Insurance Europe response to EIOPA's consultation on the infrastructure advice

Our reference:	ECO-LTI-15-078	Date:	7 August 2015
Referring to:	EIOPA's Consultation on the Call for Advice from the European Commission on the identification and calibration of infrastructure investment risk categories		
Related documents:	EIOPA's consultation paper		
Contact person:	Cristina Mihai, Head of International Affairs and Reinsurance	E-mail:	mihai@insuranceeurope.eu
Pages:	15	Transparency Register ID no.:	33213703459-54

General comments

Insurance Europe welcomed the call for advice from the European Commission and recognises that the European Insurance and Occupational Pensions Authority (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. Therefore, the current draft is not sufficient to remove the unnecessary barriers to investment.

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 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.

The following adjustments should be made to the proposed **definition**:

- 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 efficiently ring-fenced and that infrastructure investors benefit from a privileged access to such cash-flows and/or assets.

A number of adjustments should be made to the proposed **criteria,** including:

- There needs to be **more flexibility in the area of criteria,** since the current list of criteria has the potential to disqualify many projects and, therefore, not remove impediments for infrastructure investments.

Insurance Europe aisbl
Rue Montoyer 51, B-1000 Brussels
Tel: +32 2 894 30 00 • Fax: +32 2 894 30 01
E-mail: info@insuranceeurope.eu
www.insuranceeurope.eu

- The advice should consider **internal ratings** 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 II's prudent person principle.

Regarding the **recalibration proposals**, Insurance Europe notes the following:

- 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.
- A **proposal for a calibration in the counterparty default risk module** should be included in EIOPA's advice. An example for a calibration is included in Insurance Europe's comments to section 5.1.

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, and correlation with other sub-modules.

Comments on Section 1.5.

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.

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 $stress_{reduced,i}$ 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.

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.

- Insurance Europe understands that EIOPA is still considering whether the two methods under the spread risk module should be combined (para 1.21).
- 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.

Insurance Europe 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. Insurance Europe supports EIOPA's proposal of **treating qualifying unrated infrastructure debt investments as equivalent to rated infrastructure debt with credit quality step 3.** Moreover, both internal ratings and ECAI ratings should be allowed for.

Insurance Europe also supports EIOPA's aim to change the calibration for infrastructure equity investments. **For listed equity Insurance Europe 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. 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.

Insurance Europe 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 administrative burdens and costs.** 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.

Comments on Section 3.1.

The inclusion of corporate entities in the identification of infrastructure should be carefully considered (para 1.52).

- 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.

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.

Comments on Section 3.2.3.

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. 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.

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.

Comments on Section 3.3.

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).

Comments on Section 3.3.1.

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.

- The condition referring to competition should be deleted.
    - Limited competition will be very difficult to define and verify.
    - Competition characteristics are embedded in the criteria for predictability of cash flows.
- The definition should also include a reference to "facilities".
    - 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.
- In the paragraph referring to substantial control:
    - It is unclear what is envisaged by a "substantial" degree of control.
- 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.
- For the sake of clarity, Insurance Europe recommends introducing the definition of an "infrastructure project entity" as well as "infrastructure operating entity":
    - *"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.*
    - *"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.*

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.

Finally, while Insurance Europe 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.

Comments on 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.

Comments on 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.

Comments on Section 3.3.2.2.

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.

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.

- 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.
- Regarding infrastructure projects, it is very well possible that they are not in line with initial projections. However, this often does not mean that the projects perform below expectations but that projects perform better than 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 <u>or internal rating</u> with a CQS of at least ~~3~~ <u>4</u>"*

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 cash flows can never be forecasted exactly, it should read as follows: *"…has been <u>reasonably</u> in line with projections."*

Comments on Section 3.3.2.3.

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.

- 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.
- 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.
- This requirement should, therefore, read as follows (additions underlined): *"…d) the covenant package to restrict activities of the project company is strong including ~~the provision that the project shall not issue~~ <u>limitations on leverage and issuance of</u> new debt"*

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. Insurance Europe would, therefore, suggest the following amendment (additions underlined):

> *"All reserve funds have ~~a longer than average~~ coverage period <u>in line with market practice</u> and are fully funded in cash or letter of credit from a ~~bank~~ counterparty of high credit standing".*

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.

Comments on 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.

Comments on 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 to international project finance standards.

- Point 2.a or the advice on political risk should, therefore, read as follows (additions underlined): *"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 world bank or the project is insured via credit insurance).</u>"*

Requirements 2.b and 2.c should be removed:

- 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.
- 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.
  - 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.
  - Projects should always be assessed on a case-by-case basis.

Comments on Section 3.3.4.2.

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.

- 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.

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:

- 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.
- 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).

Regarding the strength of the sponsor (point 4 in advice box in paragraph 1.98.): Insurance Europe 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))."*

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".*

- 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: "*~~very~~ strong track record and relevant ~~country and sector~~ experience".*

Similarly, Insurance Europe believes 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.
- 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 be enlarged for example by changing to "creditor".

Regarding 4.c, a requirement for an ownership clause is too restrictive and not in line with common market practices.
The sponsor should have the right to sell its stake to another sponsor, provided this new sponsor has a strong track record and experience.

Comments on Section 3.3.4.3.

Insurance Europe does not believe that qualifying infrastructure should be limited to those with amortising debt (as considered in para 1.104).

- This requirement would exclude from the perimeter of infrastructure investments a significant part of eligible investments, in particular acquisition debt vehicles.
- 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.

Insurance Europe proposes to replace the requirement 6 in paragraph 1.107 with the following:

- "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."
- The exclusion of subordinated debt is not necessary as it can achieve a high level of financial soundness.
- 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.

Comments on Section 3.3.4.4.

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.

Point 2 (a) of the advice on construction risk (paragraph 1.111) 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.
- 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 <u>or an incentive and risk-sharing mechanism which is based on a detailed bottom-up cost analysis and has adequate risk contingencies</u>."

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

- It should read as "liquidated damages <u>in line with market practices</u>" (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 met insurance and reinsurance undertakings shall use independent ~~thirdparty~~ technical and legal expertise."
- 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.

Comments on Section 3.3.4.5.

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.

- 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.
- 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.
- 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.

A condition on *"very strong track record"* of the operator, as suggested in 2.c of the advice on operating risk is too restrictive.

Comments on Section 3.3.4.6.

The restriction allowing only "fully proven technology and design" would be problematic to verify, as well as too restrictive and should be removed.
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.

Comments on Section 4.2.1.

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.

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. 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).

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.

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.

- 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 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.

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:

- 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~~ avoid forced sales of 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.63

Comments on 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.).

Comments on Section 4.2.5.

See Insurance Europe's comments to section 1.5.

Comments on Section 4.2.5.1.

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.

- 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.
- 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.

Comments on 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.

Comments on Section 5.1.

Insurance Europe also expected to see EIOPA putting forward a concrete proposal for a review of infrastructure debt under the counterparty default risk module.

- Such an approach was explicitly requested in the call for advice from the European Commission.
- 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: *"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."*

As already noted in the response to the first EIOPA consultation, **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**.

- 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.
- 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.

Insurance Europe would like to put forward the following proposal for a calibration of infrastructure debt under the counterparty default risk module:
- Three duration buckets are defined: 0-5y, 5-10y and more than 10y.
- 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:
    - $SCR_{infrastructure} = PD \cdot (1-RR) \cdot Exposure$
- 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 layers of conservativeness and, despite this, the final capital charges appear to be significantly lower than the ones proposed by the EIOPA work. **So if infrastructure debt remains within the spread risk module, spread calibrations would have to be reduced by a significantly larger factor.**

Comments on 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 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 *listed* equities.

However, Insurance Europe believes that **a more tailored treatment for *unlisted* equity is crucial** (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.

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.

Comments on Section 6.3.

Insurance Europe would like to highlight the following key positions on the recalibration of unlisted infrastructure equity:

- 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:
    - 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.
    - A study by Blanc-Brude/Whittaker (2015)[1], 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.
    - A study by Bitsch, Buchner and Kaserer (2010)[2] shows that for unlisted infrastructure equity there is a lower risk of default than for other equities as well as a higher return.
    - Unlisted infrastructure equity exhibits some usual characteristics which are rather bond-like characteristics and make it less risky than other equities.
    - Unlisted infrastructure equity is most often long term, not used for short-term trading.
    - 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.

- 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:
    - A JP Morgan Asset Management study (2013)[3] 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.

---

[1] *See Blanc-Brude/Whittaker (2015): 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 (link).*

[2] *See Bitsch, Buchner and Kaserer (2010): Risk, return and cash flow characteristics of infrastructure fund investments (link).*

- 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.

Comments on 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.

Comments on 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 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.

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.

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).

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).

Comments on Section 8

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.

- 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 fiscal powers compared to the central government.
- 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

[3] *See J.P. Morgan Asset Management, Global Real Assets (2013): A case for Core Infrastructure.*

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.

- 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.

Within the asset class of qualifying infrastructure, it is therefore proposed to add the following paragraph:

"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."

About Insurance Europe

Insurance Europe is the European insurance and reinsurance federation. Through its 34 member bodies — the national insurance associations — Insurance Europe represents all types of insurance and reinsurance undertakings, eg pan-European companies, monoliners, mutuals and SMEs. Insurance Europe, which is based in Brussels, represents undertakings that account for around 95% of total European premium income. Insurance makes a major contribution to Europe's economic growth and development. European insurers generate premium income of more than €1 110bn, employ almost one million people and invest over €8 500bn in the economy.