<table>
<tr><td colspan="2">Comments Template on EIOPA-CP-15-003
Discussion Paper on
Infrastructure Investments by Insurers</td><td>Deadline
26.April.2015
23:59 CET</td></tr>
<tr><td>Company name:</td><td colspan="2">CRO Forum</td></tr>
<tr><td>Disclosure of comments:</td><td>EIOPA will make all comments available on its website, except where respondents specifically request that their comments remain confidential.

Please indicate if your comments on this CP should be treated as confidential, by deleting the word Public in the column to the right and by inserting the word Confidential.</td><td>Public</td></tr>
<tr><td></td><td colspan="2">Please follow the instructions for filling in the template:
⇨ Do not change the numbering in column “Reference”.
⇨ Please fill in your comment in the relevant row. If you have no comment on a paragraph, keep the row empty.
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The paragraph numbers below correspond to Consultation Paper No. EIOPA-CP-15-003.</td></tr>
<tr><td>Reference</td><td colspan="2">Comment</td></tr>
<tr><td>Question 1</td><td>In terms of the Solvency II framework, capital requirements are the main impediment to investment (see Q2).</td><td></td></tr>
<tr><td>Question 2</td><td>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. There is also evidence that the risks of default and/or recovery rates of infrastructure investments exhibit better performances than those of corporates. The calibration of capital charges for infrastructure</td><td></td></tr>
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	investments have to allow for (i) the recognition of the specificities of infrastructure and implicit lower investment risk, as well as for (ii) the recognition of the low correlation between infrastructure risk and other asset risks. Such an approach would require a definition of infrastructure, along with simple approaches to improve the SCR calibration methodology. The CRO Forum has with the insurance industry made some suggestions for recalibrating Solvency II capital charges on both infrastructure debt and equity, namely: • Identifying infrastructure as a separate asset through a clear definition; • For infrastructure debt, an adjustment to the spread risk charge with a ratio of loss-given-default of infrastructure and loss-given-default of general corporate bonds. • For infrastructure unlisted equity, a special sub risk-module for unlisted equity investments in infrastructure in the market risk module with a risk factor of 22% similar to the charge applied to investments of a strategic nature). An alternative possibility to a spread risk adjustment in the case of infrastructure debt would be a treatment within the Counterparty Default Risk module. Either way adjustments must not be conditional on insurers demonstrating that they hold the investments to maturity. Examples of studies and reports looking at infrastructure investments and their performance include: • Preqin. (2010). Is infrastructure living up to expectations? London: Preqin. • Moody's (2013). Default and recovery rates for project finance bank loans 1983-2011. Technical report, Moody's Investor Service, UK. • EDHEC Business School (2013).Measuring risk in unlisted infrastructure equity investments • Bitsch, F., Buchner, A., & Christoph, K. (2012). Risk, Return, and Cash Flow Characteristics of Private Equity Investments in Infrastructure. Alternative Investment Analyst Review, 9–31. • Swiss Re/ IIF (2013) 'Infrastructure Investing. It Matters'	
Question 3	Infrastructure investment in general meet many of the needs of institutional investors (long term nature, predictable and sustainable cash flows, attractive risk-adjusted yields and better credit quality versus other comparable loan or corporate bond classes). The CRO Forum sees a focus on these features as being more important than liquidity which is often dependent on investment purpose and national regulation. The biggest issues is the lack of economically viable projects to invest in. A more solid pipeline of	

	viable infrastructure projects and encouraging the use of standardised information market wide would have the following benefits: 1) **Promote market discipline** - With governments increasingly investing alongside the private sector, incentives for the public sector to suddenly change regulation and to interfere in market dynamics related to infrastructure would potentially be reduced.s 2) **Allow for diversification** - Making investments in infrastructure more accessible will reduce the time and costs associated with the investment process and enable investors to mitigate political and regulatory risks through diversification. These market adjustments cannot in the view of the CRO Forum be achieved through amendments to Solvency II.	
Question 4	Ther should not be a distinctions between external ratings and internal credit risk assessments as long as: • The investor/asset manager has the required expertise, technical means and organisational set-up to analyse the potential transaction • The setup of the internal credit risk assessment complies with European and national regulation	
Question 5		
Question 6		
Question 7	A definition of infrastructure is needed to enable the benefits and characteristics associated with infrastructure to be appropriately captured and to incentivise the development of opportunities for infrastructure investment. The CRO Forum has previously presented a definition together with the industry and this has been developed with a revised definition proposed as follows *xx. 'Infrastructure assets' means assets including networks, facilities, utilities and installations that support the current or future functioning of a community or society, whether at local, regional, national, EU/EEA or international level, and exhibit specific economic and financial features relating to credit risk, demand and competition as result of the function provided and restrictions on ownership*	

	and/or use of the assets. This definition has the advantage that it does not leave any relevant infrastructure out and fits best the purpose of supporting the goals of the Juncker Investment Plan. This would appear to be most closely aligned with option A in EIOPA's discussion paper. The CRO Forum would prefer a definition of infrastructure that is based on existing definitions and kept sufficiently broad, while at the same time capturing the features of infrastructure assets that make them suitable for investment by insurers. The CRO Forum would not support a definition that arbitrarily limits the definition to investment in certain facilities or functions, as would be the case is the case with option B.	
Question 8	See question 7.	
Question 9		
Question 10	The CRO Forum does not support an approach that excludes certain infrastructure sectors and would prefer a broader definition that captures the features of infrastructure assets that make them suitable for investment by insurers.	
Question 11		
Question 12	There is a significant variety of potential projects in the area of infrastructure, often involving highly divergent real, economic and legal environments. All infrastructure investments are characterized by lower default rates, higher recovery rates and largely predictable/ sustainable cash-flows. Therefore, identifying certain types of low-risk infrastructure investments does not make sense.	
Question 13		
Question 14		
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Question 19		
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Question 34	**Solvency II treatment of infrastructure debt** The Solvency II standard formula treats infrastructure debt in a similar way to corporate bonds. Ignoring diversification effects, the standard formula capital charges can be up to 32.5% for 25 year bond rated BBB. However, Moody's study shows that: • The average historical recovery rate is significantly higher on infrastructure debt (in the range of 65-80%) than on traditional corporate bonds; and • The recovery rate is independent of the average default rate, whereas for bonds the ultimate recovery rates fall as default rates rise. While there is a zero capital charge of infrastructure debt that is fully guaranteed by a Multilateral Development Bank, Solvency II does not accurately reflect the more favorable risk characteristics for other types of infrastructure debt which have lower default rates, higher recovery rates and regular	

	cash flows. This makes infrastructure investment uneconomical. In light of this, infrastructure bonds and loans of an equivalent residual duration should have a lower risk charge in the Solvency II standard formula than the charge applied to traditional corporate bonds. Furthermore, any credit enhancement from, for example, the EIB in its project bond initiative, should be adequately captured in the charge on infrastructure debt instruments. See Q45. **Solvency II treatment of infrastructure unlisted equity** A distinction between listed and unlisted equity infrastructure investment is crucial. While listed equity infrastructure's characteristics are similar to global equity, the returns of unlisted equity infrastructure exhibit much lower volatility and are uncorrelated with both listed equity infrastructure and global equity. Under Solvency II, however, unlisted equity investments in infrastructure are still assigned to the same high-risk factor as hedge funds or commodities of up to 59% for equity risk type 2. This treatment is not appropriate and unlisted equity infrastructure should be subject to a new sub-module "unlisted equity infrastructure risk" with a risk factor set at a prudent level of 22% and a zero correlation with other assets. See Q41.	
Question 35	The solvency capital requirement of an undertaking can either be calculated by the standard formula or – completely or partly – by an approved internal model. For those companies that use full or partial internal models the ability to accurately reflect the risk within capital requirements already exists and further regulation is not required. Therefore, EIOPA should focus on standard formula changes only and not introduce new internal model constraints at a time when companies are in the process of submitting internal model applications.	
Question 36		
Question 37		
Question 38	The current treatment as Type 1 equity is considered appropriate.	
Question 39		

Question 40

Question 41

A distinction between listed and unlisted equity infrastructure investment is crucial and could be achieved through the following amendments to the Solvency II market risk module:

Article 164

…

2. The capital requirement for market risk referred to in Article 105(5) of Directive 2009/138/EC shall include a component for infrastructure risk and be equal to the following:

where:

(a) the sum covers all possible combinations i,j of sub-modules of the market risk module;

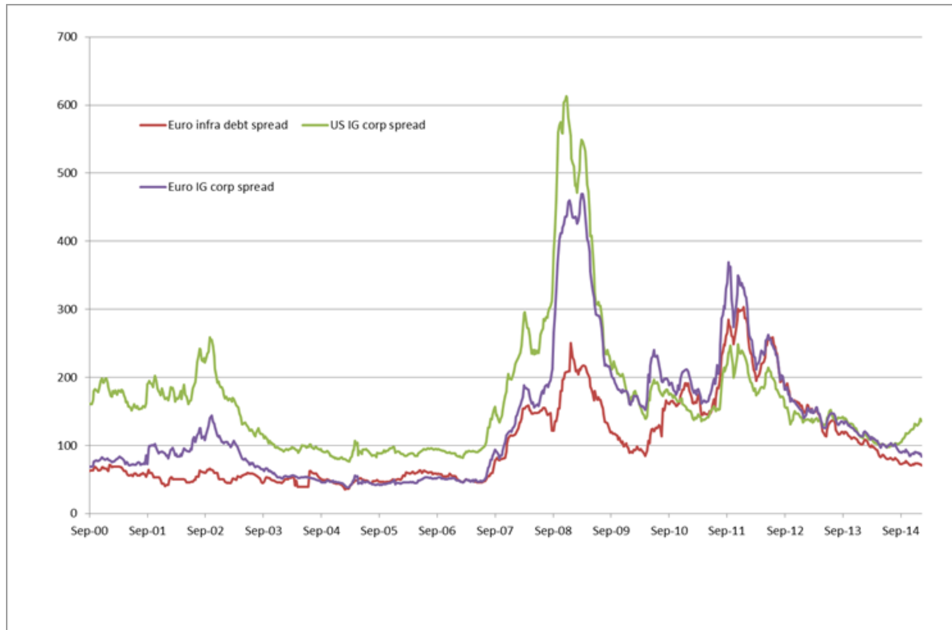
(b) Corr(i,j) denotes the correlation parameter for market risk for sub-modules i and j;

(c) SCRi and SCRj denote the capital requirements for sub-modules i and j respectively.

3. The correlation parameter Corr(i,j) referred to in paragraph 2 shall be equal to the item set out in row i and in column j of the following correlation matrix:

i \ j	Interest rate	Equity	Property	Spread	Concentration	Currency	Unlisted Infrastructure Equity
Interest rate	1	A	A	A	0	0.25	0
Equity	A	1	0.75	0.75	0	0.25	0
Property	A	0.75	1	0.5	0	0.25	0
Spread	A	0.75	0.5	1	0	0.25	0
Concentration	0	0	0	0	1	0	0
Currency	0.25	0.25	0.25	0.25	0	1	0
Unlisted Infrastructure	0	0	0	0	0	0	1

	Equity | | | | | | | | SUBSECTION X UNLISTED INFRASTRUCTURE EQUITY RISK SUB-MODULE New Article XXX The capital requirement for unlisted infrastructure equity risk shall be equal to the loss in the basic own funds that would result from an instantaneous decrease of 22% in the value of the assets. See Q34.	
Question 42	The following graph illustrates that during extreme periods of financial crisis such as those experienced in 2008, spreads on infrastructure debt were much narrower and have been more stable throughout the economic cycle.	

	 Source: Swiss Re, Bloomberg	
Question 43		
Question 44		
Question 45	This could be achieved through the following amendment to the Solvency II spread risk sub-module: <u>Article 176</u> (Add) 4 Notwithstanding paragraph 3, bonds or loans to infrastructure shall be assigned a reduced risk factor stressreduced,i as follows:	

	$$stress_{reduced,i} = stress_i \times \frac{LGD_{specific}}{LGD_{other}}$$ where: a) $stress_i$ denotes a function of the credit quality step i and/or of the modified duration of the bond or loan $_i$, as set out in paragraph 3 depending on whether a credit assessment by a denominated ECAI is available or not; b) $LGD_{specific}$, denotes the loss-given default to the infrastructure bonds or loans; c) LGD_{other}, denotes the loss-given default for bonds. For the purposes of this amendment proposal, the following could be used as an example of how to determine the LGD figures: 1. [20%;35%] for the infrastructure bonds or loans $LGD_{specific}$ 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; 2. 60% for the LGD_{other} as it is the expected recovery rate for a BBB bond.	
Question 46	The adjustment proposed in Q45 should apply to all investments in infrastructure debt. The CRO Forum would not support adjustments to the spread risk sub-module that require insurers to demonstrate that they will hold infrastructure investments to maturity. While insurers are longer-term oriented due to their long-term liabilities, they still require flexibility to adjust asset allocation.	
Question 47	In the case of SME loans, the Solvency II treatment should also reflect the higher recovery rates (as compared to investments in corporate bonds) and the importance of risk mitigation such security or collateral.	
Question 48		
Question 49		
Question 50		
Question 51		
Question 52	Insurers have to invest all their assets in accordance with a general prudent person principle	

	(investments in assets and instruments whose risks can properly be identified, measured, monitored, managed taking into account the ALM, solvency needs and best interest of all policy holders and beneficiaries). The CRO Forum does not see a need for new requirements beyond those already existing.	
Question 53		
Question 54	EIOPA should focus on standard formula changes only and not introduce new internal model constraints at a time when companies are in the process of submitting internal model applications.	
Question 55	Extensive work to develop standardized documentation based on industry best practices has already been undertaken. The use of such best practices should be encouraged, but not mandated in legislation.	
Question 56	While the CRO Forum actively supports standardised information market wide, it would discourage EIOPA from making this a criteria for a specific investment category.	
Question 57	See Q55.	
Question 58	More transparency is important in terms of facilitating project evaluation. However, it would be counterproductive to make this mandatory at this stage.	
Question 59	See Q55.	
Question 60	Improved transparency can help to make infrastructure investments more attractive to institutional investors by 1) **Promoting market discipline** 2) **Allowing for diversification** However, we believe that regulatory definitions should not include requirements for standardization and instead this should emerge through industry best practice. See Q3.	