

**Final report on public consultation No.  
14/058 on the implementing  
technical standards on  
the equity index for the symmetric  
adjustment of the equity capital charge**

## Table Contents

<b>1. Executive summary .....</b>	<b>3</b>
<b>2. Feedback statement .....</b>	<b>6</b>
<b>3. Annexes .....</b>	<b>9</b>
<b>Annex I: Implementing Technical Standard.....</b>	<b>10</b>
<b>Annex: Equity indices and weights .....</b>	<b>13</b>
<b>Annex II: Impact Assessment .....</b>	<b>14</b>
<b>Annex III: Resolution of comments.....</b>	<b>25</b>

# 1. Executive summary

## Introduction

In accordance with Article 15 of Regulation (EU) No 1094/2010 (EIOPA Regulation), EIOPA may develop implementing technical standards (ITS) by means of implementing acts under Article 291 TFEU, in the areas specifically set out in the legislative acts referred to in Article 1(2) of the EIOPA Regulation.

Before submitting the draft ITS to the European Commission, EIOPA shall conduct open public consultations and analyse the potential costs and benefits. In addition, EIOPA shall request the opinion of the Insurance and Reinsurance Stakeholder Group (IRSG) referred to in Article 37 of the EIOPA Regulation.

In accordance with paragraph 2(b) of Article 109a of Directive 2009/138/EC of the European Parliament and of the Council on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II Directive), EIOPA shall develop implementing technical standards on the equity index for the symmetric adjustment of the equity capital charge.

Because of the above, on 2 December 2014, EIOPA launched a public consultation on the draft implementing technical standards on the equity index for the symmetric adjustment of the equity capital charge.

The Consultation Paper is also published on EIOPA's website<sup>1</sup>.

The draft Implementing Technical Standard refers in the Annex to several equity indices used by EIOPA under permission. All the indices are protected registered trademarks and/or copyrights. Specifically, EIOPA was requested to include the following disclaimers:

- DAX® is a registered trade mark of Deutsche Börse AG.
- FTSE International Limited ("FTSE") © FTSE 2014. "FTSE®" is a trademark of the London Stock Exchange Group companies and is used by FTSE International Limited under licence. All rights in the FTSE indices and/or FTSE ratings vest in FTSE and/or its licensors. Neither FTSE nor its licensors accept any liability for any errors or omissions in the FTSE indices and/or FTSE ratings or underlying data. No further distribution of FTSE Data is permitted without FTSE's express written consent.
- SIX Swiss Exchange AG ("SIX Swiss Exchange") is the source of SMI® and the data comprised therein. SIX Swiss Exchange has not been involved in any way in the creation of any reported information and does not give any warranty and excludes any liability whatsoever (whether in negligence or otherwise) – including without limitation for the accuracy adequateness, correctness, completeness, timeliness, and fitness for any purpose – with respect to any reported information or in relation to any errors, omissions or interruptions in the SMI® or its data. Any dissemination or further distribution of any such information pertaining to SIX Swiss Exchange is prohibited.

---

<sup>1</sup> [Consultation Paper](#)

Sociedad de Bolsas, owner of the IBEX 35® Index and registered holder of the corresponding trademarks associated with it, does not sponsor, promote, or in any way evaluate the advisability of investing in the “EIOPA Equity Index” and the authorisation granted to EIOPA for the use of IBEX 35® trademark does not imply any approval in relation with the information offered by EIOPA or with the usefulness or interest in the “EIOPA Equity Index.

## **Content**

This Final Report includes the feedback statement to the consultation paper (EIOPA-CP-14/058) and the full package of the public consultation, including:

Annex I: Implementing Technical Standard

Annex II: Impact Assessment

Annex III: Resolution of comments

## **Next steps**

According to Article 15 of EIOPA Regulation, the draft ITS in Annex I will be submitted to the European Commission for endorsement by 30 June 2015..

According to Article 15 of the EIOPA Regulation, the European Commission shall forward it to the European Parliament and the Council.

Within 3 months of receipt of the draft ITS, the European Commission shall decide whether to endorse it in part or with amendments, where the Union's interests so require. The European Commission may extend that period by 1 month.

If the European Commission intends not to endorse a draft ITS or intends to endorse it in part or with amendments, it shall send it back to EIOPA explaining why it does not intend to endorse it, or, explaining the reasons for its amendments, as the case may be.

Within a period of 6 weeks, EIOPA may amend the ITS on the basis of the European Commission's proposed amendments and resubmit it in the form of a formal opinion to the European Commission. In this case EIOPA must send a copy of its formal opinion to the European Parliament and to the Council.

If on the expiry of the 6 weeks period, EIOPA has not submitted an amended draft ITS, or if it has submitted a draft ITS that is not amended in a way consistent with the European Commission's proposed amendments, the European Commission may adopt the implementing technical standard with the amendments it considers relevant or it may reject it.

Where the European Commission intends not to endorse a draft ITS or intends to endorse it in part or with amendments, it shall follow the process as set out in Article 15 of EIOPA Regulation.

## **2. Feedback statement**

### **Introduction**

EIOPA would like to thank the IRSG)and all the participants to the public consultation for their comments on the draft ITS. The responses received have provided important guidance to EIOPA in preparing a final version of the ITS 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 below. A full list of all the comments provided and EIOPA's responses to them can be found in Annex III.

### **General comments**

Stakeholders welcome the fact that the ITS in conjunction with the technical information on the calculation of the symmetric adjustment of the equity capital charge published by EIOPA allows for a more reliable replication of the calculations by undertakings. Some remaining concerns are raised by stakeholders in relation to the updating process of the equity indices' weights, the timing of publication by EIOPA and the representativeness of equity indices used. Some of these concerns are already addressed by the Solvency II Directive text or the Commission Delegated Regulation (EU) No 2015/35 and other concerns can not be addressed without the scope of the ITS itself.

Particular comments were made on the following issues:

#### **2.1. Process for updating weights and equity indices**

- a. Some stakeholders ask for a pre-defined approach for reviewing and updating the index weights and index composition, especially in view of the SII implementation date of 1 January 2016. In case of an anticipated change of weights or indices, they suggest this should be announced well in advance by EIOPA.
- b. For legal reasons, it is not possible to include such a review clause in the ITS. In case there are clear indications from ongoing monitoring conducted by EIOPA that the capital requirements design and calibration are no longer adequate, EIOPA will inform the European Commission. EIOPA is of the view that the allocation of weights to different market indices should be relatively stable over time. At the same time much more granular information about the equity holdings of insurers will be available in the near future. EIOPA may therefore consider proposing the inclusion of the symmetric equity adjustment in the review of the SCR standard formula in 2018, as envisaged in Recital 150 of the Commission Delegated Regulation to the European Commission.

In case EIOPA proposed a change in the ITS, a public consultation would be carried out. As a result stakeholders would be informed sufficiently in advance about a possible change in indices or weights.

## **2.2. Timeline for publication of the symmetric adjustment**

- a. Stakeholders are in favour of having a pre-defined timing for the publication of the symmetric adjustment and ideally very early in the process to facilitate the Solvency II SCR calculations at the end of each quarter.
- b. EIOPA is already publishing the symmetric adjustment values and calculations on a monthly basis, as part of the Solvency II technical information in view of preparing the implementation of Solvency II. EIOPA will continue to publish this information shortly after the end of each month.

Furthermore, the ITS sets out a simple methodology of calculation based on information in the public domain. In this manner, the value of the EIOPA equity index and the value of the symmetric adjustment are fully replicable.

## **2.3. Representativeness of a weighted average of equity indices**

- a. The equity index proposed in the ITS is intended to measure the market price of a diversified portfolio of equities which is representative of the nature of equities typically held by insurance and reinsurance undertakings, based on a weighted average across EU countries of equity indices. Stakeholders are concerned that such weighted average may not be representative for the allocation of equities by undertakings in the different EU countries and therefore propose the use of a separate equity index for each EU country.
- b. According to Article 106 (2) of Directive 2009/138, the symmetric adjustment shall be based on an appropriate, single and unique equity index. No country specific adjustments are foreseen.

## **2.4. Representativeness of the EIOPA equity index for Type 2 equity exposures**

- a. Stakeholders are concerned that the list of indices used to construct the equity index for calculating the symmetric adjustment is not representative for Type 2 equity exposures, since the same level of adjustment is applied to both Type 1 and Type 2 equity values.
- b. According to the data EIOPA collected, emerging market equities do not represent a meaningful proportion of the equity portfolios held by European insurers. There also does not seem to be evidence that there is a meaningful allocation by European insurers towards private equities. Therefore, no index for Type 2 equities was included in the derivation of the weighted EIOPA equity index.

## 2.5. Definition of “closing level” of the equity index

- a. Stakeholders are concerned that the “closing level” definition for determining the exact level of the equity index is not unambiguously clear as it could refer to the level on a working day at a particular cut-off time or to the latest quoted level of the index, regardless of the time zone in which the index is traded. This may be of particular concern when markets are illiquid and closing levels of the index might not be reflective of an active, deep and liquid market.
- b. EIOPA replaced “closing level” by “last level”, meaning the last value of the equity index for the day of reference published by the provider of the equity index.

## 2.6. Use of price or net return indices

- a. Stakeholders asked whether EIOPA uses the net-return indices (i.e. dividends after taxes are reinvested) or price indices.
- b. EIOPA uses price indices as Article 172 Par (1) (a) of the Commission Delegated Regulation requires the equity index to measure the **market price** of a diversified portfolio of equities. It also contributes to a more homogeneous treatment of different equity markets.

## General nature of participants to the public consultation

EIOPA received comments from the IRSG and eight responses from other stakeholders to the public consultation. All non-confidential comments received have been published on EIOPA’s website.

Respondents can be classified into four main categories: European trade, insurance, or actuarial associations; national insurance or actuarial associations; (re)insurance groups or undertakings; and other parties such as consultants and lawyers.

## IRSG opinion

The IRSG comments on the draft ITS at hand can be consulted on the EIOPA website<sup>2</sup>.

## Comments on the Impact Assessment

Two comments were received from the stakeholders on the Impact Assessment. Stakeholders objected that the policy options for one of the considered policy issues (the type of indices to use: gross total return indices or non-total return indices) needed further clarification. The drafting has been revised to address the stakeholders’ concern. Furthermore, stakeholders partially agree and partially disagree with the preferred policy options identified by EIOPA. The Impact Assessment provides a clear justification of the policy options adopted. Revisions have been made to the Impact Assessment to align it with the drafting changes in the ITS.

---

<sup>2</sup> [IRSG opinion](#)



### **3. Annexes**

# Annex I: Implementing Technical Standard



Brussels, **XXX**  
[...](2015) **XXX** draft

**COMMISSION IMPLEMENTING REGULATION (EU) No .../..**

**of **XXX****

**on [...]**

**COMMISSION IMPLEMENTING REGULATION (EU) .../... laying down the  
implementing technical standards with regard to the equity index for the symmetric  
adjustment of the standard equity capital charge in accordance with Directive 2009/138/EC of  
the European Parliament and of the Council**

of [ ]

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

to 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 (Solvency II)<sup>3</sup>, and in particular Article 109a(2)(b) thereof,

Whereas:

- (1) In order to ensure that the equity index measures the market price of a diversified portfolio of equities which is representative of the nature of equities typically held by insurance and reinsurance undertakings, as required by Article 172 of Commission Delegated Regulation (EU) 2015/35<sup>4</sup>, it should be composed of several existing equity indices for relevant markets. In order to make the levels of those equity indices comparable, the level of each index at the beginning of the appropriate period referred to in Article 106(2) of Directive 2009/138/EC is set at 100 percentage points.
- (2) The value of an equity index fluctuates during the day. It is therefore necessary to clarify which value shall be used for a given day. As stock exchanges are not all days open for trading it is also necessary to specify for which days the levels of the equity index have to be calculated. For this reason the terms ‘last level’ and ‘working day’ are defined.
- (3) The provisions set in this Regulation take into account all the requirements that the equity index should comply with in accordance with Article 172 of Commission Delegated Regulation (EU) 2015/35. This Regulation is based on the draft implementing technical standards submitted by the European Insurance and Occupational Pensions Authority to the Commission.
- (4) The European Insurance and Occupational Pensions Authority has conducted open public consultations on the draft implementing technical standards on which this Regulation is based, analysed the potential related costs and benefits and requested the opinion of the Insurance and Reinsurance Stakeholder Group established by Article 37 of Regulation (EU) No 1094/2010 of the European Parliament and of the Council<sup>5</sup>.

---

<sup>3</sup> OJ L 335, 17.12.2009, p.1.

<sup>4</sup> Commission Delegated Regulation (EU) 2015/35 of 10 October 2014 supplementing Directive 2009/138/EC of the European Parliament and of the Council on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II) (OJ L 12, 17.01.2015, p. 1).

<sup>5</sup> Regulation (EU) No 1094/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Insurance and Occupational Pensions Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/79/EC (OJ L 331, 15.12.2010, p. 48).

HAS ADOPTED THIS REGULATION:

*Article 1*

*Definitions*

For the purpose of this Regulation the following definitions shall apply:

- 'last level' means the last value of the equity index for the day of reference published by the provider of the equity index,
- 'working day' means every day other than Saturdays and Sundays.

*Article 2*

*Calculation of the equity index*

1. The level of the equity index referred to in Article 106(2) of Directive 2009/138/EC shall be determined for each working day. The level of the equity index for a particular working day shall be the sum of the contributions of all equity indices included in the Annex for the working day.
2. For each of the equity indices set out in the Annex its contribution for a working day shall be the product of its normalised level for the working day and the respective weight for the equity index as set out in the Annex.
3. For each of the equity indices set out in the Annex, its normalised level for a specific working day shall be its last level on that working day divided by its last level on the first day of the 36 month period ending on the working day for which the current level of the equity index as defined in Article 172(1) the Delegated Regulation (EU) 2015/35 is being calculated. Where, for a specific day, the last level of an equity index is not available, the most recent last level before that day shall be used.

*Article 3*

*Final provisions*

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels,

*[For the Commission  
The President]*

*[For the Commission  
On behalf of the President]*

*[Position]*

### Annex: Equity indices and weights

<b>Equity indices (Price indices)</b>	<b>Weights</b>
AEX	0.14
CAC 40	0.14
DAX	0.14
FTSE All-Share Index	0.14
FTSE MIB Index	0.08
IBEX 35	0.08
Nikkei 225	0.02
OMX Stockholm 30 Index	0.08
S&P 500	0.08
SMI	0.02
WIG30	0.08

## **Annex II: Impact Assessment**

### **Section 1: Procedural issues and consultation of interested parties**

According to Article 15(1) of Regulation (EU) No 1094/2010 (EIOPA Regulation), EIOPA shall analyse the potential related costs and benefits when drafting implementing technical standards. The analysis of costs and benefits is undertaken according to an Impact Assessment methodology.

This ITS defines an equity index for the symmetric adjustment referred in Article 106 of Directive 2009/138/EC (also referred as "equity dampener adjustment").

For the purpose of calculating the equity dampener adjustment, EIOPA selected in 2012 a single equity index which was not freely publicly available and proprietary to a certain financial institution.

An informal pre-consultation was carried out with the main comment that a single European index does not appear to be, in all cases, appropriate to represent the average equity holding of European insurers and reinsurers. Stakeholders proposed the use of one index per currency, but recognised the increased volatility of such an alternative.

The European Commission legal services indicated that referencing a single and non-public proprietary index would not be admissible. The proposed approach takes this steer into account.

The draft ITS and its Impact Assessment were subject to public consultation between 3 December 2014 and 2 March 2015. The comments received from the stakeholders were duly taken into account and served as a valuable input in order to improve the draft technical standards.

The comments received and EIOPA's responses to them are summarised in the section Feedback Statement of the Final Report.

### **Section 2: Problem definition**

Recital 61 of Directive 2009/138/EC states that "in order to mitigate undue potential pro-cyclical effects of the financial system and avoid a situation in which insurance and reinsurance undertakings are unduly forced to raise additional capital or sell their investments as a result of unsustainable adverse movements in financial markets, the market risk module of the standard formula for the Solvency Capital Requirement should include a symmetric adjustment mechanism with respect to changes in the level of equity prices".

Directive 2009/138/EC sets out in Article 106 that the equity risk sub-module calculated in accordance with the standard formula shall include a symmetric adjustment to the equity capital charge applied to cover the risk arising from changes in the level of equity prices. This symmetric adjustment shall be based on a function of the current level of an appropriate equity index and a weighted average level of that index. The weighted average shall be calculated over an appropriate period of time, which shall be the same for all insurance and reinsurance undertakings.

The Commission Delegated Regulation set out requirements which the equity index has to meet.

## **Baseline**

When analysing the impact of proposed policies, the Impact Assessment methodology foresees that a baseline scenario is applied as the basis for comparing policy options. This helps to identify the incremental impact of each policy option considered. The aim of the baseline scenario is to explain how the current situation would evolve without additional regulatory intervention.

The baseline scenario is based on the current situation of EU insurance and reinsurance markets, taking account of the progress towards the implementation of the Solvency II framework achieved at this stage by insurance and reinsurance undertakings and supervisory authorities.

In particular the baseline includes:

- The relevant content of Directive 2009/138/EC as amended by Directive 2014/51/EU;
- Commission Delegated Regulation 2015/35.

According to Article 109a (2) (b) of Directive 2009/138/EC, this ITS has to define the equity index to be used for the adjustment mechanism.

## **Section 3: Objective pursued**

The objective of this ITS is to define an equity index for the symmetric adjustment that meets the aims stated in Recital 61 and Article 308 b, par 13 of Directive 2009/138/EC and fulfils the requirements set out in Article 172 of the Commission Delegated Regulation:

- a) the equity index measures the market price of a diversified portfolio of equities which is representative of the nature of equities typically held by insurance and reinsurance undertakings;
- b) the level of the equity index is publicly available;
- c) the frequency of published levels of the equity index is sufficient to enable the current level of the index and its average value over the last 36 months to be determined.

EIOPA is responsible for calculating the equity index as well as the symmetric adjustment referred to in Article 106 and for publishing the results at least quarterly according to Article 109a(3) of Directive 2009/138/EC. A more frequent publication may be desirable to help insurance and reinsurance undertakings. Therefore the calculation of the index should be practicable for EIOPA in terms on efficiency, cost and timely publication.

Furthermore, the calculation of the equity index should be simple and undertakings should be able to carry out at least short-term projections of its value. To allow this, the equity index has to be defined in an unambiguous and comprehensive manner and

the values necessary to replicate the calculation of the equity index should ideally be publicly available for the undertakings free of any cost.

Finally, it is necessary to consider the impact of the EIOPA equity index, both as a reference for hedging equity risk and also its perception from a macroeconomic point of view (the index may likely be seen as representative for a desirable degree of geographical diversification for equity investments). Therefore, another objective is to avoid an index fostering the concentration of investments in certain markets or sectors.

The specific objectives of this ITS described above are consistent with the following objectives for Directive 2009/138/EC:

- improved risk management of EU undertakings;
- better allocation of capital resources; and
- harmonised risk sensitive and prospective solvency standards.

## **Section 4: Policy options**

### **Policy issue 1: Inputs for the calculation of the equity index**

Three alternative options were considered, of which one was discarded at the very initial stage:

#### **Option 1.1 (Indices of EU equity markets):**

To calculate the equity index based on well-known equity indices of the relevant EU equity markets. Under this option, the relevant ITS would mention the indices to use in the formula of the equity index. In this case, EIOPA does not need to publish the values of the components, but just the final value of the symmetric adjustment index (to be published on EIOPA's website).

#### **Option 1.2 (List of individual companies):**

To calculate the equity index based on a set of individual listed equities.

#### **Option 1.3 (Direct external procurement):**

To select a non-public equity index proprietary of a certain financial institution for calculating the equity index. Although this option was initially considered due to its simplicity, it was discarded because a reference to a proprietary index, not published free of charge, is problematic.

### **Policy issue 2: Exhaustive set or subset of relevant markets**

#### **Option 2.1 (Subset of national indices):**

To use a subset of the relevant national indices.

#### **Option 2.2 (Exhaustive set of national indices for all relevant markets):**

To use one index for each relevant equity market.



### **Policy issue 3: Type of indices to use: gross total return indices or non-total return indices**

#### **Option 3.1 (Total return indices):**

To use gross total return indices (i.e. indices that assume that all cash distributions and dividends are reinvested) to calculate the equity index.

#### **Option 3.2 (Non-total return indices):**

To use non-total return indices (i.e. price indices) to calculate the equity index.

### **Policy issue 4: Calculation of the weights**

#### **Option 4.1 (Absolute economic amount approach):**

The weights correspond to the relative shares of each national stock market (or national stock markets of a group of countries) in the aggregated equity portfolio of EU insurance and reinsurance undertakings, based on a survey EIOPA performed in the first quarter of 2013.

Each national stock market selected has been assigned to a representative national equity index.

The weight  $W_j$  of country (or group of countries)  $j$  is calculated as:

$$W_j = \frac{\sum_{i=1}^n AE_i^j}{\sum_{j=1}^m \sum_{i=1}^n AE_i^j}$$

} Total amount of equities from country  $j$  in the aggregated EU equity portfolio of insurance and reinsurance undertakings  
} Total amount of equities in the aggregated equity portfolio of EU insurance and reinsurance undertakings

with "equities from country  $j$ " being the equities whose main stock exchange is located in country  $j$ ,  $m$  the number of Member States taken into account in the equity index (i.e. the number of indices used in the calculation),  $n$  the number of Member States for which equity holdings were available and  $AE_i^j$  the amount of equities from country  $j$  held in total by (re)insurance undertakings in country  $i$ .

#### **Option 4.2 (Average of national percentages approach):**

The weight of one national stock market corresponds to the average of the relative shares of this stock market in the equity portfolios of the insurance and reinsurance undertakings of each Member State, based on a survey EIOPA performed in the first quarter of 2013.

Each national stock market selected has been assigned to a representative national equity index.

The weight  $W_j$  of country  $j$  is calculated as:

$$W_j = \frac{1}{n} \sum_{i=a}^n \frac{AE_i^j}{\underbrace{\sum_{k=0}^z AE_i^k}}$$

Share of equities from country  $j$  in the aggregated equity portfolio of country  $i$ 's insurance and reinsurance undertakings

with  $n$  the number of Member States taken into account in the equity index (i.e. the number of indices used in the calculation),  $z$  the number of countries that have stock exchanges in which some equities of the EU aggregated equity portfolio are mainly traded and  $AE_i^j$  the amount of country  $j$  equities in the aggregated equity portfolio of country  $i$  (re)insurance undertakings.

### **Option 4.3 (Combined approach):**

This approach combines the weights that result from the two approaches described above.

Some equity markets are important both in terms of the relative share of each national stock market in the aggregated equity portfolio of European insurers and in terms of the average of national percentages (e.g. France and the United Kingdom). For other equity markets, there are marked differences. The Swedish and Polish equity markets are for example much more important when looking at averages of national percentages.

The combined approach chooses equity indices with a high weight based on one or both measures. It also takes into account that all geographic parts of Europe should be represented. An index might also be included where it can be seen as a good representative for other equity markets (e.g. Japan as proxy for the Asian markets).

The starting point is the relative shares of the equity markets in the aggregated equity portfolios of European insurers. But the weights of smaller markets are adjusted upwards if insurers from many European countries have a meaningful allocation to this market or the market can be seen as a proxy for other non-included equity markets.

The selected indices are allocated to three categories. Each member of a category has the same weight (14%, 8% or 2%). The weights for the equity markets of Poland, Sweden and Japan reflect also the fact that they can be seen as proxies for the Eastern European, Scandinavian and Asian markets.

### **Policy issue 5: Normalisation of equity indices (Article 2)**

The equity index is a weighted average of different national indices. For those national indices to be consistently aggregated it is necessary to make them comparable by normalising them.

#### **Option 5.1 (Values at a specific date):**

To normalise all indices to a permanent base of 100 at a specific date based on their then current values.

#### **Option 5.2 (Values at the beginning of the observation period):**

To use a "rolling window base", i.e. normalise the indices for each new calculation to a basis of 100 at the beginning of the observation period (36 months before) based on their then current value.

## **Section 5: Analysis of impacts**

### **Policy issue 1: Inputs for the calculation of equity index**

#### **Option 1.1 (Indices of EU equity markets):**

- Benefits:
  - From the point of view of (re)insurance undertakings, this option provides an index that they can replicate with limited effort for the purposes of risk management;
  - The use of a stable and limited list of well-known equity indices is preferable in terms of simplicity and transparency.
- Costs:
  - If (re)insurance undertakings want to replicate the equity index, they have to pay for acquiring the underlying individual indices;
  - EIOPA has to pay for acquiring values of equity indices for the relevant EU equity markets on an on-going basis;
  - EIOPA has to determine and update when necessary a set of indices/markets and implement them in the relevant processes. The total costs of this option do not seem to be material (including the allocation of EIOPA staff dedicated time, estimated in two hours per run/monthly);
  - Using indices of EU equity markets as building blocks restricts the flexibility in adjusting the equity index to the holdings of insurance undertakings (whose allocation to equities from a specific country might deviate from the composition of the country indices).

#### **Option 1.2 (List of concrete equities):**

- Benefits:
  - This approach allows creating an index that differs widely from established equity indices in case this should be necessary.
- Costs:
  - From the point of view of (re)insurance undertakings, this option makes it more difficult to replicate the index for the purposes of risk management;
  - For EIOPA, this option involves the complex tasks of managing a long list of companies that will likely change frequently. Furthermore, EIOPA would have much higher implementation costs to design a mechanism for choosing companies so that the resulting portfolio is representative of a typical equity holding of undertakings. This mechanism would have to include a procedure for updating the list in case of de-listings, initial public offerings etc. The costs for acquiring prices of companies in the list would presumably be higher than in the first option. Finally the cost for executing, monitoring and controlling the process would be much higher under the policy option 2 (allocation of EIOPA staff dedicated time, estimated in perhaps more than one day per run/monthly).

## **Policy issue 2: Exhaustive set or subset of relevant markets**

### **Option 2.1 (Subset of national indices):**

- Benefits:
  - This option is easier to implement due to the reduced number of items involved in the calculation.
- Costs:
  - Where a national index is used as a proxy for a group of non-included indices based on geographical proximity and correlation, the non-perfect and changing correlations between the indices might result in over- or underestimating the symmetric adjustment of the equity capital charge;
  - It is necessary to monitor the correlations between the included and the non-included indices;
  - This approach makes it necessary to determine criteria for inclusion or exclusion.

### **Option 2.2 (Exhaustive set of national indices for all relevant markets):**

- Benefits:
  - This option is more granular than Option 1. This allows potentially a better approximation of the equities held by insurers;
  - There is no need to monitor the correlations between included and non-included indices over time.
- Costs:
  - The higher number of indices results in a more complex calculation;
  - The procurement of additional indices produces higher costs.

## **Policy issue 3: Type of indices to use: gross total return indices or non-total return indices**

### **Option 3.1 (Gross total return indices to calculate the equity index):**

- Benefits:
  - A gross-total return index avoids sudden drops resulting from dividend payments which do not correspond to actual losses as the dividends can be reinvested.

### **Option 3.2 (Non-total return indices to calculate the equity index):**

- Benefits:
  - A non-total return index measures the actual market price of a portfolio of equities as required in Article 172 of the Commission Delegated Regulation.

## **Policy issue 4: Calculation of the weights**

### **Option 4.1 (Absolute economic amount approach):**

- Benefits:
  - The weight of a national stock market increases with the aggregate exposure of European insurers and reinsurers to this market;
  - No further adjustments to the data from the EIOPA survey are needed.
- Costs:
  - The weights reflect the portfolio composition of all European insurers and reinsurers (standard formula as well as internal model users). In case there will be meaningful differences between the two groups in the geographical allocation of equities, the equity index might not be representative for the holdings of standard formula insurers and reinsurers;
  - The approach produces high weights for national stock markets with high market capitalisation. As a result, the equity index could be not representative for the equity holdings of undertakings from smaller markets.

### **Option 4.2 (Average of national percentages approach):**

- Benefits:
  - Only the mean percentage of equities from each country in the equity portfolio of a Member State country is taken into account. The size of national insurance and reinsurance equity portfolios is irrelevant. As a result each national insurance and reinsurance market is equally represented and small national insurance and reinsurance markets are not completely dominated by large ones;
  - No further adjustments to the data from the EIOPA survey are needed.
- Costs:
  - The weights reflect the portfolio composition of all European insurers and reinsurers (standard formula as well as internal model users). In case of meaningful differences between the two groups in the geographical allocation of equities the equity index might not be representative for the holdings of standard formula insurers and reinsurers;
  - Small equity markets are assigned a relatively high weight. As a result the behaviour of the equity index may deviate significantly from the overall equity portfolio of European insurers and reinsurers.

### **Option 4.3 (Combined approach):**

- Benefits:
  - The approach takes into account both the relative importance and the average relative share of individual equity markets in the aggregated equity portfolio of European insurers and in national insurance markets (i.e. all the information gathered in the EIOPA survey);

- While it is not possible to completely eliminate any distortions that are potentially introduced by the inclusion of internal model users in the EIOPA survey, the approach is more robust to them (one reason is that the selected equity indices are allocated to one of three categories with the same weights);
- The approach ensures that equity markets of all areas are represented;
- As other factors than market capitalisation are considered, there can be no disproportionately high weights for a single index that could distort the signals provided by the symmetric adjustment and create incentives for portfolios highly concentrated in equities from a single country.
- Costs:
  - There is no single method to take into account both the outputs based on market values and at the same time the outputs based on the average portfolio at national level.

### **Policy issue 5: Normalisation of equity indices**

#### **Option 5.1 (Values at a specific date):**

- Benefits:
  - The implementation is very simple and there is no need to update on a regular basis.
- Costs:
  - It is necessary to determine the date at which the index is set to 100%;
  - The effective weights of the indices (i.e. weights multiplied by the value of their respective index) are not only determined by the weights that are derived from the equity portfolios of European insurers and the relative changes of the indices since the last three years, but also by the relative changes in the equity indices since the date chosen for normalisation.

#### **Option 5.2 (Values at the beginning of the observation period):**

- Benefits:
  - The actual weights of the individual national indices at the beginning of the observation period correspond always to the weights derived from the equity portfolios of European insurers and are constant over time and the relative changes of the indices since the last three years.
- Costs:
  - This option requires an update of the base for the national indices used in the calculation for each calculation of the symmetric adjustment.

## **Section 6: Comparing the options**

### **Policy issue 1: Inputs for the calculation of equity index**

The objectives (b) and (c) listed in section 3 'Objectives pursued' can be achieved with both policy options. In theory, the objective of making the equity index "representative of the nature of equities typically held by insurance and reinsurance undertakings" could be better achieved by policy option 1.2. But even if the necessary information was available, there are a number of considerable drawbacks: the complexity and costs for both EIOPA as well as for insurers and reinsurers which want to replicate the index for risk management purposes is considerable compared with the marginal increase in precision. Moreover, policy option 1.2 could create incentives to invest in specific individual stocks.

The preferred choice is therefore **Option 1.1 (Indices of EU equity markets)**.

### **Policy issue 2: Exhaustive set or subset of relevant markets**

With policy option 2.1, the objective (a) could potentially be better achieved. But with option 2.2, the most important indices (both in terms of their aggregated weight and the average of national percentages) are already included. Adding more indices would only have a meaningful impact on the value of the equity dampener if the corresponding weights were higher than warranted by the observed equity holdings of European insurers.

Moreover, from an implementation perspective, the costs of procuring the right to use each index of EEA stock markets for EIOPA may be material.

The preferred choice for this policy issue is therefore **Option 2.1 (Subset of national indices)**.

### **Policy issue 3: Type of indices to use: gross total return indices or non-total return indices**

The Commission Delegated Regulation requires that the equity index reflects the actual market price of an equity portfolio.

The preferred policy option for this policy issue is therefore **Option 3.2 (Non-total return indices)**.

### **Policy issue 4: Calculation of the weights**

All three policy options fulfil the objectives (b) and (c) listed in section 3 'Objectives pursued'.

For all three options, the calculation of the index is practicable for EIOPA in terms of efficiency, cost and a timely publication.

All three options define the equity index in an unambiguous and comprehensive manner and the values underlying the calculation of the equity dampener index are publicly available for the undertakings (even if not necessarily free of any cost).

The equity index has to be "representative of the nature of equities typically held by insurance and reinsurance undertakings". Of all the alternatives policy options policy option 4.3 meets this objective to the largest degree. With policy option 4.1, all but the largest markets in terms of market capitalisation (France, Germany, the

Netherlands and the United Kingdom) are assigned a negligible weight. As a result, the equity nature of investments of Southern, Northern and Eastern Europe insurers is not really represented. On the contrary, policy option 4.2 gives very small equity markets a disproportionate weight.

As policy option 4.3 generates an equity index that is balanced across different markets and is therefore geographically diversified, it is preferable in terms of proper incentives for risk management.

While the weights of the national equity markets are fixed in the ITS, there will have to be at a later stage adjustments to reflect changes in the relevant factors. Policy option 4.3 moderates the impact of fluctuations in the capitalisation of individual markets. As a result, it produces more stable weights over time. This provides certainty for insurers and avoids incentives for equity portfolios that are concentrated in few countries or companies. This might help to avoid an uneven access to equity financing for the real economy across Europe.

With policy option 4.3 there are different possibilities to combine the relative weights based on the aggregated equity portfolio of European insurers and the average of national percentages. This can be justified as both metrics have their drawbacks and an adequate representative of all parts of Europe has to be ensured. This could not be achieved by mechanically combining the data underlying the first two policy options.

The preferred choice for this policy issue is therefore **Option 4.3 (Combined approach)**.

#### **Policy issue 5: Normalisation of equity indices (Article 2)**

With policy option 5.1, the effective weight of an equity index would depend on the relative performance of all selected indices between the date of normalisation and the start of the 36 months used for the calculation of the symmetric adjustment. As a result, the objective to develop an equity index "which is representative of the nature of equities typically held by insurance and reinsurance undertakings" would be met to a lesser degree.

The preferred choice is therefore **Option 5.2 (Values at the beginning of the observation period)**.

#### **Section 7: Monitoring Indicators**

Possible indicators of progress towards meeting the objectives identified in section 3 could be:

- No significant changes in the composition of equities held by (standard formula) insurers;
- Experience with the publication of the equity index/equity dampener by EIOPA (e.g. delays in the publication, costs for calculation);
- Problems encountered by undertakings about problems in producing short-term projections



## Annex III: Resolution of comments

Summary of Comments on Consultation Paper EIOPA-CP-14/058				
CP-14-058-ITS on equity dampener				
<p>EIOPA would like to thank Insurance and Reinsurance Stakeholder Group (IRSG), Actuarial Association of Europe (AAE), Company of Amundi Group, GDV, Insurance Europe, Munich Reinsurance Company, and Nordea Life &amp; Pensions.</p> <p>The numbering of the paragraphs refers to Consultation Paper No. EIOPA-CP-14/058.</p>				
No.	Name	Reference	Comment	Resolution
1.	IRSG	General Comment	<p>The explanation for the calibration weights should be included in a Technical Annex for transparency reasons - this is now included only in the Impact Assessment.</p> <p>We believe EIOPA should have in place a process to update the weights and indices. The proposed weights are outdated given that it is based on Q1 2013 data, particularly considering the SII implementation date on 1 January 2016. The allowance in the weightings for Type 2 equities may need particular attention.</p>	<p>Putting the explanation of the weights a technical annex of the ITS is not possible as it serves no legal purpose. It is also not absolutely clear why providing the same information in another place improves transparency.</p> <p>Please see section 2.1 "Process for updating weights and equity indices" of this report.</p>

			There should be a commitment from EIOPA regarding the exact timeline for the publication of the symmetric adjustment or the constructed index. For example, the working day 3 after the quarter end.	EIOPA intends to publish the relevant information on a monthly basis as soon as possible. In the past months the publication occurred within five EIOPA working days.
2.			This comment was submitted as confidential by the stakeholder.	
3.	Company of Amundi Group	General Comment	<p>- Each sub-index is normalised at the beginning of the 3-years period and the final index is the weighted average of the national indices : why not use a classical methodology of indices construction instead (monthly rebalancing of index weights) ?</p> <p>This would not have significant impact on the final value of the dampener because the index is based on a basket of euro equity indices.</p> <p>Unlike the composite index calculated with a monthly rebalancing of weights, the composite index calculated with this rolling window base cannot be reproduced on financial markets.</p> <p>Furthermore, the suggested methodology would be more intuitive and easier to implement and replicate because it would not be necessary anymore to recalculate the index on the last 36 months and the associated moving average at each dampener computation.</p> <p>- Do you confirm that non denominated in euro indices have to be taken in local currency ?</p>	<p>After receiving further clarification EIOPA did consider that the previously chosen approach is still preferable. The question of the suitable weights was already discussed in the Impact Assessment.</p> <p>It is confirmed that indices not denominated in euro are used in local currency.</p>
4.	GDV	General Comment	GDV welcomes the opportunity to comment on the draft proposal for implementing technical standards on the equity index for the symmetric adjustment of the equity capital charge.	

			<p>Unambiguous Replication</p> <p>We welcome that the ITS allow to replicate the calculation of the symmetric adjustment. However, in order to avoid ambiguities, the names of the indices should be complemented by the specific tickers (e.g. Bloomberg).</p> <p>Announcement of updates</p> <p>If later on the weights of the particular indices are to be updated, the new weights should be announced one year in advance.</p>	<p>This is for legal reasons not possible.</p> <p>In case of an update the normal process including a consultation would be followed. This would give stakeholders time to prepare.</p>
5.	Insurance Europe	General Comment	<p>Insurance Europe welcomes the opportunity to comment on the ITS on the equity index for the symmetric adjustment of the equity capital charge</p> <p>We acknowledge the fact that EIOPA has improved their approach when developing a list of equity indices and their weights instead of a single equity index.</p> <p>However, our issues of primary concern related to this paper are the following:</p> <p><input type="checkbox"/> The list in the Annex does not include an index that is representative of Type 2 equities. This was not an issue in the previous consultation and therefore, EIOPA should address this shortcoming.</p> <p>According to the Delegated Acts, Article 172(1)(a), the equity index is meant to measure the market price of a diversified portfolio of equities which is representative of the nature of equities typically held by insurance and reinsurance undertakings,</p>	<p>According to the data EIOPA collected emerging market equities do not represent a meaningful proportion of equities in the portfolios of European insurers. There is also no evidence that there is a meaningful allocation by European insurers</p>

		<p><input type="checkbox"/> We therefore suggest to add this information in the list. EIOPA should ensure that the index is built on the average representative portfolio of equities held by insurance undertakings. The calibration of parameters should be consistent with other mechanisms defined in the Solvency II Directive, as for the VA.</p> <p><input type="checkbox"/> For transparency reasons, the justification of the selection of weights should be moved to the technical annex, which is now included in the impact assessment.</p> <p><input type="checkbox"/> The proposed weights seem outdated since they are based on first quarter 2013 collected by EIOPA across the EU market. This could diverge even more from reality when SII comes into force.</p> <p>Therefore, EIOPA needs to identify and address this weakness (eg through a periodic refresh of the weights and the indexes).</p> <p>We also suggest EIOPA to make sure that the publication of the adjustment is at least on a monthly basis as already mentioned in the excel file on the equity index published by EIOPA</p>	<p>to private equities.<sup>6</sup></p> <p>See resolution comment 1.</p> <p>See resolution comment 1.</p> <p>See resolution comment 1.</p> <p>The allocation to different markets should be relatively stable over time.</p> <p>EIOPA intends to publish the relevant information on a monthly basis as soon as possible.</p>
--	--	---	---

<sup>6</sup> In a survey thirteen of the largest European insurance companies with around €3trn in assets responded that they had invested €19bn at the end of 2012 (see pages 19 and 26 in Insurance Europe/Oliver Wyman (2013): Funding the future. Insurers' role as institutional investors). It seems plausible to assume that the allocation for smaller insurers which are more likely to use the standard formula is below this level.

			<p><input type="checkbox"/> EIOPA should commit to a precise timing regarding the publication of the symmetric adjustment or the constructed index (eg at the latest the 3rd working day after the end of the quarter). Furthermore, the adjustment should be stabilised and be available to undertakings very early in the process to facilitate the calculations for Solvency II requirements.</p>	<p>In the past months the publication occurred within five EIOPA working days.</p>
6.	Munich Reinsurance Company	General Comment	<p>1. The calculation of the equity index for the symmetric adjustment of the equity capital charge is based on several world-wide equity market indices which are denominated in local currency. Thus especially strong changes in cross rates to EUR will have impact on the final symmetric adjustment to equity risk factors. For example, the performance of Nikkei 225 between eoy 2011 (8.455) and eoy 2014 (17.450) of 106% in local currency reduces to 42% in EUR as Japanese Yen devalued against Euro for the same period.</p> <p>2. The equity risk submodule shall measure the sensitivity of the values of assets, liabilities and financial instruments to changes in the level or in the volatility of market prices of equities, whereas the currency risk module shall measure the sensitivity to changes in the level or in the volatility of currency exchange rates.</p> <p>3. Regarding the current calculation of the symmetric adjustment there is a maybe unwanted link between both risk submodules possibly leading to double counting of risks (depending on individual FX hedges).</p> <p>Thus the calculation of the equity index for the symmetric adjustment of the equity capital charge shall be based on equity indices performances in exchange rate adjusted terms.</p>	<p>Not agreed. Indices not denominated in euro are used in local currency. This is consistent with the approach chosen to calibrate the equity risk charge. As a result there can be no double-counting.</p>
7.	Nordea Life & Pensions	General Comment	<p>1. On 4 February, EIOPA started publishing the calculated symmetric adjustment. However, it is not possible to fully reconstruct this calculation based on the detail of the ITS. The ITS should be amended to allow full replication of the calculation.</p>	<p>EIOPA is not clear about what is missing.</p>
8.			<p>This comment was submitted as confidential by the stakeholder.</p>	
9.			<p>This comment was submitted as confidential by the stakeholder.</p>	
10.	Insurance Europe	Article 1	<p>Regarding the definition of "closing level", it is unclear exactly which period in time is chosen for the construction of the index since in certain instances this can have a impact (eg Is that COB of the country in which the index is localised? Is that 16.00 CET? Or something else).</p> <p>At closing level, it is not specified if EIOPA will assess whether the last quotes are reflective of an active deep and liquid market or will assume this is the case.</p>	<p>Agreed. The definition has been changed</p> <p>This would introduce additional</p>

			<p>When considering a comparable example, eg for the discount rate ,there might be an impact from the timing of the setting of the curve. The market in certain moments is less liquid and more receptive for manipulations than other moments in time. The same holds for any other market observable input.</p> <p>Thus a clear moment in time is needed to avoid any discussion.</p>	<p>complexity and discretion. It is also not clear why this should be a meaningful problem because a) these are major indices and b) liquidity might be more of an issue in case markets fall. Excluding "illiquid" markets would probably mean a lower reduction of the equity risk charge.</p>
11.			This comment was submitted as confidential by the stakeholder.	
12.			This comment was submitted as confidential by the stakeholder.	
13.	GDV	Article 2	<p>In order to avoid ambiguities, the names of the indices should be complemented by the specific tickers (e.g. Bloomberg).</p> <p>If later on the weights of the particular indices are to be updated, the new weights should be announced one year in advance.</p>	<p>See resolution comment 4.</p> <p>See resolution comment 4.</p>
14.	Insurance Europe	Article 2	<p>EIOPA does not mention how they cope with material "trend breaches" and whether on a regular basis an index is assessed and certain funds will be dropped in favour of others.</p> <p>In the past indexes have been adjusted on an annual basis to reflect changes in companies/ownership structure and relative importance. At least once a year companies are removed from the index and others included. This can have an impact on the index.</p> <p>Therefore EIOPA should cope with these technical adjustments.</p>	<p>As all indices have a meaningful number of components the index updates should not have a meaningful impact.</p> <p>It is also not clear how an alternative that is based on</p>

			<p>A reference to the symmetric adjustment (SA) formula in Article 172(2) of the Delegated Acts should be made for the purposes of clarity, in order to illustrate how the calculation of the SA uses the equity index.</p> <p>Article 2(1) should also clearly reference the table of indices in the Annex.</p>	<p>public indices would look like</p> <p>EIOPA considers that the calculation is clearly set out in Article 172.</p> <p>Not agreed. As the whole Annex consists of one table the risk of misunderstandings seems to be remote.</p>
15.	Actuarial Association of Europe (AAE)	Impact Assessment	<p>Policy Issue 4: It is unclear when and how the weighting will be updated in the policy option preferred by EIOPA, i.e. there is no mechanic approach in place. While we agree with the benefits of the policy option and that it is relatively stable, this introduces uncertainty on when and how the weights are updated by EIOPA, which seems undesirable from a risk management perspective. We suggest to make to process &amp; timing for updating the weights more explicit.</p>	See resolution comment 1.
16.			This comment was submitted as confidential by the stakeholder.	
17.	Insurance Europe	Annex	The list in the Annex does not include an index that is representative of Type 2 equities. This was not an issue in the previous consultation and therefore, EIOPA should address this shortcoming.	See resolution comment 5.
18.			This comment was submitted as confidential by the stakeholder.	
19.	Insurance Europe	Impact Assessment	<p>EIOPA opts for the Non-total return version of the equity indices based on option 3.2</p> <p>However, it is not clear if this means the net-return indices (ie dividends are reinvested in the stock market after deduction of taxes on those dividends) or the Price indices (dividends are not reinvested in the index at all)</p>	Noted. EIOPA uses price indices.