

Directive 2009/138/EC of the European Parliament and of the Council  
of 25 November 2009 on the taking-up and pursuit of the business of  
Insurance and Reinsurance (Solvency II) (recast) (Text with EEA relevance)

*Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.*

## ANNEX IV

### SOLVENCY CAPITAL REQUIREMENT (SCR) STANDARD FORMULA

#### 1. Calculation of the Basic Solvency Capital Requirement

The Basic Solvency Capital Requirement set out in Article 104(1) shall be equal to the following:

$$\text{Basic SCR} = \sqrt{\sum_{i,j} \text{Corr}_{i,j} \times \text{SCR}_i \times \text{SCR}_j}$$

where  $\text{SCR}_i$  denotes the risk module  $i$  and  $\text{SCR}_j$  denotes the risk module  $j$ , and where ‘ $i,j$ ’ means that the sum of the different terms should cover all possible combinations of  $i$  and  $j$ . In the calculation,  $\text{SCR}_i$  and  $\text{SCR}_j$  are replaced by the following:

- $\text{SCR}_{\text{non-life}}$  denotes the non-life underwriting risk module,
- $\text{SCR}_{\text{life}}$  denotes the life underwriting risk module,
- $\text{SCR}_{\text{health}}$  denotes the health underwriting risk module,
- $\text{SCR}_{\text{market}}$  denotes the market risk module,
- $\text{SCR}_{\text{default}}$  denotes the counterparty default risk module,

The factor  $\text{Corr}_{i,j}$  denotes the item set out in row  $i$  and in column  $j$  of the following correlation matrix:

<b>ji</b>	<b>Market</b>	<b>Default</b>	<b>Life</b>	<b>Health</b>	<b>Non-life</b>
Market	1	0,25	0,25	0,25	0,25
Default	0,25	1	0,25	0,25	0,5
Life	0,25	0,25	1	0,25	0
Health	0,25	0,25	0,25	1	0
Non-life	0,25	0,5	0	0	1

#### 2. Calculation of the non-life underwriting risk module

The non-life underwriting risk module set out in Article 105(2) shall be equal to the following:

$$\text{SCR}_{\text{non-life}} = \sqrt{\sum_{i,j} \text{Corr}_{i,j} \times \text{SCR}_i \times \text{SCR}_j}$$

where  $\text{SCR}_i$  denotes the sub-module  $i$  and  $\text{SCR}_j$  denotes the sub-module  $j$ , and where ‘ $i,j$ ’ means that the sum of the different terms should cover all possible combinations of  $i$  and  $j$ . In the calculation,  $\text{SCR}_i$  and  $\text{SCR}_j$  are replaced by the following:

- $\text{SCR}_{\text{nl premium and reserve}}$  denotes the non-life premium and reserve risk sub-module,
- $\text{SCR}_{\text{nl catastrophe}}$  denotes the non-life catastrophe risk sub-module,

#### 3. Calculation of the life underwriting risk module

The life underwriting risk module set out in Article 105(3) shall be equal to the following:

$$\text{SCR}_{\text{life}} = \sqrt{\sum_{i,j} \text{Corr}_{i,j} \times \text{SCR}_i \times \text{SCR}_j}$$

where  $\text{SCR}_i$  denotes the sub-module  $i$  and  $\text{SCR}_j$  denotes the sub-module  $j$ , and where ‘ $i,j$ ’ means that the sum of the different terms should cover all possible combinations of  $i$  and  $j$ . In the calculation,  $\text{SCR}_i$  and  $\text{SCR}_j$  are replaced by the following:

- $SCR_{\text{mortality}}$  denotes the mortality risk sub-module,
- $SCR_{\text{longevity}}$  denotes the longevity risk sub-module,
- $SCR_{\text{disability}}$  denotes the disability – morbidity risk sub-module,
- $SCR_{\text{life expense}}$  denotes the life expense risk sub-module,
- $SCR_{\text{revision}}$  denotes the revision risk sub-module,
- $SCR_{\text{lapse}}$  denotes the lapse risk sub-module,
- $SCR_{\text{life catastrophe}}$  denotes the life catastrophe risk sub-module,

#### 4. Calculation of the market risk module

##### Structure of the market risk module

The market risk module, set out in Article 105(5) shall be equal to the following:

$$SCR_{\text{market}} = \sqrt{\sum_{i,j} \text{Corr}_{i,j} \times SCR_i \times SCR_j}$$

where  $SCR_i$  denotes the sub-module i and  $SCR_j$  denotes the sub-module j, and where ‘i,j’ means that the sum of the different terms should cover all possible combinations of i and j. In the calculation,  $SCR_i$  and  $SCR_j$  are replaced by the following:

- $SCR_{\text{interest rate}}$  denotes the interest rate risk sub-module,
- $SCR_{\text{equity}}$  denotes the equity risk sub-module,
- $SCR_{\text{property}}$  denotes the property risk sub-module,
- $SCR_{\text{spread}}$  denotes the spread risk sub-module,
- $SCR_{\text{concentration}}$  denotes the market risk concentrations sub-module,
- $SCR_{\text{currency}}$  denotes the currency risk sub-module,