

APPENDIX FOUR
(Sections 2, 110, 111)

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 SCR_i denotes the risk module i and 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, SCR_i and SCR_j are replaced by the following:

- $\text{SCR}_{\text{non-life}}$ denotes the non-life underwriting risk module,
- SCR_{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:

j	Market	Default	Life	Health	Non-life
Market					
Default					
Life					
Health					
Non-life					

2 **Calculation of the non-life underwriting risk module**
The non-life underwriting risk module set out in section 111, paragraph 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 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:

- $\text{SCR}_{\text{nl premium and reserve}}$ 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 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:

	<ul style="list-style-type: none"> — SCR_{mortality} denotes the mortality risk sub-module, — SCR_{longevity} denotes the longevity risk sub-module, — SCR_{disability} denotes the disability – morbidity risk sub-module, — SCR_{life expense} denotes the life expense risk sub-module, — SCR_{revision} denotes the revision risk sub-module, — SCR_{lapse} denotes the lapse risk sub-module, — SCR_{life catastrophe} denotes the life catastrophe risk sub-module.
4	<p>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:</p> $SCR_{\text{market}} = \sqrt{\sum_{i,j} \text{Corr}_{i,j}} \times SCR_i \times SCR_j$ <p>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:</p> <ul style="list-style-type: none"> — SCR_{interest rate} denotes the interest rate risk sub-module, — SCR_{equity} denotes the equity risk sub-module, — SCR_{property} denotes the property risk sub-module, — SCR_{spread} denotes the spread risk sub-module, — SCR_{concentration} denotes the market risk concentrations sub-module, — SCR_{currency} denotes the currency risk sub-module.