets are not held with a trading motive as for most infrastructure investments.	See resolution of comment 260.
262.	AFME ICMA	Section 4.2.4.2.	1.134 This is correct and there is a difference between long-term holding and holding-to-maturity.  1.135 It is not about a reduction of spread risk but about the inappropriateness to consider spread risk at all for an asset class that is not held for the longer term.	Noted.  Not agreed. According to Article 101 Par. 3 of Solvency II the SCR is the 99.5. VaR of basic own funds over 12 months. If the value of the debt instrument decreases this means a loss in basic own funds even without a sale.

			1.136 The rationale applies for all illiquid assets that are held for the long term. Changes in the asset-liability position can be managed properly when considering both sides simultaneously.	EIOPA is not clear what the intended direction of the comment is.
263.	IRSG	Section 4.2.4.2.	1.134 This is correct and there is a difference between long-term holding and holding-to-maturity.  1.135 It is not about a reduction of spread risk but about the inappropriateness to consider spread risk at all for an asset class that is not held for the longer term.  1.136 The rationale applies for all illiquid assets that are held for the long term. Changes in the asset-liability position can be managed properly when considering both sides simultaneously.	See resolution of comment 262.
264.	AAE	Section 4.2.4.3.	We note that the conclusions presented in this section rely, among other things, on the appropriateness of probabilities (e.g. 10%). We also note that, as commented in the general comments section, the higher recovery rates on infrastructure assets may have implications with regards to the split of the spread between credit risk and illiquidity.	Noted.
265.	AFME ICMA	Section 4.2.4.3.	1.146 Correct - but only for a one-year horizon given the logic of the decomposition of the overall interest rate. Instead one needs to consider either the cumulative default rates or the marginal default rates over the maturity of the asset.  1.147 This approach is welcome and a first but not final step to achieve more independence from Rating Agencies.  1.148 It is not practical to have a sliding scale of probability of forced sales as it is very hard to calibrate.	Not agreed regarding the need to consider the default rates. According to Article 101 Par. 3 of Solvency II the SCR is the 99.5. VaR of basic own funds over 12 months.  Noted.  Noted. EIOPA is not clear what is meant with "sliding scale" of probability. The calculation is based on a single probability.
266.	IRSG	Section 4.2.4.3.	1.146 Correct - but only for a one-year horizon given the logic of the decomposition of the overall interest rate. Instead one needs to consider either the cumulative default rates or the marginal default rates over the maturity of the asset.  1.147 This approach is welcome and a first but not final step to achieve more independence from Rating Agencies.  1.148 It is not practical to have a sliding scale of probability of forced sales as it is very	See resolution of comment 265.

			hard to calibrate.	
267.	AFME ICMA	Section 4.2.4.4.	1.149 Even under the matching adjustment the risk perception is not correct and on should focus on pure default risk.  1.150 When focusing on default risk only this is a logical consequence.	The matching adjustment is outside the scope of this consultation.  Noted.
268.	IRSG	Section 4.2.4.4.	1.149 Even under the matching adjustment the risk perception is not correct and should focus on pure default risk.  1.150 When focusing on default risk only this is a logical consequence.	See resolution of comment 267.
269.	AFME ICMA	Section 4.2.4.5.	1.151 See the arguments in above comments with respect to the logic of risk when dealing with matched position or positions with a zero probability of forced sales.	See the resolutions of the respective comments.
270.	IRSG	Section 4.2.4.5.	1.151 See the arguments in above comments with respect to the logic of risk when dealing with matched position or positions with a zero probability of forced sales.	See resolution of comment 269.
271.	AAE	Section 4.2.5.	We note and are content with EIOPA's proposed rationale and list of advantages and disadvantages for setting the spread risk sub-module for infrastructure debt based on the credit risk approach. As mentioned in the general comments section, we encourage EIOPA to consider: <ul style="list-style-type: none"> <li>• Suitability of underlying assumptions (e.g. 60:40 split of spread between credit risk and illiquidity risk, 10% forced sale assumption)</li> <li>• A blended approach to calibrate the spread risk, given that infrastructure assets are assumed to be held to maturity by institutional investors (such as insurance companies) and therefore during the various phases of the projects their assets would be exposed to both credit and illiquidity risks.</li> </ul>	Noted.  EIOPA pointed at the challenges regarding the split. EIOPA considers the 60:40 split as appropriate. Regarding the probability of sale see section "Probability of sale in the liquidity approach" in Chapter 2.  The credit risk approach assumes exposure to liquidity risk. A combination of the credit and liquidity approach could be seen as a blended approach (Please see the sections "The possibility of combining liquidity and credit risk approach", "Liquidity approach" and "Conclusions: debt calibration" in Chapter 2.
272.	ABI	Section 4.2.5.	While we believe that the best option would be to combine liquidity and credit approaches, if only one is used we suggest that the credit approach is the more appropriate methodology.	Please see the sections "The possibility of combining liquidity and credit risk approach" and "Conclusions: debt calibration" in Chapter 2.

273.	IE	Section 4.2.5.	See Insurance Europe's comments to section 1.5.	Please see resolution of comments in this section.
274.	AFME ICMA	Section 4.2.5.1.	<p>The limitation of the credit approach to CQS2 and 3 is restrictive, and is not reflective of the actual credit risk for these CQS categories. For example, when looking at Moody's "Infrastructure Default and Recovery Rates, 1983-2014" study shows that there is a lower Probability of Default and Loss Given Default and lower rating volatility for all these asset classes. Furthermore, the same study shows that, at the end of 2014, more than 30% of infrastructure projects were rated Aa or higher: a correct prudential treatment of projects with a CQS of 0 or 1 is therefore important.</p> <p>1.152 Reduction of spread risk charge is not an objective per se but a consequence of the appropriate risk identification of the asset-liability position of an insurer. Changing default rates shall be considered by (i) applying marginal default rates over the maturity of the asset and (ii) a permanent evaluation of the applicable marginal default rate term structure.</p> <p>1.153 This is an assumption and cannot be commented with respect to capital charge calibration but is meaningful from a prudent portfolio management perspective.</p> <p>1.154 If the decomposition of the overall spreads is properly done why should there be a reduction factor? The correct credit risk component is already a result of that decomposition?</p> <p>1.155 Is this assumption based on the scepticism that the proposed idea might be not applicable at the edges of the credit risk spectrum due to the non evident reference to corporate risk?</p>	<p>Partially agreed. One should note that there are limitations regarding the use of results for infrastructure corporates for infrastructure projects. Please see section "Modified credit risk approach" in Chapter 2.</p> <p>Noted. EIOPA is not clear about the relevance of the comment for this particular paragraph.</p> <p>Not agreed. The available evidence is for a diversified portfolio.</p> <p>In a first step a decomposition of the spread risk charge from the Delegated Regulation into components attributable to liquidity and credit risk is performed. Then the credit risk component is adjusted to reflect the better credit risk profile of infrastructure.</p> <p>No. The rationale is outlined in Par. 1.156 of the CP. But EIOPA has made some changes to the credit risk approach (please see section "Modified credit risk approach" in Chapter 2).</p>
275.	ABI	Section 4.2.5.1.	The ABI believes that adjustments to the credit risk module should not be restricted to CQS 2 and 3, and should be applied to higher credit quality classes as well.	Agreed. Please see section "Modified credit risk approach" in Chapter 2.
276.	GDV	Section	Infrastructure assets with high credit quality, i.e. CQS 0 and 1, should also be	Partially agreed. The reference refers to

		4.2.5.1.	admissible for a tailored treatment under the credit risk method. These assets show better credit performance than corporates as well. This view is underlined by various evidence such as Moody's (2015) "Infrastructure Default and Recovery Rates, 1983-2014".	the infrastructure corporate study and the results cannot be directly transferred to infrastructure projects. Please see section "Modified credit risk approach" in Chapter 2.
277.	IE	Section 4.2.5.1.	<p>Insurance Europe is concerned by the limitation of the credit risk approach to CQS2 and 3, which is too restrictive and not reflective of actual credit behaviour of infrastructure for lower CQSs.</p> <ul style="list-style-type: none"> <li>■ Recent statistics on infrastructure projects , such as Moody's (2015) "Infrastructure Default and Recovery Rates, 1983-2014" have shown lower probabilities of defaults (PD) and LGD statistics and lower rating volatility for all rating classes, including Aaa and Aa. Furthermore, this Moody's (2015) study shows that, at the end of 2014, more than 30% of infrastructure projects were rated Aa or higher: a correct prudential treatment of projects with a CQS of 0 or 1 is therefore important.</li> <li>■ Infrastructure assets with high credit quality, ie CQS 0 and 1, should also be admissible for a tailored treatment under the credit risk method. These assets show better credit performance than corporates as well.</li> </ul>	Partially agreed. The reference refers to the infrastructure corporate study and the results cannot be directly transferred to infrastructure projects. Please see section "Modified credit risk approach" in Chapter 2.
278.	IRSG	Section 4.2.5.1.	<p>The restriction of the credit approach to CQS2 and 3 is restrictive, and is not indicative of the actual credit risk of infrastructure for these CQS categories. For example when looking at Moody's "Infrastructure Default and Recovery Rates, 1983-2014" study shows that there is a lower Probability of Default and Loss Given Default and lower rating volatility for all rating classes.</p> <p>1.152 Reduction of spread risk charge is not an objective per se but a consequence of the appropriate risk identification of the asset-liability position of an insurer. Changing default rates shall be considered by (i) applying marginal default rates over the maturity of the asset and (ii) a permanent evaluation of the applicable marginal default rate term structure.</p> <p>1.153 This is an assumption and cannot be commented with respect to capital charge calibration but is meaningful from a prudent portfolio management perspective.</p> <p>1.154 If the decomposition of the overall spread is properly done why should there be a reduction factor? The correct credit risk component is already a result of that decomposition?</p>	Please see resolution of comment 274.

			1.155 Is this assumption based on the skepticism that the proposed idea might be not applicable at the edges of the credit risk spectrum due to the non evident reference to corporate risk?	
279.			This comment was submitted as confidential by the stakeholder.	
280.	AFME ICMA	Section 4.2.5.3.	<p>1.159 It is about to find a proper calibration of infrastructure itself and not to compare it with corporate risk.</p> <p>1.160 This is an arbitrary assumption with no disclosed statistical evidence.</p> <p>The spread risk charge attributable to credit risk for qualifying infrastructure project debt should be 50% lower consistent with EIOPA's comments that the ultimate loss-given default for qualifying infrastructure is roughly half the value for senior unsecured corporate bonds (paragraph 1.38), rather than the proposed reduction of 40% under the credit risk approach.</p>	<p>The comparison with corporate debt is used to adjust the risk charges for corporate debt in order to take into account the particularities of infrastructure.</p> <p>The reduction is based on the analysis in Annex III of the CP.</p> <p>Partially agreed. EIOPA has adjusted the credit risk reduction for CQS 3 based on the considerations set out in section "Modified credit risk approach" in Chapter 2. As Annex III in the CP shows the risk depends also on other factors like the volatility of recovery rates. Therefore EIOPA has not altered the reduction factor for other CQS.</p>
281.	IE	Section 4.2.5.3.	The spread risk charge attributable to credit risk for qualifying infrastructure project debt should be 50% lower consistent with EIOPA's comments that the ultimate loss-given default for qualifying infrastructure is roughly half the value for senior unsecured corporate bonds (para 1.38), rather than the proposed reduction of 40% under the credit risk approach.	Partially agreed. EIOPA has adjusted the credit risk reduction for CQS 3 based on the considerations set out in section "Modified credit risk approach" in Chapter 2. As Annex III in the CP shows the risk depends also on other factors like the volatility of recovery rates. Therefore EIOPA has not altered the reduction factor for other CQS.
282.	IRSG	Section 4.2.5.3.	<p>1.159 It is about finding a proper calibration of infrastructure itself and not to compare it with corporate risk.</p> <p>1.160 This is an arbitrary assumption with no disclosed statistical evidence.</p>	See resolution of comment 280.
283.	IRSG	Section 4.2.5.4.	1.162 The acceptance of non rated debt in general is welcome but a lot more is to be done to achieve independence from rating agencies as required.	Noted.
284.	AAE	Section 4.3.	We note EIOPA's conclusions on this.	Noted.

285.	AFME ICMA	Section 4.3.2.	1.164 The main disadvantage is that due to the individual characteristics of each infrastructure project one cannot assume that secondary values will overtime vary with primary value of future projects. This is why that approach is not valid for calibrating spread risk - as already concluded by BIS in its study from 2004.	Not agreed. While infrastructure projects may be different it seems not plausible that secondary values are not affected by what "prices" are there for primary projects.
286.	IRSG	Section 4.3.2.	1.164 The main disadvantage is that due to the individual characteristics of each infrastructure project one cannot assume that secondary values will overtime vary with primary value of future projects. This is why that approach is not valid for calibrating spread risk - as already concluded by BIS in its study from 2004.	See resolution of comment 285.
287.	AAE	Section 5.1.	We note EIOPA's comments and conclusions regarding calibrating infrastructure assets via the counterparty default risk module, and we are content with the conclusions.	Agreed.
288.	AFME ICMA	Section 5.1.	<p>The WG recommends that infrastructure debt should be treated under the counterparty default module to reflect the real risk to which companies are exposed. This is based on the more stable loss history of the asset class and its higher historical recovery rates compared to other asset classes, particularly since infrastructure assets are almost always senior in terms of security, as compared to other corporate bonds which are not always senior and therefore have a more volatile and lower recovery rate.</p> <p>It is also important that EIOPA treats both loan and bond/securities infrastructure exposures in the same way, so to avoid regulatory arbitrage created by EIOPA with residential mortgages.</p> <p>The WG notes that EIOPA have not made a proposal for a review of infrastructure debt under the counterparty default risk module, despite that this approach was requested in the Call for Advice from the European Commission, and the political interest in this solution based on the regulation for the European Fund for Strategic Investments (2015/017). Recital 41 of the regulation references lower default and recovery statistics (i.e. the counterparty default module): <i>"In light of the general aim of ensuring a regulatory environment conducive to investments, and in light of the fact that infrastructure assets have a strong default and recovery record and that infrastructure project finance can be seen as a means of diversifying institutional investors' asset portfolios, the treatment of infrastructure investments, as currently provided for in relevant Union prudential legislation, should be re-examined."</i></p>	<p>Not agreed. Please see the section "Counterparty default risk module" in Chapter 2.</p> <p>EIOPA is not clear what the reference to "regulatory arbitrage" is supposed to mean. The debt treatment proposed by EIOPA does not distinguish between bonds and loans.</p> <p>Please see the section "Counterparty default risk module" in Chapter 2.</p>

The WG would like to propose the following approach to calibrate infrastructure debt under the counterparty default risk module, where risk charges are distinct for infrastructure debt investments depending on their rating and the following duration buckets:

- 1<sup>st</sup> bucket: duration up to 5 years
- 2<sup>nd</sup> bucket: duration of more than 5 years and up to 10 years
- 3<sup>rd</sup> bucket: duration of more than 10 years
- Total loss due to defaults is calculated based on the combination of probability of default (PD) and recovery rates (RR).
- The capital requirement for infrastructure is calculated with the formula:  

$$[SCR]_{\text{infrastructure}} = PD \times (1 - RR) \times \text{Exposure}$$
- A recovery rate (RR) of 50% is assumed. This recovery rate is conservative, given that based on CRA default and recovery data recovery rates for infrastructure range between 60% and 80% and the most common recovery rate is 100%.
- The following 1 in 200 default rates are derived:

<b>Duration bucket / Credit quality step</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5 and 6</b>
<b>Up to 5 years</b>	3.4%	3.4%	3.4%	8.8%	31.8%	50.5%
<b>More than 5 years and up to 10 years</b>	3.9%	3.9%	7.3%	13.3%	43.0%	62.3%
<b>More than 10 years</b>	5.9%	8.1%	11.7%	18.4%	61.5%	90.6%

- The following capital charges are derived:

<b>Duration bucket / rating</b>	<b>AAA</b>	<b>AA</b>	<b>A</b>	<b>BBB</b>	<b>BB</b>	<b>B</b>
<b>Up to 5 years</b>	1.7%	1.7%	1.7%	4.4%	15.9%	25.3%

EIOPA appreciates the constructive approach taken in providing a detailed proposal. For an assessment of the counterparty default risk approach see the section "Counterparty default risk module" in Chapter 2.

			<table border="1"> <tr> <td><b>More than 5 years and up to 10 years</b></td> <td>2.0%</td> <td>2.0%</td> <td>3.7%</td> <td>6.7%</td> <td>21.5%</td> <td>31.2%</td> </tr> <tr> <td><b>More than 10 years</b></td> <td>3.0%</td> <td>4.1%</td> <td>5.9%</td> <td>9.2%</td> <td>30.8%</td> <td>45.3%</td> </tr> </table> <p>The above figures assume a zero probability of sale of the assets matching a pool of liabilities. Although the Working Group believes that the probably of sale is very low, realistically it is not zero. The WG would recommend a very slight increasing of the above capital charges to reflect a probability of sale of between 0 to 5%. The WG does not have data to support this assumption. However, given the prudence required by undertakings in the purchase of long term illiquid but stable assets to match long term liability portfolios with very low lapse risk, it is highly unlikely that insurers who do prudent matching will need to sell infrastructure assets until their maturity, irrespective of the levels of interest rates. Stated another way, if EIOPA proceeds with using a credit spread risk approach, the WG strongly supports using a combination of the two approaches stated in consultation sections 1.19 and 1.20, which will result in capital charges lower than in Table 2, but slightly higher than in the table immediately above.</p> <p>The WG recommends using a probability of sale assumption less than 10% based on the prudential person principal that will govern the decision making process of undertakings.</p>	<b>More than 5 years and up to 10 years</b>	2.0%	2.0%	3.7%	6.7%	21.5%	31.2%	<b>More than 10 years</b>	3.0%	4.1%	5.9%	9.2%	30.8%	45.3%	<p>EIOPA agrees that the probability of a sale is not zero.</p> <p>Not agreed. Please see the section "Probability of sale in the liquidity approach" in Chapter 2.</p> <p>Please see the sections "The possibility of combining liquidity and credit risk approach" and "Conclusions: debt calibration" in Chapter 2.</p> <p>Not agreed. Please see the section "Probability of sale in the liquidity approach" in Chapter 2.</p>
<b>More than 5 years and up to 10 years</b>	2.0%	2.0%	3.7%	6.7%	21.5%	31.2%												
<b>More than 10 years</b>	3.0%	4.1%	5.9%	9.2%	30.8%	45.3%												
289.	AMICE	Section 5.1.	<p>Available data indicates that infrastructure debt should be treated in the counterparty default risk module.</p> <p>The infrastructure debt should be treated under the counterparty default risk module and not in the spread risk module as insurance firms are exposed to credit risk and not to short-term volatility of market spreads. A treatment under the counterparty default risk module would recognise the fact that infrastructure assets are not a traded instrument. We therefore propose EIOPA reconsiders its position with regards the spread risk module.</p>	<p>Not agreed. Please see the section "Counterparty default risk module" in Chapter 2.</p> <p>Not agreed. Solvency II measures risk based on the volatility of basic own funds over a 12 month period.</p>														
290.	ABI	Section 5.1.	<p>1. Counterparty default risk module</p> <p>We are disappointed that EIOPA is not considering the counterparty approach, which has a number of advantages such as being neutral on maturity/duration of the debt.</p> <p>In addition, infrastructure debts would have provided further diversification benefits (default SCR and market risk SCR are 25% correlated under SF) rather than just being</p>	<p>The rationale why EIOPA considers the counterparty default risk module not as a suitable option is set out in the section "Counterparty default risk module" in Chapter 2.</p>														

			added to the spread module under market risk SCR.	
291.			This comment was submitted as confidential by the stakeholder.	
292.	BlackRock	Section 5.1.	<p>We consider that a correlation between type 1 and 2 of 75% is high.</p> <p>In practice the probability of default by off takers, construction companies, service providers and derivative providers is much lower. User market assumptions of 30% would be more appropriate for unconnected parties. We would also recommend including - collateral type - in this analysis.</p>	<p>Not agreed. Please see section "Correlation of qualifying infrastructure equity investments with other equities" in Chapter 2.</p> <p>EIOPA does not understand the relevance of the remark in this context.</p>
293.	GDV	Section 5.1.	<p>For infrastructure debt our preferred solution is a treatment under the counterparty default risk module as type 2 in order to adequately reflect the strong recovery rates and long-term character of infrastructure investments. Due to their predictable long-term liabilities, insurance companies are able and willing to invest in a relatively large portion of illiquid assets. For this reason insurers are exposed to liquidity risks to a much lesser extent than for example banks and have the ability to avoid forced-sales.</p> <p>Moreover, there is evidence that infrastructure investments react less (or even not at all) to general financial market movements due to their long-term nature and underlying exposures often with inelastic demand. There is also clear evidence that the risks of default and/or recovery rates of infrastructure investments exhibit better performances than those of corporates. Compared to corporate bonds, infrastructure debt shows much higher recovery rates: For example Moody's 2015 report on Default and Recovery Rates for Project Finance Bank Loans, based on data from 1983 to 2013, showed ultimate recovery rates for infrastructure of 77 per cent while corporate bonds showed ultimate recoveries from 28 per cent (subordinated bonds) to 63.5 per cent for senior secured bonds.</p> <p>An approach via the counterparty default risk module would allow the calibration of the capital requirement for infrastructure debt to reflect insurers ability to hold assets long-term as well as reflect higher recovery rates (as compared to corporate bonds) and the existence of risk mitigation tools (e.g. collateral) that significantly reduce the loss given default.</p>	<p>Not agreed. The rationale why EIOPA considers the counterparty default risk module not as a suitable option is set out in the section "Counterparty default risk module" in Chapter 2.</p> <p>The credit risk approach uses the available evidence on default and recovery rates to derive a reduction in the spread risk charge.</p> <p>Not agreed. The rationale why EIOPA considers the counterparty default risk module not as a suitable option is set out in the section "Counterparty default risk module" in Chapter 2.</p>
294.	IE	Section 5.1.	<p><b>Insurance Europe also expected to see EIOPA putting forward a concrete proposal for a review of infrastructure debt under the counterparty default risk module.</b></p> <ul style="list-style-type: none"> <li>■ Such an approach was explicitly requested in the call for advice from the European Commission.</li> </ul>	<p>Please see the section "Counterparty default risk module" in Chapter 2.</p>

		<ul style="list-style-type: none"> <li>■ In addition, political interest in a solution under the counterparty default module also appears through Regulation (EU) 2015/1017 on the European Fund for Strategic Investments (EFSI), where recital 41 explicitly refers to lower default and recovery statistics, ie the counterparty default module: <i>"In light of the general aim of ensuring a regulatory environment conducive to investments, and in light of the fact that infrastructure assets have a strong default and recovery record and that infrastructure project finance can be seen as a means of diversifying institutional investors' asset portfolios, the treatment of infrastructure investments, as currently provided for in relevant Union prudential legislation, should be re-examined."</i></li> </ul> <p>As already noted in the response to the first EIOPA consultation, <b>Insurance Europe believes that a treatment of infrastructure debt under the counterparty default risk module could also properly reflect the real risk to which the companies are exposed.</b></p> <ul style="list-style-type: none"> <li>■ The current treatment of infrastructure debt under the spread-risk module assumes that insurers trade infrastructure investments and are exposed to short-term volatility of market spreads and the impact this has on the market price of the infrastructure. Insurers have the ability to avoid forced sales due to liquidity management combined with asset-liability-management. They are, however, exposed to credit risk (ie default and downgrade) and only for this risk they should be required hold capital.</li> <li>■ There is data on defaults and recovery on which to base such a calibration. There is a credible, prudentially sound, as well as rigorous, method for which Insurance Europe has provided an example below. EIOPA should therefore include as an additional alternative a calibration proposal for the counterparty default risk module.</li> </ul> <p>Insurance Europe would like to put forward the following proposal for a calibration of infrastructure debt under the counterparty default risk module:</p> <ul style="list-style-type: none"> <li>■ Three duration buckets are defined: 0-5y, 5-10y and more than 10y.</li> <li>■ Total loss due to defaults needs to be calculated based on the combination of probability of default (PD) and recovery rates (RR). The capital requirement for an infrastructure exposure is calculated with the following formula:</li> </ul>	<p>Not agreed. The rationale why EIOPA considers the counterparty default risk module not as a suitable option is set out in the section "Counterparty default risk module" in Chapter 2.</p> <p>Also without a sale fluctuations in the value of infrastructure debt in the Solvency II balance sheet affect the level of basic own funds.</p> <p>The rationale why EIOPA considers the counterparty default risk module not as a suitable option is set out in the section "Counterparty default risk module" in Chapter 2.</p> <p>EIOPA appreciates the constructive approach taken in providing a detailed proposal. For an assessment of the counterparty default risk approach see the section "Counterparty default risk module" in Chapter 2.</p>
--	--	---	---

■  $SCR_{\text{infrastructure}} = PD \cdot (1-RR) \cdot \text{Exposure}$

- A recovery rate (RR) of 50% is assumed. This choice can be considered prudent, as recovery rates for infrastructure range between 60% and 80% and the most common recovery rate is 100%.
- In order to use the available information to determine the 1 in 200 level of defaults needed for Solvency II SCR calibration, it is assumed that default rates follow a lognormal distribution. Moody's data is used to calculate the parameters of a log-normal distribution for each duration bucket and credit quality step.
- The following 1 in 200 default rates are derived:

Duration bucket / Credit quality step	0	1	2	3	4	5 and 6
Up to 5 years	3.4%	3.4%	3.4%	8.8%	31.8%	50.5%
More than 5 years and up to 10 years	3.9%	3.9%	7.3%	13.3%	43.0%	62.3%
More than 10 years	5.9%	8.1%	11.7%	18.4%	61.5%	90.6%

- The following capital charges are derived:

Duration bucket / rating	AAA	AA	A	BBB	BB	B
Up to 5 years	1.7%	1.7%	1.7%	4.4%	15.9%	25.3%
More than 5 years and up to 10 years	2%	2%	3.7%	6.7%	21.5%	31.2%
More than 10 years	3%	4.1%	5.9%	9.2%	30.8%	45.3%

- For unrated debt Insurance Europe proposes a similar approach to the BBB CQS.

Insurance Europe's proposal is based on a methodology that assumes a number of

Not agreed. EIOPA considers that the counterparty default risk approach is not a suitable option. Therefore EIOPA does

			layers of conservativeness and, despite this, the final capital charges appear to be significantly lower than the ones proposed by the EIOPA work. <b>So if infrastructure debt remains within the spread risk module, spread calibrations would have to be reduced by a significantly larger factor.</b>	not agree to use it as a “benchmark” when arguing for lower risk charges in the spread risk sub-module.
295.	IRSG	Section 5.1.	<p>IRSG recommends that infrastructure debt should be treated under the counterparty default module to reflect the real risk to which companies are exposed. This is based on the more stable loss history of the asset class and its higher historical recovery rates compared to other asset classes, particularly since infrastructure assets are almost always senior in terms of security, as compared to other corporate bonds which are not always senior and therefore have a more volatile and lower recover rate.</p> <p>IRSG notes that EIOPA have not made a proposal for a review of infrastructure debt under the counterparty default risk module, despite that this approach was requested in the Call for Advice from the European Commission, and the political interest in this solution based on the regulation for the European Fund for Strategic Investments (2015/017). Recital 41 of the regulation references lower default and recovery statistics (i.e. the counterparty default module): <i>“In light of the general aim of ensuring a regulatory environment conducive to investments, and in light of the fact that infrastructure assets have a strong default and recovery record and that infrastructure project finance can be seen as a means of diversifying institutional investors’ asset portfolios, the treatment of infrastructure investments, as currently provided for in relevant Union prudential legislation, should be re-examined.”</i></p> <p>IRSG would like to propose the following approach to calibrate of infrastructure debt under the counterparty default risk module, where risk charges are distinct for infrastructure debt investments depending on their rating and the following duration buckets:</p> <ul style="list-style-type: none"> <li>o 1<sup>st</sup> bucket: duration of up to 5 years</li> <li>o 2<sup>nd</sup> bucket: duration of more than 5 and up to 10 years</li> <li>o 3<sup>rd</sup> bucket: duration of more than 10 years</li> <li>o Total loss due to defaults is calculated based on the combination of probability of default (PD) and recovery rates (RR).</li> <li>o The capital requirement for infrastructure is calculated with the formula:  <math display="block">[SCR]_{\text{infrastructure}} = PD \times (1 - RR) \times \text{Exposure}</math> </li> <li>o A recovery rate (RR) of 50% is assumed. This recovery rate is conservative,</li> </ul>	<p>Not agreed. The rationale why EIOPA considers the counterparty default risk module not as a suitable option is set out in the section “Counterparty default risk module” in Chapter 2.</p> <p>On this point please see the section “Counterparty default risk module” in Chapter 2.</p> <p>EIOPA appreciates the constructive approach taken in providing a detailed proposal. For an assessment of the counterparty default risk approach see the section “Counterparty default risk module” in Chapter 2.</p>

		<p>given that based on CRA default and recovery data recovery rates for infrastructure range between 60% and 80% and the most common recovery rate is 100%.</p> <ul style="list-style-type: none"> <li>○ It is assumed that default rates follow a lognormal distribution, in order to use the available information to calculate the 1 in 200 level of defaults needed for the Solvency II SCR calibration. The parameters of a log-normal distribution for each duration bucket and credit quality step are derived from data from Moody's.</li> <li>○ For unrated debt it is proposed to use an approach similar to the treatment for BBB CQS.</li> </ul> <p>The above proposal uses a number of prudent choices and results in capital charges which are significantly lower than the ones proposed by EIOPA. The prudent choices include:</p> <ul style="list-style-type: none"> <li>○ The assumed recovery rate of 50% is conservative, given that recovery rates for infrastructure range between 60% and 80% and the most common recovery rate is 100%.</li> <li>○ Data on default rates from corporates were used instead of data from infrastructure.</li> <li>○ The data consists of cumulative default rates and not annualized default rates (which are lower).</li> <li>○ Duration buckets with a conservatively chosen time horizon are proposed and each bucket comprises of cumulative default rates.</li> </ul> <p>If, however, infrastructure debt is considered within the spread risk module, spread calibrations would have to be reduced by a significantly larger factor.</p> <p>1.166 A capital charge based on default rates and loss given default rates only do vary with the maturity of the asset as on shall consider the term structure of marginal default rates.</p> <p>1.167 It is not a disadvantage that the calibration is not anchored to market prices as they are not relevant when having a proper risk identification. That argument is (as with like many paragraphs in that paper) a result of the not justified assumption that spread risk is an effective risk factor of that investment - which is not with a zero probability of forced sales.</p>	<p>EIOPA considers the calibration proposed in the advice as appropriate.</p> <p>Article 101 Par. 3 of Solvency II defines the SCR as the VaR of basic own funds over 12 months.</p>
--	--	--	--

1.168 It is hard to believe that a prudent risk and solvency management of insurers do not measure risk over one year.

1.169 There is no underestimating if the valuation in the accounts is properly done. There are appropriate accounting rules in place to capture that effect.

- The following 1 in 200 **default rates are derived:**

<b>Duration bucket / Credit quality step</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5 and 6</b>
<b>Up to 5 years</b>	3.4 %	3.4 %	3.4%	8.8%	31.8 %	50.5 %
<b>More than 5 years and up to 10 years</b>	3.9 %	3.9 %	7.3%	13.3 %	43.0 %	62.3 %
<b>More than 10 years</b>	5.9 %	8.1 %	11.7 %	18.4 %	61.5 %	90.6 %

- The following capital charges are derived:

<b>Duration bucket / rating</b>	<b>AAA</b>	<b>AA</b>	<b>A</b>	<b>BBB</b>	<b>BB</b>	<b>B</b>
<b>Up to 5 years</b>	1.70 %	1.70 %	1.70 %	4.40 %	15.90 %	25.30 %
<b>More than 5 years and up to 10 years</b>	2.00 %	2.00 %	3.70 %	6.70 %	21.50 %	31.20 %
<b>More than 10 years</b>	3.00 %	4.10 %	5.90 %	9.20 %	30.80 %	45.30 %

The above figures assume a zero probability of sale of the assets matching a pool of liabilities. Although IRSG believes that the probably of sale is very low, realistically it is

EIOPA is not clear about the comment as the paragraph refers to the determination of regulatory capital requirements.

Not agreed. EIOPA has discussed the topic with a number of stakeholders on several occasions and is not convinced about this "consistency".

EIOPA agrees that the probability of a sale is not zero.

			<p>not zero.</p> <p>IRSG would recommend a very slight increasing of the above capital charges to reflect a probability of sale of between 0 to 5%. IRSG does not have data to support this assumption. However, given the prudence required by undertakings in the purchase of long term illiquid but stable assets to match long term liability portfolios with very low lapse risk, it is highly unlikely that insurers who do prudent matching will need to sell infrastructure assets until their maturity, irrespective of the levels of interest rates.</p> <p>Stated another way, if EIOPA proceeds with using a credit spread risk approach, IRSG strongly supports using a combination of the two approaches stated in consultation sections 1.19 and 1.20, which will result in capital charges lower than in Table 2, but slightly higher than in the table immediately above.</p> <p>IRSG recommends using a probability of sale assumption less than 10% based on the prudential person principal that will govern the decision making process of undertakings.</p>	<p>Not agreed on the 0% to 5 % range. Please see the section "Probability of sale in the liquidity approach" in Chapter 2.</p> <p>Please see the sections "Conclusions: debt calibration" and "The possibility of combining liquidity and credit risk approach" in Chapter 2.</p> <p>Not agreed. Please see the section "Probability of sale in the liquidity approach" in Chapter 2.</p>
296.	RSA	Section 5.1.	We are of the view that the counterparty default module is not the correct place to consider such investments – the spread risk module (for debt) or equity risk module (for equity/collective investment scheme investments) are more suitable, in line with the points raised above.	Agreed.
297.	AFME ICMA	Section 5.2.	1.171 This argument is not valid when valuing the positions properly in the accounts.	Not agreed. EIOPA has discussed the topic with a number of stakeholders on several occasions and is not convinced about this "consistency".
298.	IRSG	Section 5.2.	1.171 This argument is not valid when valuing the positions properly in the accounts.	Not agreed. EIOPA has discussed the topic with a number of stakeholders on several occasions and is not convinced about this "consistency".
299.	AAE	Section 5.3.	As indicated elsewhere in our comments, we draw attention to the potential implications arising from calibration errors, due to lack of appropriate / suitable data on infrastructure assets to calibrate the capital charge for these assets.	Noted. As outlined in the CP EIOPA is aware of the data limitations.
300.			This comment was submitted as confidential by the stakeholder.	
301.	ABI	Section 6.1.	<p>Equity calibration</p> <p>2. The ABI is supportive of the proposed calibrations resulting in a stress of</p>	The approach mentioned in 3. has been only one part of the analysis that has been extended by EIOPA using a PFI

			<p>between 30% and 39% for infrastructure equity investments.</p> <p>3. However, we recognise that the equity calibration takes a simplistic approach to model infrastructure equities as a sub-sector in a well-diversified equity index (i.e. similar treatment to sectoral equity indices).</p> <p>4. We would suggest that a full look-through approach could also be considered for infrastructure equities (or alternatively, a % value stress for the underlying infrastructure assets) for the following reasons:</p> <ul style="list-style-type: none"> <li>- It is in line with the look-through principle in Article 84 (directive 2009/138/EC), particularly when the infrastructure investment is structured as funds;</li> <li>- The three proxies considered by EIOPA failed to recognise that leverage plays an important role when comparing equity performances/VaRs: for example the degree of leverage of the PFI portfolio could be materially different to that of the wider FTSE all index;</li> <li>- Therefore, applying 30-39% shock to all infrastructure equities severely penalises equity investment in unleveraged infrastructures; and provides the wrong incentive.</li> </ul> <p>We have some reservations with the consultation's contention that business decisions are limited in scope as the owner has full control over the project.</p>	<p>portfolio of five specific infrastructure firms to determine the risk-return characteristics of infrastructure projects.</p> <p>EIOPA is fully aware of the possibilities a full look-through approach could provide, but due to a lack of suitable data with a sufficient long history, such an approach has not been feasible.</p> <p>The level of leverage can influence the volatility in the market prices of the indices and entities used in the analysis, but due to the lack of suitable data even for listed infrastructure equity investments, no further analysis on this issue could be performed.</p>
302.			This comment was submitted as confidential by the stakeholder.	
303.			This comment was submitted as confidential by the stakeholder.	
304.	AFME ICMA	Section 6.2.	<p>EIOPA's advice to charge infrastructure-related equity risk between 30 and 39% is based on a PFI portfolio of 5 listed companies which invest mainly in social infrastructure. EIOPA concludes that infrastructure investments have higher returns than the market with much lower drawdowns, lower volatility, lower tail risks as well as little or no correlation with the market. The WG believes that EIOPA's proposal is acceptable for listed equities.</p> <p>In relation to non-listed equities, the WG believes that it is essential that unlisted infrastructure equity are not treated as the listed equities would be. The returns of such unlisted infrastructure exhibit much lower volatility with correlation with both listed infrastructure equity and other assets close to zero. The WG believes that prices for listed equities should not be used as a proxy to calibrate the risk charge for unlisted infrastructure projects. A low correlation factor (for instance, zero), with other market</p>	<p>EIOPA decided against a special treatment of unlisted infrastructure equity: due to the lack of suitable data with a sufficient long history, the claims of a much lower volatility of unlisted infrastructure equity and a zero correlation to listed infrastructure equity and other assets are difficult to evaluate. The academic literature does also not give clear indications.</p> <p>No convincing methodology to produce a calibration for unlisted equities emerged.</p> <p>Based on these considerations EIOPA does not suggest a different treatment</p>

			<p>risk sub-modules should be considered.</p> <p>The leverage ratio of the underlying project entity is relevant. Listed indices are usually composed of entities with a rather high leverage ratio resulting in higher volatility of these indices. A leveraged infrastructure equity index therefore usually overestimates the risk of moderately or even unleveraged infrastructure equity investments. As a conclusion, the current treatment of unlisted infrastructure equity under Solvency II and in EIOPA's proposal are not appropriate.</p>	for listed and unlisted infrastructure project equity.
305.			This comment was submitted as confidential by the stakeholder.	
306.	GDV	Section 6.2.	<p>Equity instruments are of great interest for insurers. The EIOPA advice – equity risk charge between 30 and 39 per cent - is based on a PFI-Portfolio of five companies listed at London Stock Exchange which predominantly invest in social infrastructure. We note, that the sample is very small and with its focus on social infrastructure most likely not representative of ongoing and planned infrastructure investments by insurers. EIOPA identified in its analysis of the PFI portfolio that infrastructure investments have higher returns than the market with much lower drawdowns, volatilities and tail risks as well as little or no correlation with the market. Therefore we welcome EIOPA's proposal for listed equity.</p> <p>We believe that a distinction between listed and unlisted equity is however crucial (see as well comments in section 6.3). While listed infrastructures' characteristics are similar to global equity, the returns of unlisted infrastructure exhibit much lower volatility and are nearly uncorrelated with both listed infrastructure and global equity. Therefore, we don't believe that prices for listed equities should be used as a proxy to calibrate the risk capital charge for an individual unlisted infrastructure project. Especially the low correlation down to zero to other standard investments should be considered. Beside others a crucial parameter is the leverage ratio of the underlying project entity. Listed indices are usually composed of entities with a rather high leverage ratio resulting in higher risk charges of these indices. A leveraged infrastructure equity index usually overestimates the risk of moderately or even unleveraged infrastructure equity investments. Therefore the current treatment of unlisted infrastructure equity under Solvency II and in the EIOPA proposal is not seen as appropriate. We believe that the PFI portfolio is only a very first step to better assess the riskiness of equity infrastructure investments as compared to standard equity indices indicating a lower risk charge of infrastructure equity investments as compared to Type 1 equity.</p>	See resolution of comment 304.
307.	IE	Section 6.2.	Equity instruments are of interest for insurers. The EIOPA advice – an equity risk charge between 30 and 39% - is based on a Portfolio of five companies that are mostly invested in projects under the Private Finance Initiative (PFI) which are listed on the	See resolution of comment 304.

			<p>London Stock Exchange and predominantly invest in social infrastructure. EIOPA identified in its analysis of this 'PFI portfolio' that infrastructure investments have higher returns than the market with much lower drawdowns, lower volatility, lower tail risks, as well as little or no correlation with the market. Therefore, the EIOPA proposal for a reduction of the capital charges could be acceptable for <i>listed</i> equities.</p> <p>However, Insurance Europe believes that <b>a more tailored treatment for unlisted equity is crucial</b> (see comments on section 6.3 below). The returns for unlisted infrastructure exhibit much lower volatility and are nearly uncorrelated with both listed infrastructure equity and other assets. Therefore, Insurance Europe believes that prices for listed equities should not be used as a proxy to calibrate the risk charge for unlisted infrastructure projects. Especially a low correlation factor, preferably zero, with other market risk sub-modules should be considered.</p> <p>Beside others, the leverage ratio of the underlying project entity is relevant. Listed indices are usually composed of entities with a rather high leverage ratio resulting in higher volatility of these indices. A leveraged infrastructure equity index, therefore, usually overestimates the risk of moderately or even unleveraged infrastructure equity investments. As a conclusion, the current treatments of unlisted infrastructure equity under Solvency II and in EIOPA's proposal are not appropriate.</p>	
308.	IRSG	Section 6.2.	<p>The approach taken for the calibration of unlisted equity infrastructure is concerning, since the IRSG believes the prices for listed equities cannot be used as a proxy, especially not on the correlation side. The stock market is sensitive to macroeconomic and political factors, and cannot be used as a proxy to look at unlisted infrastructure equity.</p> <p>1.180 This approach is heavily if not exclusively dependent on the right choice of proxies.</p> <p>1.181 Those proxies except the third bullet point might be not in line with the eligibility criteria of infrastructure investments as they do not represent projects only but operating companies which have a (completely) different risk profile.</p>	<p>See resolution of comment 304.</p> <p>EIOPA is aware of the possible drawbacks when using proxies and of the properties of the proxies used.</p>
309.	The Investment Association	Section 6.2.	<p>To achieve the most accurate equity calibration, a full-look through approach is better suited for infrastructure equities (or alternatively, a percentage value stress for the underlying infrastructure assets), for the following reasons:</p> <p><input type="checkbox"/> It is in line with the look-through principle in Article 84, particularly when the investment is structured as fund.</p>	<p>See resolution of comment 301.</p>

			<p><input type="checkbox"/> The three proxies considered by EIOPA do not recognise that leverage plays an important role when comparing equity performance or VaRs. For example, the degree of leverage of the PFI portfolio could be materially different to that of the wider FTSE All Index.</p> <p><input type="checkbox"/> Applying a 30-39% risk charge to all infrastructure equities would penalise equity investment in unleveraged infrastructures.</p> <p>We consider that a risk assessment of 22% for equity is more appropriate, as this is the capital charge applied to 'strategic equity', with which infrastructure shares many characteristics. For example, infrastructure equity is generally held until maturity, and has a lower volatility than listed equity.</p>	Not agreed. Regarding the similarities with strategic participations see par. 1.179 in the CP.
310.	AFME ICMA	Section 6.2.1.	1.183 The conclusion is heavily influenced by the definition of proxies. As proxies seem to be operating companies also the outcome is not surprising. But the WG believes this is not relevant for project type equity.	See resolution to comment 308.
311.	IRSG	Section 6.2.1.	1.183 The conclusion is heavily influenced by the definition of proxies. As proxies seem to be operating companies also the outcome is not surprising. But the IRSG believes this is not relevant for project type equity.	See resolution to comment 308.
312.	AFME ICMA	Section 6.2.3.	1.192 Another limitation of the interpretation is whether returns of equity of an operating company investing into equity of project SPV are suitable proxies when having run through a risk inventory exercise of the proxies.	See resolution of comment 308.
313.	AMICE	Section 6.2.3.	We believe that prices for listed equities should not be used as a proxy for unlisted equity infrastructure.	See resolution to comment 304.
314.	IRSG	Section 6.2.3.	1.192 Another limitation of the interpretation is whether returns of equity of an operating company investing into equity of project SPV are suitable proxies when having run through a risk inventory exercise of the proxies.	See resolution to comment 308.
315.	LTIIA	Section 6.2.3.	We consider it important to emphasize that conclusions from the analysis presented in this section (and detailed in Annex V) can be drawn for listed infrastructure equities only. While we are not suggesting that conclusions for unlisted infrastructure would necessarily be qualitatively different, however the VaR and worst drawdown estimates established using monthly and daily volatilities are not descriptive of unlisted infrastructure performance whose valuations are typically subject to a yearly revision cycle, smoothening and ±6 month lag to the general market conditions.	See resolution to comment 304.
316.	AFME ICMA	Section 6.3.	There should be a clear distinction between listed and unlisted equity infrastructure.	See resolution of comment 304.

			<p>The returns of unlisted equity infrastructure investments are less volatile and uncorrelated with other asset classes. Unlisted equity should therefore be included in a new sub-module with a 22% charge.</p> <p>The WG believes that the zero correlation between unlisted infrastructure equity and other equity should be recognised in the definition of an unlisted infrastructure equity risk sub-module.</p> <p>1.195 The WG supports this as project SPVs especially do not bear strategic management risk as corporates (operating companies) do. A consequence of it is that equities of operating companies do normally trade above the pure NAV in contrast to equity of project SPVs.</p> <p>1.197 This assumption is not evident from statistical analysis.</p> <p>1.198 To which losses EIOPA refers here - marked-to-market losses or realized losses?</p>	<p>Not agreed. This combines the evidence described.</p> <p>Losses referred to in this paragraph are marked-to-market losses.</p>
317.	AMICE	Section 6.3.	<p>Strategic Investments</p> <p>We believe that further research should be undertaken with regards equity investments of strategic nature for the calibration of infrastructure equity investments.</p> <p>The suggested approach of equity investments of strategic nature as defined in Article 171 of the Delegated Regulation was disregarded on the basis that business decisions in infrastructure projects are limited in scope and by the covenants required by the lenders.</p> <p>We would like to reiterate that most insurance firms hold equity investments for longer periods thereby reducing the risk of loss. It is also important to consider the evidence provided in a study by Blanc-Brude/Whittaker of a lower volatility observed over listed PFI portfolios as compared to general listed equity. Besides the study shows a lower correlation to GDP and the longer horizon of PFI portfolio investors.</p> <p>Duration-based equity approach</p> <p>This approach is limited to ring-fenced retirement provision business of life assurance undertakings that satisfy a number of explicit requirements where (the typical holding period of equity investments is assumed to be consistent with an average duration of</p>	<p>Not agreed. EIOPA considers the statement in Par. 1.179 of the CP still valid.</p> <p>EIOPA did not pursue a duration-based equity approach, as predicting cash flows and values for equity investments in the</p>

			<p>liabilities for such business and exceeds 12 years). The reason behind is that for long-term equity investments short-term volatility should not be considered, allowing the application of a lower capital requirement.</p> <p>Given the illiquid nature of infrastructure investments, insurance companies consider a relatively long holding period in their investment decisions. Consequently, insurance companies meeting the duration-based equity approach explicit requirements are interested in buying and holding infrastructure assets. Thus, we recommend EIOPA to indicate in the consultation paper the possibility to apply the duration based equity approach to equity infrastructure.</p>	<p>middle to long-term is much more difficult than for debt. Additionally, long recovery periods after a drawdown during a period of financial stress may create a tail risk that also affects investors who are willing to hold the investment to maturity by a possible reduction of cash flows over a longer period of time.</p>
318.	AFG	Section 6.3.	<p>We believe that further research should be undertaken in the direction of strategic equity treatment for the calibration of equity infrastructure investments.</p> <p>The suggested approach of strategic equity investments as defined in Article 171 of the Delegated Regulation was discarded on basis that in infrastructure projects the business decisions are very limited in scope and by the covenants required by the lenders.</p> <p>It may be argued that investors have limited freedom to structure an upside for equity returns given the above mentioned constraints. Nevertheless, their supervision and management efforts are primary for avoiding the downside. In parallel to higher infrastructure debt recovery rates resulting from active management by lenders, the lesser volatility of infrastructure equity at least partly results from active management by financial investors. Their efforts counterbalance the conflicting interests of construction and operating companies thus limiting possible costs overruns, unavailability and delays. Also in the environment of regulatory risk, the proactive attitude of financial investors has already shown its importance for maintaining of equity value.</p> <p>Also EIOPA did not pursue the argument that insurance companies hold equity investments for longer periods thus reducing the risk of a loss. Nevertheless, it is important to consider sources of lower volatility observed by Blanc-Brude/Whittaker over listed PFI portfolios as compared to general listed equity. Besides lower correlation to GDP, it may also reflect the longer horizon of PFI portfolio investors.</p> <p>The duration based equity sub module targets SCR calculation for life insurance companies providing certain occupational retirement provisions or retirement benefits where the typical holding period of equity investments is assumed to be consistent with an average duration of liabilities for such business and exceeds 12 years. The argument is that for long-term equity investments short-term volatility should not be considered, and therefore should lead in turn to a lower capital requirement.</p> <p>Given the illiquid nature of infrastructure investment, the insurance companies do integrate a relatively long holding period into their investment decisions. Consequently,</p>	<p>See resolution to comment 317.</p>

			insurance companies meeting the duration-based equity sub module requirements are precisely the investors interested in the buy and hold infrastructure strategies. Thus, it is important to underline the possibility to apply the duration based equity sub module to infrastructure equity.	
319.	ABI	Section 6.3.	The ABI is supportive of the proposed calibrations resulting in a stress of between 30% and 39% for infrastructure equity investments. The proposed band will encompass the different types of projects with varying risk and cash flow profiles (e.g. greenfield and brownfield infrastructure projects).	The range refers to operational project.
320.			This comment was submitted as confidential by the stakeholder.	
321.	GDV	Section 6.3.	<p>We share EIOPA's view that infrastructure equity investments have higher returns and lower risks than other equity investments. Therefore we would like to highlight the following key positions on the recalibration of infrastructure equity:</p> <p>For listed infrastructure equities, we believes there is a high correlation with type 1 equities. Therefore we agree with the proposed risk charge between 30 and 39 per cent.</p> <p>A distinction between listed and unlisted equity infrastructure investment is however crucial. While listed infrastructure equity characteristics are similar to other listed equity, the returns of unlisted equity infrastructure exhibit much lower volatility and are uncorrelated with both listed equity infrastructure and global equity.</p> <p>Unlisted infrastructure equities should therefore be captured under a new sub-module in the market risk, with a 20 per cent charge. A zero correlation should be applied between the sub risk-module for infrastructure risk on one side and the sub risk-modules for equity risk, interest rate risk and other market risks on the other side. The following evidence supports such an approach:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> In the current Delegated Act (DA), equity investments of a strategic nature and long-term equity investments (covered by Article 304(1)(b) of the Directive) receive a 22 per cent charge in the SCR calculation. Infrastructure unlisted equity have similar characteristics (e.g. not subject to short-term trading, significantly less volatile, etc) and should therefore be treated similar.</li> <li><input type="checkbox"/> A study by Blanc-Brude/Whittaker (2015), partly reproduced in Annex V of the EIOPA draft advice notes that the PFI portfolio exhibits higher returns than the market, with much lower drawdown and tail risks and very little, or no correlation with the market.</li> <li><input type="checkbox"/> A JP Morgan Asset Management study (2013) notes that unlisted infrastructure</li> </ul>	Please see resolution of comment 304.

			<p>equities are nearly uncorrelated with both listed infrastructure and global equity.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> A study by Bitsch, Buchner and Kaserer (2010) shows that for unlisted infrastructure equity there is lower risk of default than for other equities as well as a higher return.</li> <li><input type="checkbox"/> Unlisted infrastructure equity exhibits rather bond-like characteristics.</li> <li><input type="checkbox"/> Unlisted infrastructure equity is most often long term and not used for short-term trading, matching insurers' ability to invest long-term and to avoid forced sales.</li> <li><input type="checkbox"/> The proposed definition and some criteria will result in infrastructure equity investments being a subset of equity investments with a higher quality.</li> <li><input type="checkbox"/> Since EIOPA advocates for a charge of 30 to 39 per cent based on prices of listed equities, this would justify a charge lower than 30 per cent for unlisted infrastructure equities.</li> </ul>	
322.	IE	Section 6.3.	<p>Insurance Europe would like to highlight the following key positions on the recalibration of unlisted infrastructure equity:</p> <ul style="list-style-type: none"> <li>■ Unlisted infrastructure equities should be captured under a new sub-module in the market risk, with a 22% charge. The following evidence supports such an approach: <ul style="list-style-type: none"> <li>■ In the current Delegated Act (DA), equity investments of a strategic nature and long-term equity investments (covered by Article 304(1)(b) of the Directive) receive a 22% charge in the SCR calculation. Infrastructure unlisted equity have similar characteristics (eg not subject to short-term trading, significantly less volatile, etc) and should, therefore, be treated alike.</li> <li>■ A study by Blanc-Brude/Whittaker (2015)*, partly reproduced in Annex V of the EIOPA draft advice notes that the PFI portfolio exhibits higher returns than the market, with much lower drawdown and tail risks and very little, or no, correlation with the market.</li> <li>■ A study by Bitsch, Buchner and Kaserer (2010)** shows that for unlisted infrastructure equity there is a lower risk of default than for other equities as well as a higher return.</li> <li>■ Unlisted infrastructure equity exhibits some usual characteristics which are rather bond-like characteristics and make it less risky than other equities.</li> <li>■ Unlisted infrastructure equity is most often long term, not used for short-term trading.</li> </ul> </li> </ul>	<p>Please see resolution of comment 304.</p> <p>The quoted study from Bitsch, Buchner and Kaserer (2010) showed a lower risk of default for unlisted infrastructure equity and higher returns, but could find no evidence of more stable cash flows of unlisted infrastructure equity than for non-infrastructure deals. They proposed that the unlisted infrastructure equity investments appeared to be highly levered and the returns showed a positive correlation to public equity markets.</p> <p>Regarding the low correlation of the PFI portfolio with the market, as proposed in the study by Blanc-Brude/Whittaker (2015) EIOPA drew a different conclusion.</p>

			<ul style="list-style-type: none"> <li>■ In addition to the above attributes, EIOPA aims to derive a restrictive definition and some criteria for infrastructure, meaning that those investments will necessarily be a subset of equities, of a higher quality, therefore justifying a lower risk charge. Since EIOPA advocates for a charge of 30 to 39% based on prices of listed equities, this would justify a charge lower than 30% for infrastructure equities.</li> <li>■ Insurance Europe believes that a zero correlation between unlisted infrastructure equity and other equity should be recognised through the definition of an equity risk sub-module in Solvency II. Insurance Europe is disappointed to see that the EIOPA proposal does not give any explicit recognition to the diversification that unlisted infrastructure equity brings to insurers' investment portfolios. The following evidence can be used to support this: <ul style="list-style-type: none"> <li>■ A JP Morgan Asset Management study (2013)*** notes that unlisted infrastructure equities are nearly uncorrelated with both listed infrastructure and global equity. Historical correlation is only 0.1 between private infrastructure and global equities.</li> <li>■ The study by Blanc-Brude/Whittaker (2015)*, partly reproduced in Annex V of the EIOPA draft advice notes that the PFI portfolio exhibits higher returns than the market, with much lower drawdown and tail risks and very little, or no, correlation with the market.</li> </ul> </li> </ul> <p><i>References:</i></p> <p>* See Blanc-Brude/Whittaker (2015): <i>Listed proxies of private infrastructure equity. Performance, risk measures and representativity. A contribution to the EIOPA consultation on the calibration of infrastructure investment in Solvency 2. The paper can be downloaded from the EIOPA website (<a href="#">link</a>).</i></p> <p>** See Bitsch, Buchner and Kaserer (2010): <i>Risk, return and cash flow characteristics of infrastructure fund investments (<a href="#">link</a>).</i></p> <p>*** See J.P. Morgan Asset Management, <i>Global Real Assets (2013): A case for Core Infrastructure.</i></p>	
323.	IRSG	Section 6.3.	There should be clear distinction between listed and unlisted equity infrastructure investments. The returns of unlisted equity infrastructure investments are less volatile and uncorrelated with other asset classes. Unlisted equity should therefore be included in a new sub-module with a 22% charge.	See resolution of comments 304 and 316.

			<p>The IRSG believes that the zero correlation between unlisted infrastructure equity and other equity should be recognised in the definition of an unlisted infrastructure equity risk sub-module.</p> <p>1.195 IRSG supports this as project SPVs especially do not bear strategic management risk as corporates (operating companies) do. A consequence of it is that equities of operating companies do normally trade above the pure NAV in contrast to equity of project SPVs.</p> <p>1.197 This assumption is not evident from statistical analysis.</p> <p>1.198 To which losses EIOPA refers here - marked-to-marked losses or realized losses?</p>	
324.	LTIIA	Section 6.3.	See comment to Section 1.5 above. We also believe that greenfield projects having satisfied the construction and revenues risks management criteria should benefit from a treatment similar to that of operational projects, in particular at portfolio level (since construction risk is idiosyncratic).	Not agreed. The risks during the construction phase are higher and equity holders have a subordinated claim.
325.	RSA	Section 6.3.	We broadly agree with the text as drafted.	Noted.
326.	AMICE	Section 7.1.	Additional qualitative requirements relating to investments in infrastructure should be avoided. Prescribing additional elements of risk management for a small part of the investment portfolio will refrain firms from investing in infrastructure assets.	Not agreed, please see the response to comment 12.
327.			This comment was submitted as confidential by the stakeholder.	
328.	GDV	Section 7.1.	Additional qualitative requirements relating to investments in infrastructure projects should be predominantly avoided. We believe there is no need and justification for these requirements - like the stress testing of cash flows on a regular basis. With regard to the already existing risk management requirements in Solvency II and the prudent person principle these detailed requirements are not seen as necessary and appropriate. Moreover, the complexity and costs involved in conducting such stress tests – if at all possible due to lack of appropriate data - would in many cases outweigh the positive impact from an adjusted calibration. This would contradict the political will and efforts to improve the conditions for infrastructure investments.	<p>Not agreed, please see the response to comments 4, 12, 24 and 28.</p> <p>Regarding the requirement to perform a stress analysis, the advice provides further specification on Article 259(3) of Commission Delegated Regulation (EU) 2015/35, which already requires undertakings to perform stress analyses.</p> <p>Further, the qualifying criteria for infrastructure investments include a requirement for appropriate stress analysis.</p> <p>Therefore, as explained in paragraph 1.216 of the CP, having conducted a stress analysis prior to investment, it is important for the undertaking to continue</p>

				<p>to assess the ability of the project to withstand adverse events based for example on its performance to date as well as the impact of relevant economic conditions.</p> <p>In addition, the requirement for regular stress testing is risk based and it is stated that it shall be commensurate with the nature, scale and complexity of the risks. This would mean for example there where there has not been particular events, it may be justified to continue to rely on the assumptions taken during previous stress analyses.</p>
329.	IE	Section 7.1.	Additional qualitative requirements relating to investments in infrastructure projects should be avoided. Insurance Europe believes there is no need and no justification for these requirements - like stress testing of cash flows on a regular basis. With regard to the already existing risk management requirements in Solvency II and the prudent person principle these requirements do not seem necessary, but the associated burden might outweigh the capital relief under the adjusted calibration. This would contradict political will and efforts to improve the conditions of infrastructure investments.	Not agreed, please see the response to comments 12, 24, 28 and 328.
330.	RSA	Section 7.1.	We broadly agree with the text as drafted.	Noted.
331.	AAE	Section 7.2.	We agree with the application of the principle of materiality (proportionality) in applying the risk management requirements.	Noted.
332.	AFME ICMA	Section 7.2.	<p>1.202 The advice should properly take into account the existing requirements under pillar 2 for investments.</p> <p>1.203 The stipulation of steps and procedures in relation to infrastructure investments should be in accordance with the prudent person principle.</p> <p>1.204 See comment 1.203. Costs should be capped to those which are needed to set up an appropriate risk management framework for infrastructure investments within the existing Solvency II system - a main focus here is to avoid cost for external ratings and/or for plausibility checks of external ratings.</p>	<p>Please see the response to comment 24.</p> <p>Not applicable - no risk management requirements are proposed regarding external ratings.</p>
333.	IRSG	Section 7.2.	<p>1.202 The advice should properly take into account the existing requirements under pillar 2 for investments.</p> <p>1.203 The stipulation of steps and procedures in relation to infrastructure investments should be in accordance with the prudent person principle.</p>	Please see the response to comment 332.

			1.204 See comment 1.203. Costs should be capped to those which are needed to set up an appropriate risk management framework for infrastructure investments within the existing Solvency II system - a main focus here is to avoid cost for external ratings and/or for plausibility checks of external ratings.	
334.	AFME ICMA	Section 7.3.	<p>There is no justification for setting elements of risk management, as the Prudent Person Principle is presently the best practice. Legislating for best practice prevent future improvements.</p> <p>1.207 Those specifications are welcome as they are in line with the prudent person principle and with all other asset classes.</p> <p>1.208 Referencing infrastructure investments to the Guideline on non-routine investment activities seem only appropriate as long as those investments are non-routine for an undertaking. Once they are routine investments they shall be treated like all other routine investments.</p> <p>1.212 There are alternatives to requiring an external audit, e.g. stressing the financial model.</p>	<p>Not agreed. EIOPA supports the prudent person principle as the risk based approach to be introduced by Solvency II. It is not contrary to that principle to provide more detailed provisions, where justified. Indeed, there are already provisions in Commission Delegated Regulation (EU) 2015/35 and EIOPA's Guidelines on the System of Governance which supplement the prudent person principle.</p> <p>Not agreed. EIOPA considers that it is appropriate to refer to the Guideline on non-routine investments since by default infrastructure investments are considered to be complex investments which should be treated as non-routine. It does not preclude the possibility that an undertaking could demonstrate that a particular investment is routine. However, an investment is not routine simply because the undertaking has previously made a similar investment.</p> <p>Agreed. As explained in paragraph 1.212 of the CP, an external audit is not required, but rather an independent validation process. EIOPA has made an amendment to the advice to try to clarify its expectations.</p>

			<p>1.215 Work-out strategies are in principle superior to forced sale strategies. Therefore it is prudent to incentivise work-outs and disincentives forced sales.</p> <p>The WG believes insurance companies should be able to validate themselves whether a project satisfies the qualifying criteria because the investor itself is best placed to make this assessment (rather than having an independent validation confirm it). Otherwise, this would impose higher requirements on insurance companies than those that the pillar 2 of Solvency II already calls for (where an insurance company needs to conduct its own assessment whether an investment satisfies the prudent person principle).</p>	<p>Agreed. The proposed requirement in paragraph 3(b) of the advice reflects this.</p> <p>Partially agreed. EIOPA sought to explain in the CP that an independent validation process did not mean that the undertaking could not validate the assessment of the qualifying criteria themselves. EIOPA has made an amendment to the advice to try to clarify its expectations.</p>
335.			This comment was submitted as confidential by the stakeholder.	
336.	AMICE	Section 7.3.	The requirement that the insurer should hold a well-diversified portfolio of qualifying infrastructure project debt in order to apply a lower capital charge should be removed; As the supply of infrastructure assets is still scarce it will be difficult to find many assets to invest in. Moreover, a small number of assets can also contribute positively to the risk in the total portfolio.	Partially agreed. As stated in paragraph 1.209 of the CP no risk management requirements are proposed with regard to diversification.
337.	ABI	Section 7.3.	<p>We do not think that it is necessary to prescribe elements of risk management. The prudent person principle is the currently best practice in any case, and it is not clear why it is necessary to legislate for best practice, as this would just prevent future improvements.</p> <p>We agree that insurers need to understand the risks that they are exposed to, and this is a routine part of managing an insurance business. However, we do not think that infrastructure investment can or should be treated in all cases as a "non-routine investment activity" (paragraph 1.208).</p>	Please see the response to comment 334.
338.			This comment was submitted as confidential by the stakeholder.	
339.	GDV	Section 7.3.	We believe there is no justification for prescribing specific elements of risk management for infrastructure investments as proposed in section 7 of the EIOPA advice. Insurance companies should be able to validate themselves whether a project satisfies the qualifying criteria because it is best placed to make this assessment (rather than having an independent validation confirm it). Otherwise, this would impose higher requirements on insurance companies than those that the second pillar of Solvency II is already calling for (where an insurance company needs to conduct its own assessment whether an investment satisfies the prudent person principle).	Please see the response to comment 334.
340.	IE	Section 7.3.	Insurance Europe acknowledges the importance of the risk management framework under Solvency II. But Insurance Europe also believes there is no justification for	Please see the response to comment 334.

			<p>prescribing specific elements of risk management for these infrastructure investments as proposed in section 7 of the EIOPA advice. The prudent person principle is the currently best practice in any case. It is not clear why it is necessary to legislate for best practice only for these assets, as this would just prevent future improvements.</p> <p>More specifically, Insurance Europe does not think it is relevant to complement the existing framework by additional criteria to be met for infrastructure debt transactions which are not rated by ECAI as long as the undertakings are able to use other ratings/scoring developed internally and approved.</p> <p>Insurance Europe would also like to highlight that it is important to clarify that independent and reputable experts should mean that they are professional experts who are independent from the financing or refinancing project sponsors (paragraph 1.210).</p> <p>Insurance Europe believes insurance companies should be able to validate themselves whether a project satisfies the qualifying criteria, because the investor itself is best placed to make this assessment (rather than having an independent validation confirm it). Otherwise, this would impose higher requirements on insurance companies than those that the pillar 2 of Solvency II already calls for (where an insurance company needs to conduct its own assessment whether an investment satisfies the prudent person principle).</p>	<p>Please see the response to comment 2.</p> <p>Please see the response to comment 334.</p> <p>Please see the response to comment 334.</p>
341.	IRSG	Section 7.3.	<p>There is no justification for setting elements of risk management, as the Prudent Person Principle is presently the best practice. Legislating for best practice would prevent future improvements.</p> <p>1.207 Those specifications are welcome as they are in line with the prudent person principle and with all other asset classes.</p> <p>1.208 Referencing infrastructure investments to the Guideline on non-routine investment activities seem only appropriate as long as those investments are non-routine for an undertaking. Once they are routine investments they shall be treated like all other routine investments.</p> <p>1.212 There are alternatives to requiring an external audit, e.g. stressing the financial model</p> <p>1.215 Work-out strategies are in principle superior to forced sale strategies. Therefore it is prudent to incentivise work-outs and disincentive forced sales.</p>	<p>Please see the response to comment 334.</p>
342.	NATIXIS	Section 7.3.	<p>Insurance companies should be able to validate themselves the fulfilment of the criteria</p>	<p>Please see the response to comment 334.</p>

			and not be required to use external independent validation.	
343.	RSA	Section 7.3.	We broadly agree with the text as drafted – essentially setting out the implications of the prudent person principle as applied to investing in this sector.	Noted.
344.	The Investment Association	Section 7.3.	Overall, we do not believe that there is any justification for EIOPA prescribing elements of risk management. This approach seems to run counter to the prudent person principle that is currently the mandated approach under Solvency II.	Not agreed, please see the response to comments 12, 24 and 28.
345.	AFME ICMA	Section 8.	<p>In the asset class for qualifying infrastructure, guarantees by regional governments and local authorities (RGLA) should be treated as central government exposures, given their lower risk.</p> <ul style="list-style-type: none"> <li>- Guarantees provided by the central government are assigned a risk factor of 0% for SCR spread risk, concentration risk and counterparty default risk under the Solvency II Delegated Acts. From a risk perspective, there should be no difference between a guarantee provided by a central government or RGLA. In some member states regional governments possess more fiscal powers compared to the central government.</li> <li>- In the event of a default a clear guarantee ensures repayment by the RGLA, thereby exposing Insurance companies directly to the creditworthiness of the RGLA. The lower credit risk of the RGLA should therefore be recognised in prudential regulation.</li> <li>- For the counterparty default module, article 199 point 11 of the Delegated Acts ensures that RGLA guarantees are treated as central government exposures. Not recognising RGLA guarantees within qualifying infrastructure would lead to an inconsistent treatment in comparison to the counterparty default module.</li> </ul> <p>Therefore the WG proposes to add the following paragraph within the asset class of qualifying infrastructure:</p> <p><i><u>"Exposures which are fully, unconditionally and irrevocably guaranteed by counterparties listed in the implementing act adopted pursuant to point (a) of Article 109a(2) of Directive 2009/138/EC shall be treated as exposures to the central government."</u></i></p>	Please see the section "Treatment of RGLA guarantees" in Chapter 2.
346.	ABI	Section 8.	Guarantees by a RGLA should be treated in the same way as other government guarantees. This would be consistent with the same treatment afforded to central government and RGLA exposures. (1.221). We note that insurers would still be expected to understand the risks associated with the project.	Please see the section "Treatment of RGLA guarantees" in Chapter 2.
347.	Assuralia	Section 8.	EIOPA recognizes under paragraph 1.220 that most institutional investments in infrastructure projects in Belgium benefit from an RGLA guarantee. Such infrastructure	Please see the section "Treatment of RGLA guarantees" in Chapter 2.

		<p>projects include, for instance, the development and renewal of schools, healthcare and social housing which generally fall under the authority of regional governments in Belgium, and not under the central government. For many of these projects public-private partnerships have been established which are steered and controlled by a regional or local government. The financing usually occurs through the issuance of bonds (or sometimes bank loans) which benefit from an RGLA guarantee against default. The regional and local governments monitor very strictly the quality of the projects, the financing process and conditions, and the amount of guarantees provided.</p> <p>Through the guarantees provided by regional and local governments private investors benefit from an inherently lower credit risk on the infrastructure projects they invest in. This is recognized by the governments when determining the financing conditions. The debt instruments of infrastructure projects are generally issued with low credit spreads due to the RGLA guarantee in case of a default of the project. Belgian insurance companies, as important institutional investors of these projects, have always accepted such financing conditions precisely because of the provided government guarantees and the residual low credit risk. Indeed, Belgian regional governments and local authorities dispose of sufficient revenue raising powers which makes these effectively reliable counterparties to back such projects. For instance, the Flemish government has always received a credit rating at a same level, and sometimes even at a higher level than the credit rating of the central government of Belgium.</p> <p>From a prudential perspective a different treatment of infrastructure projects guaranteed by a RGLA seems not justified. If EIOPA would consider that exposures to RGLA guarantees should not be treated in the same way as direct exposures to these governments, this would have a serious impact of the future financing of infrastructure projects and the realisation of President Juncker’s investment plan in Belgium.</p> <p>Infrastructure projects guaranteed by RGLA have a lower risk</p> <p>As discussed in chapter 2.3 of this consultation paper qualifying infrastructure projects exhibit lower loss-given default statistics compared to senior unsecured corporate bonds. Many other studies, such as Moody’s (Moody’s, March 9 2015, Infrastructure Default and Recovery Rates, 1983-2014) also provide evidence for lower rating volatility of infrastructure projects and lower marginal and cumulative default rates for infrastructure projects compared to non-financial corporates. These studies justify that qualifying infrastructure is charged with lower capital requirements compared to other debt instruments.</p> <p>Within the scope of infrastructure projects, investments that are guaranteed by a RGLA</p>	
--	--	--	--

		<p>should benefit from a special prudential treatment. Due to their significantly lower credit risk, infrastructure investments guaranteed by a RGLA should be considered as direct exposures to RGLA, which are equal to direct exposures to central governments. Such treatment would not conflict with the Solvency II directive and related Delegated Acts:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Guarantees provided by a central government are, in line with sound risk management considerations, treated as exposures to a central government and are assigned a risk factor of 0% for SCR spread risk, concentration risk and counterparty default risk in the Solvency II Delegated Acts.</li> <li><input type="checkbox"/> From a prudential perspective there should be no difference between a guarantee provided by a central government and a guarantee provided by a RGLA. In most Member States regional governments have comparable fiscal powers as central governments. In some jurisdictions such as Belgium, regional governments even have more fiscal powers than the central government.</li> <li><input type="checkbox"/> An explicit guarantee ensures repayment by the RGLA in case of a default of the project. Insurance companies are thus first exposed to the credit risk of the project and then to the creditworthiness of the RGLA.</li> <li><input type="checkbox"/> For the counterparty default risk module, article 199 point 11 of the Solvency II Delegated Acts ensures that RGLA guarantees are treated as central government exposures. Not recognising RGLA guarantees in a same way in the market risk module for infrastructure debt would lead to an inconsistent treatment in comparison to the counterparty default risk module.</li> </ul> <p>Legal analysis</p> <p>Article 109 of Omnibus II mentions that exposures to regional governments and local authorities can be considered as exposures to central governments because specific revenue-raising powers and institutional arrangements exist, the effect of which is to reduce the risk of default. The ITS lists regional governments and local authorities, exposures to whom are to be considered as exposures to the central government.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> For exposures to regional governments and local authorities listed in the ITS risk factors of 0% apply for SCR spread risk, concentration risk and counterparty default risk.</li> </ul> <p>Articles 180 point 2, 187 point 3 and 199 point 11 of the DA specify that exposures that are fully, unconditionally and irrevocably guaranteed by central governments and</p>	
--	--	---	--

		<p>meet the requirements set out in Article 215, should be considered as exposures to the central government and be assigned a risk factor of 0% for SCR spread risk, concentration risk and counterparty default risk.</p> <p><input type="checkbox"/> For exposures guaranteed by central governments risk factors of 0% apply for SCR spread risk, concentration risk and default risk, provided that article 215 of the DA on guarantees is complied with.</p> <p>Recital 42 of the DA mentions that direct exposures to regional governments and local authorities can be considered as exposures to a central government.</p> <p><input type="checkbox"/> However, this is nowhere mentioned in the Solvency II or Omnibus II directives. As a consequence, there seems to be no legal basis for this recital. Also, if a recital is not in line with an article of a Delegated Act, the article prevails.</p> <p>Since the directive requires that regional governments and local authorities listed in the ITS should be considered as central governments, articles 180 point 2, 187 point 3 and 199 points 8 and 11 should also be applied for these regional and local government exposures.</p> <p><input type="checkbox"/> However, this is nowhere clearly mentioned in the Delegated Acts. This could be made explicit for infrastructure investments guaranteed by the regional governments and local authorities.</p> <p><input type="checkbox"/> For infrastructure investments guaranteed by regional governments and local authorities listed in the ITS risk factors of 0% would apply for SCR spread risk, concentration risk and default risk.</p> <p>Conclusion</p> <p>The lower credit risk provided through RGLA guarantees should be correctly recognised within the prudential rules under Solvency II. In particular for infrastructure investments, guarantees provided by RGLA should be considered as direct exposures to RGLA. This means that both indirect and direct exposures to RGLA should be treated as direct exposures to the central government. For these exposures risk factors of 0% apply for SCR spread risk, concentration risk and counterparty default risk, provided that the qualifying criteria for infrastructure investments and the requirements on guarantees are complied with.</p> <p>Such a consistent treatment would reflect and foster good risk management practices.</p>	
--	--	--	--

			<p>In this way, the Solvency II rules would not hinder the important role insurance companies take up as institutional investors in regional and local infrastructure projects.</p> <p>Proposed amendment to the Solvency II Delegated Acts</p> <p>Within the asset class of qualifying infrastructure, it is proposed to add the following paragraph in the Solvency II Delegated Acts:</p> <p>Exposures which are fully, unconditionally and irrevocably guaranteed by counterparties listed in the implementing act adopted pursuant to point (a) of Article 109a(2) of Directive 2009/138/EC shall be treated as exposures to the central government.</p>	
348.	GDV	Section 8.	<p>As outlined in section 6.3 we believe it is advisable to reduce risk charges for infrastructure investments and to introduce a separate sub-risk module of unlisted infrastructure equity investments. The introduction of such a sub-module would enable EIOPA to stress the importance of Solvency II risk management requirements and alleviates a subsequent parameter adjustment, if necessary.</p> <p>Within the asset class of qualifying infrastructure, strong guarantees by RGLA should benefit from a specific prudential treatment. Due to their lower risk, qualifying infrastructure guaranteed by RGLA should be treated as central government exposures.</p> <p>We also recommend to extend the discussion to the practicability of fund investments. Especially the determination of capital requirements for funds which both invest in assets with higher risk return profiles and in assets with lower risk return profiles seems to be difficult and time-consuming in this approach.</p>	<p>See resolution of comment 304.</p> <p>Please see the section "Treatment of RGLA guarantees" in Chapter 2.</p> <p>EIOPA is not aware of any practical difficulties that would outweigh the importance of ensuring that the favourable treatment is restricted to qualifying infrastructure investments.</p>
349.	IE	Section 8.	<p><b>Within the asset class of qualifying infrastructure, guarantees by regional governments and local authorities (RGLA) should benefit from a specific prudential treatment. Due to their lower risk, qualifying infrastructure guaranteed by RGLA should be treated as central government exposures.</b></p> <ul style="list-style-type: none"> <li>■ Guarantees provided by the central government are, in line with sound risk management considerations, treated as exposures to the central government and are assigned a risk factor of 0% for SCR spread risk, concentration risk and counterparty default risk under the Solvency II Delegated Acts. From a risk point of view, there should be no difference between a guarantee provided by a central government or RGLA. In certain jurisdictions, such as Belgium, regional governments can even have more</li> </ul>	<p>Please see the section "Treatment of RGLA guarantees" in Chapter 2.</p>

			<p>fiscal powers compared to the central government.</p> <ul style="list-style-type: none"> <li>■ An explicit guarantee ensures repayment by the RGLA in an event of default. Insurance companies are therefore directly exposed to the creditworthiness of the RGLA. The lower credit risk of the RGLA should, therefore, be recognised in prudential regulation. It has to be noted that a loan from the RGLA would receive a risk charge of 0% in the spread risk module. The current rules of Solvency II lead therefore to an inconsistent treatment of loans and guarantees from RGLA which is not in line with sound risk management principles.</li> <li>■ For the counterparty default module, article 199 point 11 of the Delegated Acts already ensures that RGLA guarantees are treated as central government exposures. Not recognising RGLA guarantees within qualifying infrastructure would lead to an inconsistent treatment in comparison to the counterparty default module. Such an inconsistent treatment would not reflect good risk management practices.</li> </ul> <p>Within the asset class of qualifying infrastructure, it is therefore proposed to add the following paragraph:</p> <p><u>"Exposures which are fully, unconditionally and irrevocably guaranteed by counterparties listed in the implementing act adopted pursuant to point (a) of Article 109a (2) of Directive 2009/138/EC shall be treated as exposures to the central government."</u></p>	
350.	IRSG	Section 8.	<p>In the asset class for qualifying infrastructure, guarantees by regional governments and local authorities (RGLA) should be treated as central government exposures, given their lower risk.</p> <ul style="list-style-type: none"> <li>• Guarantees provided by the central government are assigned a risk factor of 0% for SCR spread risk, concentration risk and counterparty default risk under the Solvency II Delegated Acts. From a risk perspective, there should be no difference between a guarantee provided by a central government or RGLA. In some member states regional governments possess more fiscal powers compared to the central government.</li> <li>• In the event of a default a clear guarantee ensures repayment by the RGLA, thereby exposing Insurance companies directly to the creditworthiness of the RGLA. The lower credit risk of the RGLA should therefore be recognised in prudential regulation.</li> <li>• For the counterparty default module, article 199 point 11 of the Delegated Acts</li> </ul>	Please see the section "Treatment of RGLA guarantees" in Chapter 2.

			<p>ensures that RGLA guarantees are treated as central government exposures. Not recognising RGLA guarantees within qualifying infrastructure would lead to an inconsistent treatment in comparison to the counterparty default module.</p> <p>Therefore the IRSG propose to add the following paragraph within the asset class of qualifying infrastructure:</p> <p><i><u>"Exposures which are fully, unconditionally and irrevocably guaranteed by counterparties listed in the implementing act adopted pursuant to point (a) of Article 109a(2) of Directive 2009/138/EC shall be treated as exposures to the central government."</u></i></p>	
351.	The Investment Association	Section 8.	<p>Guarantees provided by RGLA should be treated, at a minimum, in the same way as a direct exposure to a RGLA. An explicit guarantee ensures repayment by the RGLA in the event of a default. The lower credit risk should therefore be recognised in prudential regulation.</p>	Please see the section "Treatment of RGLA guarantees" in Chapter 2.
352.	AMICE	Annex I	<p>We concur with EIOPA that the scope should be widened to include these entities, when their main activities are focused on operating infrastructure assets and when they generally meet the requirements defined in 3.3.2 in terms of stress analysis and cash flows predictability.</p> <p>Entities should be enabled to qualify regardless of their regulated or unregulated status as revenues can also be contracted of featuring a low and predictable demand risk.</p> <p>We generally believe that the qualifying criteria defined under the "predictability of cash flows" advice section is also relevant for such "corporate-type" exposures.</p>	<p>Not agreed. Annex I did not suggest to widen the scope. Please see the section "Infrastructure corporates" in Chapter 2.</p> <p>The criteria EIOPA proposes do not require that revenues have to be subject to a regulation.</p> <p>Noted.</p>
353.	AFG	Annex I	<p>We concur with EIOPA that the scope shall be widened to include these entities, when their main activities are focused on operating infrastructure assets and when they generally meet the requirements defined in 3.3.2 in terms of stress analysis and cash flows predictability. Entities should be enabled to qualify regardless of their regulated or unregulated status, as revenues can also be contracted of featuring a low and predictable demand risk. We generally believe that the qualifying criteria defined under the "predictability of cash flows" advice are also relevant for such "corporate -type" exposures.</p>	See resolution of comment 352.
354.			This comment was submitted as confidential by the stakeholder.	
355.	Moody's	Annex I	Table 11 is reproduced from Moody's Special Comment "Infrastructure Default and Recovery Rates, 1983-2012H1", March 2013.	Noted.

			<p>Our most recent study of the credit performance of Moody's-rated infrastructure debt is "Infrastructure Default and Recovery Rates, 1983-2014", March 2015.</p> <p>Although the findings of both studies are consistent, the study data sets are different and the results are necessarily different too.</p> <p>See comments at Section 3.1</p>	
--	--	--	---	--