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Commissariat aux Assurances Regulation N° 15/03 of 7th December 2015 on insurance and reinsurance undertakings, as amended

Chronological record

Commissariat aux Assurances Regulation N° 15/03 of 7th December 2015 on insurance and reinsurance undertakings¹, as amended by:

1. Commissariat aux Assurances Regulation N° 16/01 of 3rd May 2016 amending Regulation of the Commissariat aux Assurances N° 15/03 of 7th December 2015 on insurance and reinsurance undertakings²;
2. Commissariat aux Assurances Regulation N° 19/02 of 26th February 2019 amending the amended Regulation of the Commissariat aux Assurances N° 15/03 of 7th December 2015 on insurance and reinsurance undertakings³.

Chapter I – Taking-up of business

Art. 1. – Contents of the application as a Luxembourg insurance or reinsurance undertaking

The application shall be submitted to the minister through the CAA. It shall contain the following documents and information:

- a) for limited companies, corporate partnerships limited by shares and European companies:
 1. the articles of incorporation;
 2. the names, first names, domicile, residence, profession and nationality of board members and of persons in charge of the management of the undertaking;
 3. the names, first names, domicile, residence, profession or corporate name and nationality of the undertaking's shareholders;
 4. if the share capital is not fully paid-up: the names, first names, domicile, residence, profession and nationality of the shareholders with details of the unpaid amount of their shares;
- b) for cooperative societies and European cooperative societies :
 1. the statutes of the society;
 2. the names, first names, domicile, residence, profession and nationality of the board members and the persons in charge of the management of the

¹ Mémorial A – N° 229 of 9th December 2015

² Mémorial A – N° 90 of 13th May 2016

³ Mémorial A – N° 149 of 14th March 2019

corporate objectives as well as the extent of their powers and the term of their mandate;

3. the amount of payments paid in;
4. the terms on which withdrawals of these payments of these payments may be made;
5. the distribution of profits and losses;
6. the extent of the members' responsibilities;

c) for undertakings under the form of a mutual insurance association:

1. the association's memorandum of association ;
2. the names, first names, domicile, residence, profession and nationality of the persons in charge of the corporate objectives as well as the extent of their power and the term of their mandate;
3. the provisions relating to the founding capital, the extent of the rights and obligations of the mutual members;

d) in addition, for all undertakings :

1. a business plan, as provided for in Article 3 of the present regulation;
2. the identity of those persons referred to in Article 54, paragraph 3, of the law of 7th December 2015 on the insurance sector (hereinafter referred to as "the law"), other than those referred to in point a) 3 above;
3. the annual accounts, as well as the consolidated annual accounts, if any, of the three last corporate financial years of any of the shareholders holding a qualifying holding or a control relationship within the insurance or reinsurance undertaking;
4. the rules that determine the appointment and designation of the approved independent auditor;
5. the evidence that the undertaking covers the Minimum Capital Requirement, as provided for in Article 112 of the law.

Luxembourg insurance and reinsurance undertakings must also provide any other information necessary for of the request to be considered.

Art. 2. – Contents of the application for a branch of a third country insurance or reinsurance undertaking

The application referred to in Articles 159, paragraph 6, and 167, paragraph 5, of the law shall be submitted to the minister through the CAA. It shall contain the documents and information referred to in Article 1 of the present regulation and in addition:

- a) the document approving the establishment of a branch in the Grand Duchy of Luxembourg;
- b) the names, first names, domicile, residence and nationality of the legal representative managing the Luxembourg branch of the insurance or reinsurance undertaking;
- c) evidence that the insurance or reinsurance undertaking is authorised to carry on in its home country the insurance or reinsurance operations which are the subject of the application, or any reasons why it is not authorised there;
- d) evidence that the insurance or reinsurance undertaking possesses the assets referred to in Article 159, paragraph 2, points d) and e) of the law for the activities carried on by its Luxembourg branch.

Art. 3. – Content of the business plan

- (1) The business plan referred to in Article 1, point d) of the present regulation shall include particulars or evidence of the following:
- a) the nature of the risks or commitments which the insurance or reinsurance undertaking concerned proposes to cover;
 - b) the kind of reinsurance or retrocession arrangements which the undertaking proposes to make with ceding undertakings, where applicable;
 - c) the guiding principles as to reinsurance and to retrocession;
 - d) the type and composition of eligible own-funds and of the basic own-funds of the undertaking constituting the Solvency Capital Requirement and the Minimum Capital Requirement;
 - e) as regards life insurance, a plan setting out technical bases used for calculating scales of premiums, mathematical provisions and surrender or reduction values;
 - f) estimates of the costs of setting up the administrative services and the distribution network, the financial resources intended to meet these costs and, if the risks to be covered are classified in class 18 in Part A of Annex I of the law, the resources at the disposal of the insurance undertaking for the provision of the assistance promised;
 - g) in addition, as regards reinsurance undertakings, a descriptive statement of the ceding or retroceding insurance or reinsurance undertakings with details of their corporate name, the country where their registered office is situated and to whose prudential law they are subject. Insurance and reinsurance undertakings incorporated in the European Union and third country undertakings subject to prudential rules deemed to be at least equivalent, as a whole, to the legislation applicable in the Member States of the European Union are automatically considered eligible;
 - h) information on the structure of the system of governance for the first three financial years.
- (2) In addition to the requirements set out in paragraph 1, for the first three financial years the business plan shall include the following:
- a) a forecast balance sheet, drawn up in accordance with the evaluation rules of :
 - (1) the law on annual accounts and
 - (2) Title I, Chapter VI of Directive 2009/138/EC;
 - b) estimates of the future Solvency Capital Requirement, as laid down in Chapter IV, Section 4, of the present regulation on the basis of a forecast balance sheet under point a), as well as the calculation method used to derive those estimates;
 - c) estimates of the future Minimum Capital Requirement, as provided for in Chapter IV, section 5 of the present regulation, on the basis of the forecast balance sheet referred to in point a) above, as well as the calculation method used to derive those estimates;
 - d) estimates of the financial resources intended to cover technical provisions, the Minimum Capital Requirement and the Solvency Capital Requirement,
 - e) estimates of management expenses other than installation costs, in particular current general expenses and commissions;
 - f) estimates of premiums or contributions and claims with a breakdown between direct business and reinsurance acceptances;

For branches of third country insurance or reinsurance undertakings, the documents referred to under subparagraph 1, shall only contain estimates and information regarding the activity of the branch established in the Grand Duchy of Luxembourg.

Chapter II – Supervisory authority and general rules

Art. 4. - Policy and premium tariff conditions

With regard to the general and special insurance policy conditions, together with premium tariffs and forms and other printed documents which an insurance or reinsurance undertaking intends to use in its dealings with policy holders, undertakings are only obliged to notify the following:

- a) for compulsory insurance contracts, insurance undertakings authorised or operating in the Grand Duchy of Luxembourg must communicate the general and special insurance policy conditions prior to their use.
- b) in life insurance and in health insurance conducted pursuant to life insurance techniques, insurance undertakings authorised in the Grand Duchy of Luxembourg must notify to the CAA the technical bases used for calculating premium tariffs and technical provisions as well as any subsequent changes no later than the first placing on the market of the contracts concerned.

Except for cases foreseen in points a) and b) above, the CAA may only require non-systematic notification of the general and special insurance policy conditions, the premium tariffs and forms and other printed documents which an undertaking intends to use in its dealings with policy holders.

Art. 5. Derogation from the regular communication of certain information for the purposes of supervision

(1) The CAA may waive its regular supervisory reporting "..."⁴ with predefined periods shorter than one year, except for the communication of the results of the Minimum Capital Requirement Calculation, where:

- a) the submission of that information would be overly burdensome having regard to the nature, scale and complexity of the risks inherent in the business of the undertaking;
- b) the information is reported at least annually.

This derogation does not apply to information "to be communicated by insurance or reinsurance undertakings"⁵ that are part of a group within the meaning of Article 184, point 3, of the law, unless the undertaking concerned can demonstrate to the satisfaction of the CAA that regular supervisory reporting with a frequency of more than once per year is inappropriate, given the nature, scale and complexity of the risks inherent in the business of the group.

The undertakings benefiting from the above derogation shall not represent, respectively, more than 20 % of the Luxembourg insurance and reinsurance life markets or non-life insurance and reinsurance markets. The calculation of the respective market share is based on gross written premiums for the "non-life" market and on gross technical provisions for the "life" market.

The CAA shall give priority to the smallest undertakings when determining such undertakings' eligibility for these exemptions.

⁴ removed by RCAA 16/01 of 3 May 2016

⁵ RCAA 16/01 of 3 May 2016

(2) The CAA may limit regular supervisory reporting or exempt insurance and reinsurance undertakings from reporting financial assets on an item-by-item basis, where:

- a) the submission of that information would be overly burdensome having regard to the nature, scale and complexity of the risks inherent in the business of the undertaking;
- b) the submission of that information is not necessary for the effective supervision of the undertaking;
- c) the exemption does not undermine the stability of the financial systems concerned within the European Union; and
- d) the undertaking is able to provide the information on an ad-hoc basis.

The CAA shall not exempt from reporting on an item-by-item basis insurance or reinsurance undertakings that are part of a group within the meaning of Article 184, point 3, of the law, unless the undertaking can demonstrate to the satisfaction of the CAA that reporting on an item-by-item basis is inappropriate, given the nature, scale and complexity of the risks inherent in the business of the group and taking into account the objective of financial stability.

The exemption from reporting on an item-by-item basis shall be granted only to undertakings that do not represent, respectively, more than 20 % of the Luxembourg life and non-life insurance or reinsurance markets, where the non-life market share is based on gross written premiums and the life market share is based on gross technical provisions.

The CAA shall give priority to the smallest undertakings when determining such undertakings' eligibility for these exemptions.

(3) For the purposes of paragraphs 1 and 2, the CAA shall assess whether the submission of information would be overly burdensome in relation to the nature, scale and complexity of the risks of the undertaking, taking into account, at least:

- a) the volume of premiums, technical provisions and assets of the undertaking;
- b) the volatility of the claims and benefits covered by the undertaking;
- c) the market risks that the investments of the undertaking give rise to;
- d) the level of risk concentrations;
- e) the total number of classes of life and non-life insurance for which authorisation is granted;
- f) possible effects of the management of the assets of the undertaking on financial stability;
- g) the systems and structures of the undertaking which enable it to provide information for supervisory purposes and the written policy referred to in Article 62, paragraph 5, of the law;
- h) the appropriateness of the system of governance of the undertaking;
- i) the level of own funds covering the Solvency Capital Requirement and the Minimum Capital Requirement;
- j) whether the undertaking is a captive insurance or reinsurance undertaking limited to covering risks associated with the industrial or commercial group to which it belongs.

Art 6. – Conservation of documents

- (1) Luxembourg insurance and reinsurance undertakings are required to hold at any time the following records and other documentation in the Grand Duchy of Luxembourg :
- a) the undertaking's articles of association, the minutes of the general meetings and of the board meetings and any other statutory document of the undertaking;
 - b) the accepted and retroceded insurance and reinsurance contracts;
 - c) the documents establishing the powers of the undertaking's bodies and the delegation of those powers;
 - d) all records and other documentation necessary for the establishment of a balance sheet and a profit and loss account at any time;
 - e) all contracts or conventions binding the insurance or reinsurance undertaking.
- Documents relating to contracts and commitments entered into by a branch abroad must be kept within those branches.
- (2) Points b), c) d) and e) of paragraph 1 apply to Luxembourg branches of third country insurance and reinsurance undertakings.

Art. 7. Enforceability of the portfolio transfer in the field of reinsurance

In respect of the risks accepted by a reinsurance undertaking authorised in the Grand Duchy of Luxembourg, the authorised portfolio transfer is enforceable upon ceding insurance or reinsurance undertakings within the limits and the conditions fixed by the reinsurance treaty concerned by the transfer.

Chapter III – Conditions governing business

Art. 8. – Risk Management

- (1) Where insurance or reinsurance undertakings apply the matching adjustment referred to in Article 13 of the present regulation or the volatility adjustment referred to in Article 15 of the present regulation, they shall establish a liquidity plan to include estimates of the cash in- and out-flows with respect to the assets and liabilities being subject to the adjustments and corrections.
- (2) As regards asset-liability management, insurance and reinsurance undertakings shall regularly assess:
- a) the sensitivity of their technical provisions and eligible own funds to the assumptions underlying the extrapolation of the relevant risk- free interest rate term structure;
 - b) where the matching adjustment is applied:
 - 1. the sensitivity of their technical provisions and eligible own funds to the assumptions underlying the calculation of the matching adjustment, including the calculation of the fundamental spread, and the possible effect of a forced sale of assets on their eligible own funds;
 - 2. the sensitivity of their technical provisions and eligible own funds to changes in the composition of the assigned portfolio of assets;
 - 3. the impact of a reduction of the matching adjustment to zero;
 - c) where the volatility adjustment is applied:

1. the sensitivity of their technical provisions and eligible own funds to the assumptions underlying the calculation of the volatility adjustment and the possible effect of a forced sale of assets on their eligible own funds;
2. the impact of a reduction of the volatility adjustment to zero.

Insurance and reinsurance undertakings shall submit the assessments referred to in points a), b) and c) of the first subparagraph annually to the CAA as part of the information reported under Article 62 of the law. Where the reduction of the matching adjustment or the volatility adjustment to zero would result in non-compliance with the Solvency Capital Requirement, the undertaking shall also submit an analysis of the measures it could apply in such a situation to re-establish the level of eligible own funds covering the Solvency Capital Requirement or to reduce its risk profile to restore compliance with the Solvency Capital Requirement.

Where the volatility adjustment is applied, the written policy on risk management referred to in Article 71, paragraph 3, shall include a policy on the criteria for the application of the volatility adjustment.

- (3) In order to avoid overreliance on external credit assessment institutions when they use external credit rating assessments in the calculation of technical provisions and the Solvency Capital Requirement, insurance and reinsurance undertakings shall assess the appropriateness of those external credit assessments as part of their risk management by using additional assessments wherever practicably possible in order to avoid any automatic dependence on such external assessments.

Art. 9. – Evaluation of the conformity in case of use of a matching adjustment, a volatility adjustment or a transitional measure

Where the insurance or reinsurance undertaking applies the matching adjustment, the volatility adjustment or the transitional measures referred to in Articles 99 et 100 of the present regulation, it shall perform the assessment of compliance with the capital requirements referred to in Article 75, paragraph 1, point b), of the law, with and without taking into account those adjustments and transitional measures.

Chapter IV – Valuation of assets and liabilities, technical provisions, own funds, Solvency Capital Requirement, Minimum Capital Requirement and investment rules

Section 1 – Separate management

Art. 10. - Separation of life and non-life insurance management

- (1) Without prejudice to Articles 104 and 112 of the law, the insurance undertakings referred to in Article 96, paragraph 2, of the law shall calculate:
 - a) a notional life Minimum Capital Requirement with respect to their life insurance or reinsurance activity, calculated as if the undertaking concerned only pursued that activity, on the basis of the separate accounts referred to in paragraph 4; and
 - b) a notional non-life Minimum Capital Requirement with respect to their non-life insurance or reinsurance activity, calculated as if the undertaking concerned only pursued that activity, on the basis of the separate accounts referred to in paragraph 3.
- (2) As a minimum, the insurance undertakings referred to in Article 96, paragraph 2, of the law shall cover the following requirements by an equivalent amount of eligible basic own-fund items:

- a) the notional life Minimum Capital Requirement, in respect of the life activity;
- b) the notional non-life Minimum Capital Requirement, in respect of the non-life activity.

The minimum financial obligations referred to in the first subparagraph, in respect of the life insurance activity and the non-life insurance activity, shall not be sustained by the other activity.

- (3) As long as the minimum financial obligations referred to in paragraph 2 are fulfilled and provided the CAA is informed, the undertaking may, in order to cover the Solvency Capital Requirement referred to in Article 104 of the law, use the explicit eligible own-fund items which are still available for one or the other activity.
- (4) Accounts shall be drawn up so as to show the sources of the results for life and non-life insurance separately. All income, in particular premiums, recoveries from reinsurers and investment income, and expenditure, in particular insurance settlements, additions to technical provisions, reinsurance premiums and operating expenses in respect of insurance business, shall be broken down according to origin. Items common to both activities shall be entered in the accounts in accordance with methods of apportionment accepted by the CAA.

Insurance undertakings shall, on the basis of the accounting records, prepare a statement in which the eligible basic own-fund items covering each notional amount of Minimum Capital Requirement as referred to in paragraph 1 are clearly identified, in accordance with Article 31, paragraph 4 of the present regulation.

- (5) If the amount of eligible basic own-fund items with respect to one of the activities is insufficient to cover the minimum financial obligations referred to in the first subparagraph of paragraph 2, the CAA shall apply to the activity in deficit the measures provided for in the law, whatever the results from the other activity.

By way of derogation from the second subparagraph of paragraph 2, those measures may involve the authorisation of a transfer of explicit eligible basic own-fund items from one activity to the other.

Section 2 – Technical provisions

Art. 11. – Calculation of technical provisions

- (1) The calculation of the best estimate, in accordance with Article 101 of the Law, (hereinafter referred to as “best estimate”) shall be based upon up-to-date and credible information and realistic assumptions and be performed using adequate, applicable and relevant actuarial and statistical methods.

The cash-flow projection used in the calculation of the best estimate shall take account of all the cash in- and out-flows required to settle the insurance and reinsurance obligations over the lifetime thereof.

The best estimate shall be calculated gross, without deduction of the amounts recoverable from reinsurance contracts and special purpose vehicles. Those amounts shall be calculated separately, in accordance with Article 20 of the present regulation.

- (2) Where insurance and reinsurance undertakings value the best estimate and the risk margin separately, insurance and reinsurance undertakings must calculate the risk margin by determining the cost of providing an amount of eligible own funds equal to the Solvency Capital Requirement necessary to support the insurance and reinsurance obligations over the lifetime thereof.

- (3) The rate to be used in the determination of the cost of providing that amount of eligible own funds (Cost-of-Capital rate) shall be the same for all insurance and reinsurance undertakings.
- (4) The Cost-of-Capital rate to be used is equal to the additional rate, in addition to the relevant risk-free interest rate, that an insurance or reinsurance undertaking would incur holding an amount of eligible own funds, as set out in Section 2 of this Chapter, equal to the Solvency Capital Requirement necessary to support insurance and reinsurance obligations over the lifetime of those obligations.

Art. 12. - Extrapolation of the relevant risk-free interest rate term structure

The determination of the relevant risk-free interest rate term structure referred to in Article 101, paragraph 2, of the law shall make use of, and be consistent with, information derived from relevant financial instruments. That determination shall take into account relevant financial instruments of those maturities where the markets for those financial instruments as well as for bonds are deep, liquid and transparent. For maturities where the markets for the relevant financial instruments or for bonds are no longer deep, liquid and transparent, the relevant risk-free interest rate term structure shall be extrapolated.

The extrapolated part of the relevant risk-free interest rate term structure shall be based on forward rates converging smoothly from one or a set of forward rates in relation to the longest maturities for which the relevant financial instrument and the bonds can be observed in a deep, liquid and transparent market to an ultimate forward rate.

Art. 13. - Matching adjustment to the relevant risk-free interest rate term structure

- (1) Insurance and reinsurance undertakings may apply a matching adjustment to the relevant risk-free interest rate term structure to calculate the best estimate of a portfolio of life insurance or reinsurance obligations, including annuities stemming from non-life insurance or reinsurance contracts subject to prior approval by the CAA where the following conditions are met:
 - a) the insurance or reinsurance undertakings have assigned a portfolio of assets, consisting of bonds and other assets with similar cash-flow characteristics, to cover the best estimate of the portfolio of insurance or reinsurance obligations and maintain that assignment over the lifetime of the obligations, except for the purpose of maintaining the replication of expected cash flows between assets and liabilities where the cash flows have materially changed;
 - b) the portfolio of insurance or reinsurance obligations to which the matching adjustment is applied and the assigned portfolio of assets are identified, organised and managed separately from other the activities of the undertakings, and the assigned portfolio of assets cannot be used to cover losses arising from other activities of the undertakings;
 - c) the expected cash flows of the assigned portfolio of assets replicate each of the expected cash flows of the portfolio of insurance or reinsurance obligations in the same currency and any mismatch does not give rise to risks which are material in relation to the risks inherent in the insurance or reinsurance business to which the matching adjustment is applied;
 - d) the contracts underlying the portfolio of insurance or reinsurance obligations do not give rise to future premium payments;
 - e) the only underwriting risks connected to the portfolio of insurance or reinsurance obligations are longevity risk, expense risk, revision risk and mortality risk;

- f) where the underwriting risk connected to the portfolio of insurance or reinsurance obligations includes mortality risk, the best estimate of the portfolio of insurance or reinsurance obligations does not increase by more than 5 % under a mortality risk stress that is calibrated in accordance with Article 105 of the law ;
- g) the contracts underlying the portfolio of insurance or reinsurance obligations include no options for the policy holder or, except for a surrender option where the surrender value does not exceed the value of the assets, valued in accordance with Article 99 of the law, covering the insurance or reinsurance obligations at the time the surrender option is exercised;
- h) the cash flows of the assigned portfolio of assets are fixed and cannot be changed by the issuers of the assets or any third parties;
- i) the insurance or reinsurance obligations of an insurance or reinsurance contract are not split into different parts when composing the portfolio of insurance or reinsurance obligations for the purpose of this paragraph.

Notwithstanding point h) of the first subparagraph, insurance or reinsurance undertakings may use assets where the cash flows are fixed except for an indexation for inflation, provided that those assets replicate the cash flows of the portfolio of insurance or reinsurance obligations that themselves are inflation dependent.

In the event that issuers or third parties have the right to change the cash flows of an asset in such a manner that the investor receives sufficient compensation to allow it to obtain the same cash flows by re-investing in assets of an equivalent or better credit quality, the right to change the cash flows shall not disqualify the asset for admissibility to the assigned portfolio.

- (2) Insurance or reinsurance undertakings that apply the matching adjustment to a portfolio of insurance or reinsurance obligations shall not revert back to an approach that does not include a matching adjustment. Where an insurance or reinsurance undertaking that applies the matching adjustment is no longer able to comply with the conditions set out in paragraph 1, it shall immediately inform the CAA and take the necessary measures to restore compliance with those conditions. Where the undertaking is not able to restore compliance with those conditions within two months, it shall cease to apply the matching adjustment to any of its insurance or reinsurance obligations and shall not apply the matching adjustment for a period of a further 24 months.
- (3) The matching adjustment shall not be applied with respect to insurance or reinsurance obligations where the relevant risk-free interest rate term structure used to calculate the best estimate for those obligations includes a volatility adjustment under Article 15 of the present regulation or a transitional measure on the risk-free interest rates under Article 99 of the present regulation.

Art. 14. - Calculation of the matching adjustment

- (1) For each currency the matching adjustment referred to in Article 13 of the present regulation shall be calculated in accordance with the following principles:
 - a) the matching adjustment must be equal to the difference between the following amounts:
 - 1. the annual effective rate, calculated as the single discount rate that, where applied to the cash flows of the portfolio of insurance or reinsurance obligations, results in a value that is equal to the value calculated in accordance with Article 99 of the law of the portfolio of assigned assets;
 - 2. the annual effective rate, calculated as the single discount rate that, where applied to the cash flows of the portfolio of insurance or reinsurance

obligations, results in a value that is equal to the value of the best estimate of the portfolio of insurance or reinsurance obligations where the time value of money is taken into account using the basic risk-free interest rate term structure;

- b) the matching adjustment must not include the fundamental spread reflecting the risks retained by the insurance or reinsurance undertaking;
 - c) notwithstanding point a), the fundamental spread must be increased where necessary to ensure that the matching adjustment for assets with sub-investment grade credit quality does not exceed the matching adjustments for assets of investment grade credit quality and the same duration and asset class;
 - d) the use of external credit assessments in the calculation of the matching adjustment must be in accordance with the delegated acts of the European Commission taken pursuant to Article 111, paragraph 1, point n) of Directive 2009/138/EC.
- (2) For the purpose of paragraph 1, point b), the fundamental spread shall be equal to the sum of the following elements :
- a) the credit spread corresponding to the probability of default of the assets;
 - b) the credit spread corresponding to the expected loss resulting from downgrading of the assets;

subject to the following provisions :

1. for exposures to Member States' central governments and central banks, the fundamental spread shall not be lower than 30 % of the long-term average of the spread over the risk-free interest rate of assets of the same duration, credit quality and asset class, as reflected in financial markets;
2. for assets other than exposures to Member States' central governments and central banks, the fundamental spread shall not be lower than 35 % of the long-term average of the spread over the risk-free interest rate of assets of the same duration, credit quality and asset class, as reflected in financial markets.

The probability of default referred to in point 1., of the first subparagraph shall be based on long-term default statistics that are relevant for the asset in question in relation to its duration, credit quality and asset class.

Where no reliable credit spread can be derived from the default statistics referred to in the second subparagraph, the fundamental spread shall be equal to the portion of the long-term average of the spread over the risk-free interest rate set out in points 1) and 2) of the present paragraph.

Art.15. - Volatility adjustment to the relevant risk-free interest rate term structure

- (1) Insurance and reinsurance undertakings may apply a volatility adjustment to the relevant risk-free interest rate term structure to calculate the best estimate.
- (2) For each relevant currency, the volatility adjustment to the relevant risk-free interest rate term structure shall be based on the spread between the interest rate that could be earned from assets included in a reference portfolio for that currency and the rates of the relevant basic risk-free interest rate term structure for that currency. The reference portfolio for a currency shall be representative of the assets which are denominated in that currency and in which insurance and reinsurance undertakings are invested in to cover the best estimate for insurance and reinsurance obligations denominated in that currency.

- (3) The amount of the volatility adjustment to risk-free interest rates shall correspond to 65 % of the risk-corrected currency spread.

The risk-corrected currency spread shall be calculated as the difference between the spread referred to in paragraph 2 and the portion of that spread that is attributable to a realistic assessment of expected losses or unexpected credit or other risk of the assets.

The volatility adjustment shall apply only to the relevant risk-free interest rates of the term structure that are not derived by means of extrapolation in accordance with Article 12 of the present regulation. The extrapolation of the relevant risk-free interest rate term structure shall be based on those adjusted risk-free interest rates.

- (4) For each relevant country, the volatility adjustment to the risk-free interest rates referred to in paragraph 3 for the currency of that country shall, before application of the 65 % factor, be increased by the difference between the risk-corrected country spread and twice the risk-corrected currency spread, whenever that difference is positive and the risk-corrected currency spread is higher than 100 basis points. The increased volatility adjustment shall be applied to the calculation of the best estimate for insurance and reinsurance obligations of products sold in the insurance market of that country. The risk-corrected country spread is calculated in the same way as the risk-corrected currency spread for the currency of that country, but based on a reference portfolio that is representative for the assets which insurance and reinsurance undertakings are invested in to cover the best estimate for insurance and reinsurance obligations of products sold in the insurance market of that country and denominated in the currency of that country.
- (5) The volatility adjustment shall not be applied with respect to insurance obligations where the relevant risk-free interest rate term structure to calculate the best estimate for those obligations includes a matching adjustment under Article 13 of the present regulation.
- (6) By way of derogation from Article 105 of the law, the Solvency Capital Requirement shall not cover the risk of loss of basic own funds resulting from changes of the volatility adjustment.

Art. 16. – Technical information adopted by the European Commission

- (1) Insurance and reinsurance undertakings shall use the technical information adopted by the European Commission in calculating the best estimate, the matching adjustment and the volatility adjustment.
- (2) Where the European Commission has not foreseen any volatility adjustment, insurance and reinsurance undertakings shall not apply a volatility adjustment to the relevant risk-free interest rate term structure to calculate the best estimate.

Art. 17. – Other elements to consider in the calculation of the technical provisions

Besides the provisions of Article 101 of the law and Article 11 of the present regulation, insurance and reinsurance undertakings shall be obliged to take account of the following elements when calculating their technical provisions:

- a) all expenses that will be incurred in servicing insurance and reinsurance obligations;
- b) inflation, including expenses and claims inflation;
- c) all payments to policy holders and beneficiaries, including future discretionary bonuses, which insurance and reinsurance undertakings expect to make in the future, whether or not those payments are contractually guaranteed, unless those payments fall under Article 103, paragraph 2, of the law.

Art. 18. - Valuation of financial guarantees and contractual options included in insurance and reinsurance contracts

When calculating technical provisions, insurance and reinsurance undertakings shall take account of the value of financial guarantees and any contractual options included in their insurance and reinsurance policies.

Any assumptions made by insurance and reinsurance undertakings with respect to the likelihood that policy holders will exercise contractual options, including lapses and surrenders, shall be realistic and based on current and credible information. The assumptions shall take account, either explicitly or implicitly, of the impact that future changes in financial and non-financial conditions may have on the exercise of those options.

Art. 19. - Segmentation

Insurance and reinsurance undertakings shall segment their insurance and reinsurance obligations into homogeneous risk groups, and as a minimum by lines of business, when calculating their technical provisions.

Art. 20. – Provisions and recoverables arising from reinsurance contracts and special purpose vehicles

Insurance and reinsurance undertakings shall comply with Articles "..."⁶ 100 and 101 of the law and Articles 11 to 19 of the present regulation when calculating technical provisions and amounts recoverable from reinsurance contracts and special purpose vehicles.

When calculating technical provisions and amounts recoverable from reinsurance contracts and special purpose vehicles, insurance and reinsurance undertakings shall take account of the time difference between recoveries and their payment.

The result from that calculation shall be adjusted to take account of expected losses due to any counterparty default. That adjustment shall be based on an assessment of the probability of default of the counterparty and the average loss resulting therefrom (loss-given- default).

Art. 21. - Data quality and application of approximations, including case-by-case approaches, for technical provisions

Insurance and reinsurance undertakings shall have internal processes and procedures in place to ensure the appropriateness, completeness and accuracy of the data used in the calculation of their technical provisions

Where, in specific circumstances, insurance and reinsurance undertakings have insufficient data of appropriate quality to apply a reliable actuarial method to a set or subset of their insurance and reinsurance obligations, or amounts recoverable from reinsurance contracts and special purpose vehicles, appropriate approximations, including case-by-case approaches, may be used in the calculation of the best estimate.

Art. 22. - Comparison against experience-based data

Insurance and reinsurance undertakings shall have processes and procedures in place to ensure that best estimates, and the assumptions underlying the calculation of best estimates, are regularly compared against experience.

⁶ removed by RCAA 16/01 of 3 May 2016

Where the comparison identifies any systematic deviation between experience and the best estimate calculations of the insurance or reinsurance undertaking, the undertaking concerned shall make appropriate adjustments to the actuarial methods being used and/or the assumptions being made.

Art. 23. - Appropriateness of the level of technical provisions

Upon request from the CAA, insurance and reinsurance undertakings shall demonstrate the appropriateness of the level of their technical provisions, as well as the applicability and relevance of the methods applied, and the adequacy of the underlying statistical data used.

Art. 24. – Increasing the technical provisions

To the extent that the calculation of technical provisions of insurance and reinsurance undertakings does not comply with Articles 100 and 101 of the law and Articles 11 to 22 of the present regulation, the CAA may require insurance and reinsurance undertakings to increase the amount of technical provisions so that they correspond to the level determined pursuant to those Articles.

Section 3 – Own funds

Subsection 1 – Determination of own funds

Art. 25. - Ancillary own funds

- (1) Ancillary own funds may comprise the following items to the extent that they are not basic own-fund items:
- a) unpaid share capital or the initial fund that has not been called up;
 - b) letters of credit and guarantees;
 - c) any other legally binding commitments received by insurance and reinsurance undertakings.

In the case of a mutual or mutual-type association with variable contributions, ancillary own funds may also comprise any future claims which that association may have against its members by way of a call for supplementary contribution, within the following 12 months.

- (2) Where an ancillary own-fund item has been paid in or called up, it shall be treated as an asset and cease to form part of ancillary own-fund items.

Art. 26. - CAA approval of ancillary own funds

- (1) The amounts of ancillary own-fund items to be taken into account when determining own funds shall be subject to prior approval by the CAA.
- (2) The amount ascribed to each ancillary own-fund item shall reflect the loss-absorbency of the item and shall be based upon prudent and realistic assumptions. Where an ancillary own-fund item has a fixed nominal value, the amount of that item shall be equal to its nominal value, where it appropriately reflects its loss-absorbency.
- (3) The CAA shall approve either of the following:
- a) a monetary amount for each ancillary own-fund item;

- b) a method by which to determine the amount of each ancillary own-fund item, in which case CAA approval of the amount determined in accordance with that method shall be granted for a specified period of time.
- (4) For each ancillary own-fund item, the CAA shall base its approval on an assessment of the following:
- a) the status of the counterparties concerned, in relation to their ability and willingness to pay;
 - b) the recoverability of the funds, taking account of the legal form of the item, as well as any conditions which would prevent the item from being successfully paid in or called up;
 - c) any information on the outcome of past calls which insurance and reinsurance undertakings have made for such ancillary own funds, to the extent that information can be reliably used to assess the expected outcome of future calls.

Subsection 2 – Classification of own funds

Art. 27. - Characteristics and features used to classify own funds into tiers

- (1) Own-fund items shall be classified into three tiers. The classification of those items shall depend upon whether they are basic own fund or ancillary own-fund items and the extent to which they possess the following characteristics:
- a) the item is available, or can be called up on demand, to fully absorb losses on a going-concern basis, as well as in the case of winding-up (permanent availability);
 - b) in the case of winding-up, the total amount of the item is available to absorb losses and the repayment of the item is refused to its holder until all other obligations, including insurance and reinsurance obligations towards policy holders and beneficiaries of insurance and reinsurance contracts, have been met (subordination).
- (2) When assessing the extent to which own-fund items possess the characteristics set out in points (a) and (b) of paragraph 1, currently and in the future, due consideration shall be given to the duration of the item, in particular whether the item is dated or not. Where an own-fund item is dated, the relative duration of the item as compared to the duration of the insurance and reinsurance obligations of the undertaking shall be considered (sufficient duration).

In addition, the following features shall be considered:

- a) whether the item is free from requirements or incentives to redeem the nominal sum (absence of incentives to redeem);
- b) whether the item is free from mandatory fixed charges (absence of mandatory servicing costs);
- c) whether the item is clear of encumbrances (absence of encumbrances).

Art. 28. - Main criteria for the classification into tiers

- (1) Basic own-fund items shall be classified in Tier 1 where they substantially possess the characteristics set out in Article 27, paragraph 1, points a) and b), taking into consideration the features set out in Article 27, paragraph 2 of the present regulation.

- (2) Basic own-fund items shall be classified in Tier 2 where they substantially possess the characteristic set out in Article 27, paragraph 1, point b), taking into consideration the features set out in Article 27, paragraph 2 of the present regulation.

Ancillary own-fund items shall be classified in Tier 2 where they substantially possess the characteristics set out in Article 93(1)(a) and (b), taking into consideration the features set out in Article 93(2).

- (3) Any basic and ancillary own-fund items which do not fall under paragraphs 1 and 2 shall be classified in Tier 3.

Art. 29. - Classification of own funds into tiers

Insurance and reinsurance undertakings shall classify their own-fund items on the basis of the criteria laid down in Article 28 of the present regulation.

For that purpose, insurance and reinsurance undertakings shall refer, where applicable, to the list of own-fund items deemed to fulfil the conditions of Article 28 of the present regulation.

Where an own-fund item is not covered by that list, it shall be assessed and classified by insurance and reinsurance undertakings, in accordance with the first subparagraph. That classification shall be subject to approval by the supervisory authority.

Art. 30. - Classification of specific insurance own-fund items

Without prejudice to Article 29 of the present regulation and the list of own-funds deemed to fulfil the conditions of Article 28 of the present regulation for the purposes of the present regulation the following classifications shall be applied:

- a) surplus funds falling under Article 103, "subparagraph 2,"⁷ of the law shall be classified in Tier 1;
- b) letters of credit and guarantees which are held in trust for the benefit of insurance creditors by an independent trustee and provided by credit institutions authorised in accordance with Directive 2006/48/EC shall be classified in Tier 2;
- c) any future claims which mutual or mutual-type associations of shipowners with variable contributions solely insuring risks listed in classes 6, 12 and 17 in Part A of Annex I of the law may have against their members by way of a call for supplementary contributions, within the following 12 months, shall be classified in Tier 2.

In accordance with Article 28, paragraph 2, subparagraph 2, any future claims which mutual or mutual-type associations with variable contributions may have against their members by way of a call for supplementary contributions, within the following 12 months, not falling under point c) of the first subparagraph shall be classified in Tier 2 where they substantially possess the characteristics set out in Article 27, paragraph 1, points a) and b), taking into consideration the features set out in Article 27, paragraph 2 of the present regulation.

Sub-section 3 – Eligibility of own funds

Art. 31. - Eligibility and limits applicable to Tiers 1, 2 and 3

- (1) Without prejudice to Article 82 of Commission Delegated Regulation (EU) 2015/35 of 10 October 2014 supplementing Directive 2009/138/EC of the European Parliament

⁷ RCAA 16/01 of 3 May 2016

and of the Council on the taking up and pursuit of the business of insurance and reinsurance (Solvency II) (hereinafter referred to as "Delegated Regulation (EU) 2015/35"), as regards compliance with the Solvency Capital Requirement, the eligible amounts of the Tier 2 and Tier 3 items are subject to quantitative limits. These limits are such that they ensure, at least, that the following conditions are met:

- a) the proportion of Tier 1 items in the eligible own funds is higher than one third of the total amount of eligible own funds;
 - b) the eligible amount of Tier 3 items is less than one third of the total amount of eligible own funds.
- (2) As far as compliance with the Minimum Capital Requirement is concerned, the amount of basic own-fund items eligible to cover the Minimum Capital Requirement which are classified in Tier 2 shall be subject to quantitative limits. Those limits shall be such as to ensure, as a minimum, that the proportion of Tier 1 items in the eligible basic own funds is higher than one half of the total amount of eligible basic own funds.
- (3) The eligible amount of own funds to cover the Solvency Capital Requirement set out in Article 104 of the law shall be equal to the sum of the amount of Tier 1 items, the eligible amount of Tier 2 items and the eligible amount of Tier 3 items.
- (4) The eligible amount of basic own funds to cover the Minimum Capital Requirement set out in Article 112 of the law shall be equal to the sum of the amount of Tier 1 items and the eligible amount of basic own-fund items classified in Tier 2.

Section 4 – Solvency Capital Requirement

Subsection 1 - General provisions concerning the Solvency Capital Requirement, calculated using the standard formula or an internal model

Art. 32. – Calculation of the solvency capital requirement

- (1) The Solvency Capital Requirement shall cover at least the following risks:
- a) non-life underwriting risk; b) life underwriting risk;
 - b) health underwriting risk;
 - c) market risk;
 - d) counterparty default risk;
 - e) operational risk.

Operational risk as referred to in point (f) of the first subparagraph shall include legal risks, and exclude risks arising from strategic decisions, as well as reputation risks.

- (2) When calculating the Solvency Capital Requirement, insurance and reinsurance undertakings shall take account of the effect of risk- mitigation techniques, provided that credit risk and other risks arising from the use of such techniques are properly reflected in the Solvency Capital Requirement.

Subsection 2 – Solvency capital requirement – standard formula

Art. 33. - Structure of the standard formula

The Solvency Capital Requirement calculated on the basis of the standard formula shall be the sum of the following items:

- a) the Basic Solvency Capital Requirement, as laid down in Article 34 of the present regulation;
- b) the capital requirement for operational risk, as laid down in Article 37 of the present regulation;
- c) the adjustment for the loss-absorbing capacity of technical provisions and deferred taxes, as laid down in Article 38 of the present regulation.

Art. 34. – Risk modules of the Basic Solvency Capital Requirement

- (1) The Basic Solvency Capital Requirement shall comprise individual risk modules, which are aggregated in accordance with point 1 of the present regulation's Annex.

It shall comprise of the following risk modules:

- a) non-life underwriting risk;
 - b) life underwriting risk;
 - c) health underwriting risk; d) market risk;
 - d) counterparty default risk.
- (2) For the purposes of points a), b) and c) of paragraph 1, insurance or reinsurance operations shall be allocated to the underwriting risk module that best reflects the technical nature of the underlying risks.
 - (3) Each of the risk modules comprised in the Basic Solvency Capital Requirement shall be calibrated using a Value-at-Risk measure, with a 99,5 % confidence level, over a one-year period.

Where appropriate, diversification effects shall be taken into account in the design of each risk module.

- (4) Insurance and reinsurance undertakings as well as the CAA shall ensure that the calibration of the capital requirements for each risk module and the correlation coefficients applied for the aggregation of the risk modules referred to in paragraph 1 result in an overall Solvency Capital Requirement which complies with the principles set out in Article 105 of the law.

With regard to risks arising from catastrophes, geographical specifications may, where appropriate, be used for the calculation of the life, non-life and health underwriting risk modules.

- (5) Subject to the approval of the CAA, insurance and reinsurance undertakings may, within the design of the standard formula, replace a subset of its parameters by parameters specific to the undertaking concerned when calculating the life, non-life and health underwriting risk modules.

Such parameters shall be calibrated on the basis of the internal data of the undertaking concerned, or of data which is directly relevant for the operations of that undertaking using standardised methods.

Before granting its approval, the CAA shall verify the completeness, accuracy and appropriateness of the data used.

Those specific parameters shall be calculated in such a way so as to ensure that the undertaking complies with Article 105 of the law.

Art. 35. - Calculation of the Basic Solvency Capital Requirement

- (1) The Basic Solvency Capital Requirement shall be calculated in accordance with paragraphs 2 to 6.

- (2) The non-life underwriting risk module shall reflect the risk arising from non-life insurance obligations, in relation to the perils covered and the processes applied in the conduct of this activity.

It shall take account of the uncertainty in the results of insurance and reinsurance undertakings related to the existing insurance and reinsurance obligations as well as to the new business expected to be written over the following 12 months.

It shall be calculated, in accordance with point 2 of the present regulation's Annex, as a combination of the capital requirements for at least the following sub- modules:

- a) the risk of loss, or of adverse change in the value of insurance liabilities, resulting from fluctuations in the timing, frequency and severity of insured events, and in the timing and amount of claim settlements (non-life premium and reserve risk);
 - b) the risk of loss, or of adverse change in the value of insurance liabilities, resulting from significant uncertainty of pricing and provisioning assumptions related to extreme or exceptional events (non-life catastrophe risk).
- (3) The life underwriting risk module shall reflect the risk arising from life insurance obligations, in relation to the perils covered and the processes applied in the conduct of this activity.

It shall be calculated, in accordance with point 3 of the present regulation's Annex, as resulting from a combination of the capital requirements for at least the following sub- modules:

- a) the risk of loss or of adverse change in the value of insurance liabilities, resulting from fluctuations in the level, trend or volatility of mortality rates, where an increase in the mortality rate leads to an increase in the value of insurance liabilities (mortality risk);
 - b) the risk of loss or of adverse change in the value of insurance liabilities, resulting from fluctuations in the level, trend or volatility of mortality rates, where a decrease in the mortality rate leads to an increase in the value of insurance liabilities (longevity risk);
 - c) the risk of loss or of adverse change in the value of insurance liabilities, resulting from fluctuations in the level, trend or volatility of disability, sickness and morbidity rates (disability – morbidity risk);
 - d) the risk of loss or of adverse change in the value of insurance liabilities, resulting from fluctuations in the level, trend or volatility of the expenses incurred in servicing insurance or reinsurance contracts (life-expense risk);
 - e) the risk of loss or of adverse change in the value of insurance liabilities, resulting from fluctuations in the level, trend or volatility of the revision rates applied to annuities, due to changes in the legal environment or in the state of health of the person insured (revision risk);
 - f) the risk of loss or of adverse change in the value of insurance liabilities, resulting from fluctuations in the level or volatility of the rates of policy lapses, terminations, renewals and surrenders (lapse risk);
 - g) the risk of loss or of adverse change in the value of insurance liabilities, resulting from the significant uncertainty of pricing and provisioning assumptions related to extreme or irregular events (life-catastrophe risk).
- (4) The health underwriting risk module shall reflect the risk arising from the underwriting of health insurance liabilities, whether it is pursued on a similar technical basis to that of life insurance or not, following from both the perils covered and the processes used in the conduct of business.

It shall cover at least the following risks:

- a) the risk of loss or of adverse change in the value of insurance liabilities, resulting from changes in the level, trend or volatility of the expenses incurred in servicing insurance or reinsurance contracts;
 - b) the risk of loss or of adverse change in the value of insurance liabilities, resulting from fluctuations in the timing, frequency and severity of insured events and in the timing and amount of claim settlements at the time of provisioning;
 - c) the risk of loss or of adverse change in the value of insurance liabilities, resulting from the significant uncertainty of pricing and provisioning assumptions related to outbreaks of major epidemics, as well as the unusual accumulation of risks under such extreme circumstances.
- (5) The market risk module shall reflect the risk arising from the level or volatility of market prices of financial instruments which have an impact upon the value of the assets and liabilities of the undertaking concerned. It shall properly reflect the structural mismatch between assets and liabilities, in particular with respect to the duration thereof.

It shall be calculated, in accordance with point 4 of the present regulation's Annex, as a combination of the capital requirements for at least the following sub- modules:

- a) the sensitivity of the values of assets, liabilities and financial instruments to changes in the term structure of interest rates or in the volatility of interest rates (interest rate risk);
 - b) 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 (equity risk);
 - c) the sensitivity of the values of assets, liabilities and financial instruments to changes in the level or in the volatility of market prices of real estate (property risk);
 - d) the sensitivity of the values of assets, liabilities and financial instruments to changes in the level or in the volatility of credit spreads over the risk-free interest rate term structure (spread risk);
 - e) the sensitivity of the values of assets, liabilities and financial instruments to changes in the level or in the volatility of currency exchange rates (currency risk);
 - f) additional risks to an insurance or reinsurance undertaking stemming either from lack of diversification in the asset portfolio or from large exposure to default risk by a single issuer of securities or a group of related issuers (market risk concentrations).
- (6) The counterparty default risk module shall reflect possible losses due to unexpected default, or deterioration in the credit standing, of the counterparties and debtors of insurance and reinsurance undertakings over the following 12 months. The counterparty default risk module shall cover risk-mitigating contracts, such as reinsurance arrangements, securitisations and derivatives, and receivables from intermediaries, as well as any other credit exposures which are not covered in the spread risk sub-module. It shall take appropriate account of collateral or other security held by or for the account of the insurance or reinsurance undertaking and the risks associated therewith.

For each counterparty, the counterparty default risk module shall take account of the overall counterparty risk exposure of the insurance or reinsurance undertaking concerned to that counterparty, irrespective of the legal form of its contractual obligations to that undertaking.

- (7) For the purposes of paragraph 5, point e), the following rules shall apply with regard to monetary matching:
- a) where the guarantees of an insurance contract are expressed in a specific currency, the commitments of the insurance undertaking shall be considered as due in that currency;
 - b) where the guarantees of an insurance contract are not expressed in a currency, the commitments of the insurance undertaking shall be considered as due in the currency of the country in which the risk is situated. However, the insurance undertaking may choose the currency in which the premium is expressed if there are cases justifying such a choice. This may be the case where, as soon as the contract is concluded, it seems likely that a claim will be paid not in the currency of the country where the risk is situated, but in the currency of the premium;
 - c) where a claim has been reported to the insurance undertaking and the benefits are payable in a specific currency other than that resulting from the application of the aforementioned methods, the liabilities of the insurance undertaking shall be considered payable in that currency, in particular that in which the benefit to be paid by the insurance undertaking has been fixed by a court decision or by agreement between the insurance undertaking and the insured;
 - d) where a claim is valued in a currency known in advance to the insurance undertaking but different from that resulting from the application of the aforementioned methods, the latter may consider its commitments as due in that currency.

Art. 36. - Calculation of the equity risk sub-module

- (1) 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.
- (2) The symmetric adjustment made to the standard equity capital charge, calibrated in accordance with Article 34, paragraph 3 of the present regulation, covering the risk arising from changes in the level of equity prices 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.
- (3) The symmetric adjustment made to the standard equity capital charge covering the risk arising from changes in the level of equity prices shall not result in an equity capital charge being applied that is more than 10 percentage points lower or 10 percentage points higher than the standard equity capital charge.
- “(4) Notwithstanding paragraph 3 and Articles 104, 105, paragraph 3, and 107 of the law, the standard parameters to be used for equities that the undertaking purchased on or before 1 January 2016, when calculating the equity risk sub-module in accordance with the standard formula without the option set out in Article 304 of Directive 2009/138/EC shall be calculated as the weighted averages of:
- a) the standard parameter to be used when calculating the equity risk sub-module in accordance with Article 304 of Directive 2009/138/EC; and
 - b) the standard parameter to be used when calculating the equity risk sub-module in accordance with the standard formula without the option set out in Article 304 of Directive 2009/138/EC.”⁸

⁸ RCAA 16/01 of 3 May 2016

The weight for the parameter expressed in point b) of the first subparagraph shall increase at least linearly at the end of each year from 0 % during the year starting on 1st January 2016 to 100 % on 1st January 2023.

Art. 37. - Capital requirement for operational risk

- (1) The capital requirement for operational risk shall reflect operational risks to the extent they are not already reflected in the risk modules referred to in Article 34 of the present regulation. That requirement shall be calibrated in accordance with Article 105, paragraph 3, of the law.
- (2) With respect to life insurance contracts where the investment risk is borne by the policyholders, the calculation of the capital requirement for operational risk shall take account of the amount of annual expenses incurred in respect of those insurance liabilities.
- (3) With respect to insurance and reinsurance operations other than those referred to in paragraph 2, the calculation of the capital requirement for operational risk shall take account of the volume of those operations, in terms of earned premiums and technical provisions which are held in respect of those insurance and reinsurance obligations. In this case, the capital requirement for operational risks shall not exceed 30 % of the Basic Solvency Capital Requirement relating to those insurance and reinsurance operations.

Art. 38. - Adjustment for the loss-absorbing capacity of technical provisions and deferred taxes

The adjustment referred to in Article 33, point c) for the loss-absorbing capacity of technical provisions and deferred taxes shall reflect potential compensation of unexpected losses through a simultaneous decrease in technical provisions or deferred taxes or a combination of the two.

That adjustment shall take account of the risk mitigating effect provided by future discretionary benefits of insurance contracts, to the extent insurance and reinsurance undertakings can establish that a reduction in such benefits may be used to cover unexpected losses when they arise. The risk mitigating effect provided by future discretionary benefits shall be no higher than the sum of technical provisions and deferred taxes relating to those future discretionary benefits.

For the purpose of the second paragraph, the value of future discretionary benefits under adverse circumstances shall be compared to the value of such benefits under the underlying assumptions of the best- estimate calculation.

Sub-section 3 – Solvency Capital Requirement – full or partial internal models

Art. 39. – General provisions applicable to the approval of full and partial internal models.

- (1) In any application for approval, insurance and reinsurance undertakings shall submit, as a minimum, documentary evidence that the internal model fulfils the requirements set out in Articles 45 to 50 of the present regulation.
- (2) The CAA shall give approval to the application only if it is satisfied that the systems of the insurance or reinsurance undertaking for identifying, measuring, monitoring, managing and reporting risk are adequate and in particular, that the internal model fulfils the requirements referred to in paragraph 1.
- (3) After having received approval from the CAA to use an internal model, insurance and reinsurance undertakings may, by means of a decision stating the reasons, be

required to provide the CAA with an estimate of the Solvency Capital Requirement determined in accordance with the standard formula, as set out in Subsection 2.

Art. 40. – Specific provisions governing the approval of partial internal models

- (1) Insurance and reinsurance undertakings may use partial internal models for the calculation of one or more of the following elements:
 - a) one or more risk modules, or sub-modules, of the Basic Solvency Capital Requirement, as set out in Articles 34 and 35 of the present regulation;
 - b) the capital requirement for operational risk as set out in Article 37 of the present regulation;
 - c) the adjustment referred to in Article 38 of the present regulation.

In addition, partial modelling may be applied to the whole business of an insurance or reinsurance undertaking, or only to one or more major business units.

- (2) Where the application for that approval relates to a partial internal model, the requirements set out in Articles 45 to 50 of the present regulation shall be adapted to take account of the limited scope of the application of the model.
- (3) In the case of a partial internal model, approval of the CAA shall be given only where that model fulfils the requirements set out in Article 39 of the present regulation and the following additional conditions:
 - a) the reason for the limited scope of application of the model is properly justified by the undertaking;
 - b) the resulting Solvency Capital Requirement reflects more appropriately the risk profile of the undertaking and in particular complies with the principles set out in Part II, Title II, Sub-title I, Chapter 6, section 5, of the law;
 - c) its design is consistent with the principles set out in Part II, Title II, Sub-title I, Chapter 6, section 5, of the law so as to allow the partial internal model to be fully integrated into the Solvency Capital Requirement standard formula.
- (4) When assessing an application for the use of a partial internal model which only covers certain sub-modules of a specific risk module, or some of the business units of an insurance or reinsurance undertaking with respect to a specific risk module, or parts of both, the CAA may require the insurance or reinsurance undertakings concerned to submit a realistic transitional plan to extend the scope of the model.

The transitional plan shall set out the manner in which an insurance or reinsurance undertaking plans to extend the scope of the model to other sub-modules or business units, in order to ensure that the model covers a predominant part of their insurance operations with respect to that specific risk module.

Art. 41. - Policy for changing full and partial internal models

The initial approval process of an internal model shall include the policy for changing the model of the insurance or reinsurance undertaking. Insurance and reinsurance undertakings may change their internal model in accordance with that policy.

That policy shall include a specification of minor and major changes to the internal model.

Major changes to the internal model, as well as changes to that policy, shall always be subject to prior approval by the CAA.

Minor changes to the internal model shall not be subject to prior approval by the CAA, insofar as they are developed in accordance with that policy.

Art. 42. - Responsibilities of the administrative, management or supervisory bodies

In advance to any submission to the CAA, the administrative, management or supervisory body of an insurance or reinsurance undertaking shall approve the application for approval of the internal model, as well as any application for approval of any subsequent major changes made to that model.

The administrative, management or supervisory body shall have responsibility for putting in place systems which ensure that the internal model operates properly on a continuous basis.

Art. 43. Reversion to the standard formula

After having received approval requested, the insurance and reinsurance undertakings shall not revert to calculating the whole or any part of the Solvency Capital Requirement in accordance with the standard formula, except in duly justified circumstances and subject to the approval of the CAA.

Art. 44. - Non-compliance of the internal model

- (1) If, after having received the necessary approval to use an internal model, insurance and reinsurance undertakings cease to comply with the requirements set out in Articles 45 to 50 of the present regulation, they shall, without delay, either present to the CAA a plan to restore compliance within a reasonable period of time, or demonstrate without delay that the impact of non-compliance is insignificant.
- (2) In the event that the insurance or reinsurance undertaking fails to implement the plan referred to in paragraph 1, the CAA may require the undertaking to revert to calculating the Solvency Capital Requirement in accordance with the standard formula.

Art. 45. – Test relating to the use of the model

Insurance and reinsurance undertakings shall demonstrate that the internal model is widely used in and plays an important role in their system of governance, referred to in Articles 71 to 81 of the law, in particular:

- a) their risk-management system as laid down in Article 74 and their decision-making processes;
- b) their economic and solvency capital assessment and allocation processes, including the assessment referred to in Article 75 of the law.

In addition, insurance and reinsurance undertakings shall demonstrate that the frequency of calculation of the Solvency Capital Requirement using the internal model is consistent with the frequency with which they use their internal model for the other purposes covered by the first subparagraph.

The administrative, management or supervisory body shall ensure the ongoing appropriateness of the design and operations of the internal model, and that the internal model continues to appropriately reflect the risk profile of the insurance and reinsurance undertaking concerned.

Art. 46. - Statistical quality standards

- (1) The internal model, and in particular the calculation of the probability distribution forecast underlying it, shall comply with the criteria set out in paragraphs 2 to 9.
- (2) The methods used to calculate the probability distribution forecast shall be based on adequate, applicable and relevant actuarial and statistical techniques and shall be consistent with the methods used to calculate technical provisions.

The methods used to calculate the probability distribution forecast shall be based upon current and credible information and realistic assumptions.

Insurance and reinsurance undertakings shall be able to justify the assumptions underlying their internal model to the CAA.

- (3) Data used for the internal model shall be accurate, complete and appropriate.
Insurance and reinsurance undertakings shall update the data sets used in the calculation of the probability distribution forecast at least annually.
- (4) No particular method for the calculation of the probability distribution forecast shall be prescribed.

Regardless of the calculation method chosen, the ability of the internal model to rank risk shall be sufficient to ensure that it is widely used in and plays an important role in the system of governance of the insurance or reinsurance undertaking concerned, in particular their risk-management system and decision-making processes, and capital allocation in accordance with Article 45 of the present regulation.

The internal model shall cover all of the material risks to which insurance and reinsurance undertakings are exposed. Internal models shall cover at least the risks set out in Article 32, paragraph 1, of the present regulation.

- (5) As regards diversification effects, insurance and reinsurance undertakings may take account in their internal model of dependencies within and across risk categories, provided that the CAA is satisfied that the system used for measuring those diversification effects is adequate.
- (6) Insurance and reinsurance undertakings may take full account of the effect of risk-mitigation techniques in their internal model, as long as credit risk and other risks arising from the use of risk-mitigation techniques are adequately reflected in the internal model.
- (7) Insurance and reinsurance undertakings shall accurately assess the particular risks associated with financial guarantees and any contractual options in their internal model, where not negligible. They shall also assess the risks associated with both policy holder options and contractual options for insurance and reinsurance undertakings. For that purpose, they shall take account of the impact that possible changes in financial and non-financial conditions could have on the exercise of those options.
- (8) In their internal model, insurance and reinsurance undertakings may take account of future management actions that they would reasonably expect to carry out in specific circumstances.
In the case set out in the first subparagraph, the undertaking concerned shall make allowance for the time necessary to implement such actions.
- (9) In their internal model, insurance and reinsurance undertakings shall take account of all payments to policy holders and beneficiaries which they expect to make, whether or not those payments are contractually guaranteed.

Art. 47.- Calibration standards

- (1) Insurance and reinsurance undertakings may use a different time period or risk measure than that set out in Article 105, paragraph 3, for internal modelling purposes as long as the outputs of the internal model can be used by those undertakings to calculate the Solvency Capital Requirement in a manner that provides policy holders and beneficiaries with a level of protection equivalent to that set out in Article 105 of the law.
- (2) Where practicable, insurance and reinsurance undertakings shall derive the Solvency Capital Requirement directly from the probability distribution forecast generated by the internal model of those undertakings, using the Value-at-Risk measure set out in Article 105, paragraph 3, of the law .
- (3) Where insurance and reinsurance undertakings cannot derive the Solvency Capital Requirement directly from the probability distribution forecast generated by the internal model, the CAA may allow approximations to be used in the process to calculate the Solvency Capital Requirement, as long as those undertakings can demonstrate to the CAA that policy holders are provided with a level of protection equivalent to that provided for in Article 105 of the law.
- (4) The CAA may require insurance and reinsurance undertakings to run their internal model on relevant benchmark portfolios and using assumptions based on external rather than internal data in order to verify the calibration of the internal model and to check that its specification is in line with generally accepted market practice.

Art. 48. - Profit and loss attribution

Insurance and reinsurance undertakings shall review, at least annually, the causes and sources of profits and losses for each major business unit.

They shall demonstrate how the categorisation of risk chosen in the internal model explains the causes and sources of profits and losses. The categorisation of risk and attribution of profits and losses shall reflect the risk profile of the insurance and reinsurance undertakings.

Art. 49. – Validation standards

Insurance and reinsurance undertakings shall have a regular cycle of model validation which includes monitoring the performance of the internal model, reviewing the ongoing appropriateness of its specification, and testing its results against experience.

The model validation process shall include an effective statistical process for validating the internal model which enables the insurance and reinsurance undertakings to demonstrate to their supervisory authorities that the resulting capital requirements are appropriate.

The statistical methods applied shall test the appropriateness of the probability distribution forecast compared not only to loss experience but also to all material new data and information relating thereto.

The model validation process shall include an analysis of the stability of the internal model and in particular the testing of the sensitivity of the results of the internal model to changes in key underlying assumptions. It shall also include an assessment of the accuracy, completeness and appropriateness of the data used by the internal model.

Art. 50. – Documentation standards

Insurance and reinsurance undertakings shall document the design and operational details of their internal model.

This documentation shall demonstrate compliance with Articles 45 to 49 of the present regulation.

It shall provide a detailed outline of the theory, assumptions, and mathematical and empirical bases underlying the internal model.

The documentation shall indicate any circumstances under which the internal model does not work effectively.

Insurance and reinsurance undertakings shall document all major changes to their internal model, as set out in Article 41 of the present regulation.

Art 51. - External models and data

The use of a model or data obtained from a third party shall not be considered to be a justification for exemption from any of the requirements for the internal model set out in Articles 45 to 50 of the present regulation.

Section 5 – Minimum Capital requirement

Art. 52. – Calculation of the Minimum Capital Requirement

(1) The Minimum Capital Requirement is calculated in accordance with the provisions adopted by the European Commission in its Delegated Regulation (EU) 2015/35.

(2) The absolute floor referred to in Article 112 of the law is set as follows :

- a) EUR 2.500.000 for non-life insurance undertakings, including captive insurance undertakings, except in the case where all or some of the risks included in one of the classes 10 to 15 listed in Part A of Annex I of the law are covered, in which case it shall be no less than EUR 3.700.000;
- b) EUR 3.700.000 for life insurance undertakings, including captive insurance undertakings;
- d) EUR 3.600.000 for reinsurance undertakings, except in the case of captive reinsurance undertakings, in which case the Minimum Capital Requirement shall be not less than EUR 1.200.000;

(3) Without prejudice to paragraph 2, the Minimum Capital Requirement shall neither fall below 25 % nor exceed 45 % of the undertaking's Solvency Capital Requirement and including any capital add-on imposed in accordance with Article 64 of the law.

For a period ending no later than 31st December 2017, the CAA may require an insurance or reinsurance undertaking to apply the Solvency Capital Requirement calculated in accordance with the standard formula for the application of these percentages.

(4) Insurance and reinsurance undertakings shall calculate the Minimum Capital Requirement at least quarterly and report the results of that calculation to the CAA.

For the purposes of calculating the limits referred to in paragraph 3, undertakings shall not be required to calculate the Solvency Capital Requirement on a quarterly basis.

Where either of the limits referred to in paragraph 3 determines an undertaking's Minimum Capital Requirement, the undertaking shall provide to the CAA information allowing a proper understanding of the reasons therefor.

Section 6 - Investments

Art. 53. – Prudent person principle

- (1) With respect to the whole portfolio of assets, insurance and reinsurance undertakings shall only invest in assets and instruments whose risks the undertaking concerned can properly identify, measure, monitor, manage, control and report, and appropriately take into account in the assessment of its overall solvency needs.

All assets, in particular those covering the Minimum Capital Requirement and the Solvency Capital Requirement, shall be invested in such a manner as to ensure the security, quality, liquidity and profitability of the portfolio as a whole.

The localisation of those assets shall be such as to ensure their availability.

Assets held to cover the technical provisions (hereinafter called "matching assets") shall also be invested in a manner appropriate to the nature and duration of the insurance and reinsurance liabilities. Those assets shall be invested in the best interest of all policy holders and beneficiaries taking into account any disclosed policy objective.

In the case of a conflict of interest, insurance undertakings, or the entity which manages their asset portfolio, shall ensure that the investment is made in the best interest of policy holders and beneficiaries.

- (2) Without prejudice to paragraph 1, with respect to assets held in respect of life insurance contracts where the investment risk is borne by the policy holders, the following provisions shall apply:

- a) Where the benefits provided by a contract are directly linked to the value of units in an UCITS as defined in Directive 2009/65/EC, or to the value of assets contained in an internal fund held by the insurance undertakings, usually divided into units, the technical provisions in respect of those benefits must be represented as closely as possible by those units or, in the case where units are not established, by those assets.
- b) Where the benefits provided by a contract are directly linked to a share index or some other reference value other than those referred to in the second subparagraph, the technical provisions in respect of those benefits must be represented as closely as possible either by the units deemed to represent the reference value or, in the case where units are not established, by assets of appropriate security and marketability which correspond as closely as possible with those on which the particular reference value is based.
- c) Where the benefits referred to in points a) and b) include a guarantee of investment performance or some other guaranteed benefit, the assets held to cover the corresponding additional technical provisions shall be subject to paragraph 3.

The choice of assets shall be made within the framework of an asset investment policy approved by the CAA but whose rules shall not be more restrictive than those set out in Directive 2009/65/CE.

- (3) Without prejudice to paragraph 1, with respect to assets other than those covered by paragraph 2, the following additional provisions shall apply:

- a) the use of derivative instruments shall be possible insofar as they contribute to a reduction of risks or facilitate efficient portfolio management;
- b) investments and assets which are not admitted to trading on a regulated financial market shall be kept to prudent levels;

- c) assets shall be properly diversified in such a way as to avoid excessive reliance on any particular asset, issuer or group of undertakings, or geographical area and excessive accumulation of risk in the portfolio as a whole;
- d) investments in assets issued by the same issuer, or by issuers belonging to the same group, shall not expose the insurance undertakings to excessive risk concentration.

Art. 54. - Freedom of investment

Insurance and reinsurance undertakings shall not be obliged either to invest in particular categories of assets or to have their investment decisions authorised or to notify them systematically.

Chapter V - Special provisions applicable to segregated assets of insurance undertakings

Art. 55.- Deposit of matching assets

- (1) Luxembourg insurance undertakings must deposit transferable securities matching technical provisions with a credit institution having its registered office in the EEA, being authorised in accordance with Directive 2013/36/EU and accepted by the CAA.
- (2) Upon a reasoned request from the insurance undertaking concerned, the CAA may authorise the deposit with credit institutions having their registered office outside the EEA.

Art. 56. – Deposit agreement

- (1) For the deposit of matching assets with a credit institution as referred to in Article 55 of the present regulation, an agreement must be concluded between the undertaking and the depositary bank.
- (2) This agreement, which is subject to the approval of the CAA, must stipulate that deposits made in respect of matching assets recorded in the permanent inventory in accordance with Articles 117 and 118 of the law, must be clearly segregated from the undertaking's other commitments and assets with the same credit institution, that they may not be offset against the latter, and that they may not be subjected to privileges or guarantees other than those provided for in Article 118 of the law.
- (3) In a situation such as referred to in Article 55, paragraph 2, of the present regulation, the CAA may exempt an insurance undertaking, upon a reasoned request from the latter, from the conclusion of a deposit agreement with a credit institution.

Art. 57. - Allocation to segregated assets

Following registration of these assets in the permanent inventory of segregated assets as provided for in Article 118 of the law, they shall, continue to be allocated to the segregated assets referred to in that Article until such time as they are removed from the register.

Art. 58. - Registration of a mortgage

Engrossed copies of the deeds of mortgage required by the CAA pursuant to section 121 of the law shall be deposited with the CAA.

In the event of registration of a mortgage on a property located in the Grand Duchy of Luxembourg, the CAA shall proceed in accordance with the amended law of 18 April 1910 on the mortgage regime and its implementing regulations.

Chapter VI – Activities provided under the right of establishment and of freedom to provide services

Section 1 – Activities inside the EEA

Art. 59. - Establishment of a branch in another Member State by a Luxembourg insurance or reinsurance undertaking

- (1) The notification provided for in Articles 132 and 138 shall be accompanied by the following information:
 - a) the name of the Member State within the territory of which the insurance or reinsurance undertaking proposes to establish a branch;
 - b) its scheme of operations setting out, at least, the kind of business envisaged and the structural organisation of the branch;
 - c) the name of the general manager of the branch who must possess sufficient powers to bind, in relation to third parties, the insurance or reinsurance undertaking and to represent it in relations with the authorities and courts of the host Member State;
 - d) the address in the host Member State from which documents may be obtained from the undertaking and to which they may be delivered, including any communications to the general manager of the branch.
- (2) Where a non-life insurance undertaking intends its branch to cover risks classified in class 10 in Part A of Annex I of the law, but not including carrier's liability, it shall produce a declaration that it has become a member of the national bureau and the national guarantee fund of the host Member State.
- (3) In the event of a change in any of the particulars communicated under point b), c) or d) of paragraph 1, an insurance undertaking shall give written notice of the change to the CAA and the host Member State of the branch at least one month before making the change so that the CAA and the supervisory authorities of the host Member State of the branch may fulfil their respective obligations under Article 134 of the law.
- (4) In the event of a change in any of the particulars communicated under point b), c) or d) of paragraph 1, a reinsurance undertaking shall give written notice of the change to the CAA at least one month before making the change.

Art. 60. - Establishment of a branch in the Grand Duchy of Luxembourg of an insurance or reinsurance undertaking of the EEA other than from Luxembourg

- (1) The notification provided for in Article 135, paragraph 1, of the law shall be accompanied by the following information :
 - a) a certificate issued by the competent authority of the home Member State that the insurance undertaking fulfils the Solvency Capital Requirement and the Minimum Capital Requirement, calculated in accordance with Articles 104 and 112 of the law.;
 - b) its scheme of operations setting out, at least, the kind of business envisaged and the structural organisation of the branch;
 - c) the name of the general manager of the branch who shall possess sufficient powers to bind, in relation to third parties, the insurance undertaking or, in the

case of Lloyd's, the underwriters concerned, and to represent it or them in relations with the authorities and courts of the host Member State (hereinafter referred to as the "general manager");

- d) the address in the Grand Duchy of Luxembourg from which documents may be obtained from the undertaking and to which they may be delivered, including any communications to the general manager.

With regard to Lloyd's, in the event of any litigation in the Grand Duchy of Luxembourg arising out of underwritten commitments, the insured persons shall not be treated less favourably than if the litigation had been brought against businesses of a conventional type.

- (2) Where a non-life insurance undertaking intends its branch to cover risks classified in class 10 in Part A of Annex I of the law, but not including carrier's liability, it shall produce a declaration that it has become a member of the "Bureau Luxembourgeois" and the "Fonds de Garantie Automobile" of the Grand Duchy of Luxembourg.
- (3) In the event of a change in any of the particulars "communicated under paragraphs 1 and 2,"⁹ the insurance undertaking shall give written notice of the change to the supervisory authorities of the home Member State and to the CAA at least one month before making the change so that the supervisory authorities of the home Member State and the CAA may fulfil their respective obligations under the present Article and Article 136 of the law.

Art. 61. – Activities provided in another Member State by a Luxembourg insurance undertaking under the freedom to provide services

The notification provided for in Article 139, paragraph 1, of the law shall be accompanied by the following information:

- a) a description of the nature of the risks and commitments that the undertaking proposes to cover in the host Member State;
- b) where applicable, the name and address of the branch through which the insurance undertaking intends to provide its services in the host Member State;
- c) where a non-life insurance undertaking intends to cover in the host Member State risks classified in class 10 of Part A of Annex I of the law, but not including carrier liability, it shall produce a declaration that it has become a member of the national bureau and the national guarantee fund of the host Member State.

Art. 62. – Statistical information relating to cross-border activities

Pursuant to Article 156 of the law, every Luxembourg insurance undertaking shall inform the CAA, separately in respect of transactions carried out under the right of establishment and those carried out under the freedom to provide services, of the amount of the premiums, claims and commissions, without deduction of reinsurance, by Member State and as follows:

- a) for non-life insurance, by lines of business¹⁰;
- b) for life insurance, by lines of business¹¹.

As regards class 10 in Part A of Annex I of the law, though excluding carrier's liability, the undertaking concerned shall also inform the CAA of the frequency and average cost of claims.

⁹ RCAA 16/01 of 3 May 2016

¹⁰ The lines of business are defined in Delegated Regulation (EU) 2015/35.

¹¹ The lines of business are defined in Delegated Regulation (EU) 2015/35.

The CAA shall submit the information referred to in the first and second subparagraphs within a reasonable time and in aggregate form to the supervisory authorities of each of the Member States concerned, upon their request.

Section 2 – Activities in a third country

Art. 63. - Establishment of a third country branch by a Luxembourg insurance or reinsurance undertaking

“In addition to the information and documents listed in Article 59 of the present regulation and pursuant to Article 4, point b) of the law, the notification referred to in Article 133, paragraph 1 of the law and the application for authorisation referred to in Article 138, paragraph 3 of the law shall be accompanied by:

- a) a description of the nature of the risks and commitments that the undertaking proposes to cover in the host State;
- b) a legal opinion or other documentary evidence certifying that the proposed activities are in accordance with the law of the host State.”¹²

Art. 64. - Activities provided in a third country by a Luxembourg insurance undertaking under the freedom to provide services

In addition to the information and documents listed in Article 61 of the present regulation, the notification referred to in Article 139, paragraph 1, and 148, paragraph 3, of the law shall be accompanied by:

- a) a description of the nature of the risks and commitments that the undertaking proposes to cover in the host State¹³;
- b) a legal opinion or other documentary evidence certifying that the proposed activities are in accordance with the law of the host State where these activities include the conclusion of contracts other than those for which the policyholder has taken the initiative within the meaning of Article 159, paragraph 1, of the law.

Chapter VII - Recovery plan and finance scheme

Art. 65. - Recovery plan and finance scheme

(1) The recovery plan referred to in Article 124, paragraph 2 of the law and the finance scheme referred to in Article 125, subparagraph 2, shall, at least include indications or justifications concerning the following elements:

- a) an estimate of management expenses, in particular current general expenses and commissions;
- b) an estimate of income and expenditure in respect of direct business, reinsurance acceptances and reinsurance cessions;
- c) a forecast balance sheet;
- d) an estimate of the financial resources intended to cover the technical provisions and the Solvency Capital Requirement and the Minimum Capital Requirement;
- e) the overall reinsurance policy.

¹² RCAA 16/01 of 3 May 2016

¹³ RCAA 16/01 of 3 May 2016

- (2) Where the CAA is requested by a supervisory authority of another Member State to issue a solvency certificate relating to a Luxembourg insurance or reinsurance undertaking being the transferee of a portfolio transfer and the undertaking is subject to a recovery plan or a finance scheme, the CAA shall refrain from issuing such a certificate for so long as it considers that the rights of the policyholders or the contractual obligations of the reinsurance undertaking are threatened, and shall inform the requesting supervisory authority of the reasons for its refusal.

Chapter VIII – Insurance and reinsurance undertakings in a group

Section 1 – Group Solvency

Subsection 1 – Choice of the calculation method of the solvency of a group and general principles

Art. 66. - Choice of method

Where the CAA acts as group supervisor, or exercises control at the level of a Luxembourg subgroup pursuant to Article 188 of the law, the calculation of the solvency at the level of the group of the insurance and reinsurance undertakings referred to in “Article 185, paragraph 2, point a)”¹⁴ of the law shall be carried out in accordance with the provisions set out in Articles 67 to 79 of the present regulation.

This calculation shall be carried out in accordance with method 1, which is laid down in Article 76 of the present regulation.

However, the CAA may decide, where appropriate, after consulting the other supervisory authorities concerned and the group itself, to apply to that group method 2, which is laid down in Article 78 of the present regulation, or a combination of methods 1 and 2, where the exclusive application of method 1 would not be appropriate.

Art. 67. - Inclusion of proportional share

- (1) The calculation of the group solvency shall take account of the proportional share held by the participating undertaking in its related undertakings.

For the purposes of the first subparagraph, the proportional share shall correspond:

- a) where method 1 is used, to the percentages used for the establishment of the consolidated accounts; or
- b) where method 2 is used, to the proportion of the subscribed capital that is held, directly or indirectly, by the participating undertaking.

However, regardless of the method used, where the related undertaking is a subsidiary undertaking and does not have sufficient eligible own funds to cover its Solvency Capital Requirement, the total solvency deficit of the subsidiary shall be taken into account.

Where the CAA acts as group supervisor and is of the opinion, that the responsibility of the parent undertaking owning a share of the capital is strictly limited to that share of the capital, the CAA may nevertheless permit for the solvency deficit of the subsidiary undertaking to be taken into account on a proportional basis.

- (2) Where the CAA acts as group supervisor, it shall determine, after consulting the other supervisory authorities concerned and the group itself, the proportional share which shall be taken into account in the following cases:

¹⁴ RCAA 16/01 of 3 May 2016

- a) where there are no capital ties between some of the undertakings belonging to a group;
- b) where a supervisory authority has determined that the direct or indirect holding of voting rights or capital in an undertaking qualifies as a participation because, in its opinion, a significant influence is effectively exercised over that undertaking;
- c) where a supervisory authority has determined that an undertaking is a parent undertaking of another because, in the opinion of that supervisory authority, it effectively exercises a dominant influence over that other undertaking.

Art. 68. - Elimination of double use of eligible own funds

- (1) The double use of own funds eligible for coverage of the Solvency Capital Requirement among the different insurance or reinsurance undertakings taken into account in that calculation shall not be allowed.

For that purpose, when calculating the group solvency and where the methods described in Articles 76 to 79 of the present regulation do not provide for it, the following amounts shall be excluded:

- a) the value of any asset of the participating insurance or reinsurance undertaking which represents the financing of own funds eligible for the Solvency Capital Requirement of one of its related insurance or reinsurance undertakings;
- b) the value of any asset of a related insurance or reinsurance undertaking of the participating insurance or reinsurance undertaking which represents the financing of own funds eligible for the Solvency Capital Requirement of that participating insurance or reinsurance undertaking;
- c) the value of any asset of a related insurance or reinsurance undertaking of the participating insurance or reinsurance undertaking which represents the financing of own funds eligible for the Solvency Capital Requirement of any other related insurance or reinsurance undertaking of that participating insurance or reinsurance undertaking.

- (2) Without prejudice to paragraph 1, the following may be included in the calculation only in so far as they are eligible for covering the Solvency Capital Requirement of the related undertaking concerned:

- a) surplus funds falling under Article 103, paragraph 1, of the law, arising in a related life insurance or reinsurance undertaking of the participating insurance or reinsurance undertaking for which the group solvency is calculated;
- b) any subscribed but not paid-up portions of the capital of a related insurance or reinsurance undertaking of the participating insurance or reinsurance undertaking for which the group solvency is calculated.

However, the following elements shall in any event be excluded from the calculation:

- subscribed but not paid-up portions of the capital which represent a potential obligation on the part of the participating undertaking;
- subscribed but not paid-up portions of the capital of the participating insurance or reinsurance undertaking which represent a potential obligation on the part of a related insurance or reinsurance undertaking;
- subscribed but not paid-up portions of the capital of a related insurance or reinsurance undertaking which represent a potential obligation on the part of another related insurance or reinsurance undertaking of the same participating insurance or reinsurance undertaking.

- (3) Where the CAA acts as group supervisor and considers that certain own funds eligible for the Solvency Capital Requirement of a related insurance or reinsurance

undertaking other than those referred to in paragraph 2 cannot effectively be made available to cover the Solvency Capital Requirement of the participating insurance or reinsurance undertaking for which the group solvency is calculated, those own funds may be included in the calculation only in so far as they are eligible for covering the Solvency Capital Requirement of the related undertaking.

- (4) The sum of the own funds referred to in paragraphs 2 and 3 shall not exceed the Solvency Capital Requirement of the related insurance or reinsurance undertaking.
- (5) Any eligible own funds of a related insurance or reinsurance undertaking of the participating insurance or reinsurance undertaking for which the group solvency is calculated that are subject to prior authorisation from the supervisory authority in accordance with Article 26 of the present regulation shall be included in the calculation only in so far as they have been duly authorised by the supervisory authority responsible for the supervision of that related undertaking.

Art. 69. - Elimination of intra-group creation of capital

(1) When calculating group solvency, no account shall be taken of any own funds eligible for the Solvency Capital Requirement arising out of reciprocal financing between the participating insurance or reinsurance undertaking and any of the following:

- a) a related undertaking;
- b) a participating undertaking;
- c) another related undertaking of any of its participating undertakings.

(2) When calculating group solvency, no account shall be taken of any own funds eligible for the Solvency Capital Requirement of a related insurance or reinsurance undertaking of the participating insurance or reinsurance undertaking for which the group solvency is calculated, where the own funds concerned arise out of reciprocal financing with any other related undertaking of that participating insurance or reinsurance undertaking.

(3) Reciprocal financing shall be deemed to exist at least where an insurance or reinsurance undertaking, or any of its related undertakings, holds shares in, or makes loans to, another undertaking which, directly or indirectly, holds own funds eligible for the Solvency Capital Requirement of the first undertaking.

Art. 70. - Valuation

The value of the assets and liabilities shall be assessed in accordance with Article 99 of the law.

Subsection 2 – Application of calculation methods

Art. 71. - Related insurance and reinsurance undertakings

Where the insurance or reinsurance undertaking owns more than one related insurance or reinsurance undertaking, each of those related insurance or reinsurance undertakings shall be taken into account in the group solvency calculation.

Where the related insurance or reinsurance undertaking has its registered office in a Member State other than that of the insurance or reinsurance undertaking for which the group solvency calculation is carried out, the calculation shall take account, in respect of the related undertaking, of the Solvency Capital Requirement and the own funds eligible to satisfy that requirement as laid down in that other Member State.

Art. 72. - Intermediate insurance holding companies

- (1) When calculating the group solvency of an insurance or reinsurance undertaking which through the intermediary of an insurance holding company or a mixed financial holding company holds a participation in a related insurance or reinsurance undertaking, a third-country insurance or reinsurance undertaking, the situation of such an insurance holding company or mixed financial holding company shall be taken into account.

For the sole purpose of that calculation, the intermediate insurance holding company or intermediate mixed financial holding company shall be treated as if it were an insurance or reinsurance undertaking subject to the rules laid down in Articles 104 to 111 of the law and Articles 32 to 51 of the present regulation in respect of the Solvency Capital Requirement and subject to the same conditions as are laid down in Articles 102 and 103 of the law and Articles 25 to 31 of the present regulation in respect of own funds eligible for the Solvency Capital Requirement.

- (2) In cases where an intermediate insurance holding company or intermediate mixed financial holding company holds subordinated debt or other eligible own funds subject to limitation in accordance with Article 31 of the present regulation, they shall be recognised as eligible own funds up to the amounts calculated by application of the limits set out in Article 31 of the present regulation to the total eligible own funds at group level as compared to the Solvency Capital Requirement at group level.

Any eligible own funds of an intermediate insurance holding company or intermediate mixed financial holding company, which would require prior authorisation from the supervisory authority in accordance with Article 26 of the present regulation if they were held by an insurance or reinsurance undertaking, may be included in the calculation of the group solvency only in so far as they have been duly authorised by the group supervisor.

Art. 73. - Equivalence concerning related third-country insurance and reinsurance undertakings

- (1) When calculating the group solvency of an insurance or reinsurance undertaking which is a participating undertaking in a third-country insurance or reinsurance undertaking, in accordance with Article 78 of the present regulation, this third-country insurance or reinsurance undertaking shall, solely for the purposes of that calculation, be treated as a related EEA insurance or reinsurance undertaking.

However, where the third country in which that undertaking has its registered office makes it subject to authorisation and imposes on it a solvency regime at least equivalent to that laid down in Title I, Chapter VI, the calculation may take into account, as regards that undertaking, the Solvency Capital Requirement and the own funds eligible to cover this as laid down by the third country concerned.

- (2) Where no delegated act adopted by the European Commission in accordance with Article 227, paragraph 2, of directive 2009/138/EC specifies whether the solvency regime of a third-country concerned is considered equivalent or provisionally equivalent to the regime established by Title I, Chapter VI of the said Directive 2009/138/EC, the CAA, when acting as group supervisor, assisted where appropriate by EIOPA, shall verify, at the request of the participating undertaking or on its own initiative, whether the third country regime is at least equivalent.

To this end, the CAA, assisted by EIOPA, shall consult the other supervisory authorities concerned before deciding on equivalence. The decision is taken on the basis of the criteria adopted by the Delegated Regulation (EU) 2015/35. The CAA, when acting as group supervisor, shall not take any decision with regard to a third country which contradicts a previous decision taken with regard to that third

country, unless it is necessary to take into account significant changes in the control regime established by Chapter VI of Title I of Directive 2009/138/EC and in the control regime of the third country.

- (3) Where a supervisory authority other than the CAA acts as group supervisor and takes a decision on the equivalence of a third country in accordance with the procedure described in paragraph 2, the CAA may, in the event of disagreement with that decision, within three months of the notification of the group supervisor's decision, refer the matter to EIOPA and request its assistance.
- (4) Where a delegated act determining that the supervisory regime of a third country is provisionally equivalent has been adopted, that third country shall be deemed to be equivalent for the purposes of the second subparagraph of paragraph 1.

Art. 74. - Related credit institutions, investment firms and financial institutions

When calculating the group solvency of an insurance or reinsurance undertaking which is a participating undertaking in a credit institution, investment firm or financial institution, the CAA, when acting as group supervisor, may allow the participating insurance and reinsurance undertakings to apply methods 1 or 2 set out in Article 96 of the present regulation. However, method 1 shall be applied only where the CAA is satisfied as to the level of integrated management and internal control regarding the entities which would be included in the scope of consolidation. The method chosen shall be applied in a consistent manner over time.

Instead of applying subparagraph 1, the CAA, may also decide, at the request of the participating undertaking or on its own initiative, to deduct any participation as referred to in the first subparagraph from the own funds eligible for the group solvency of the participating undertaking.

Art. 75. Non-availability of the necessary information

Where the information necessary for calculating the group solvency of an insurance or reinsurance undertaking, in respect of a related undertaking with its registered office in a Member State or a third country, is not available to the CAA, the book value of that undertaking in the participating insurance or reinsurance undertaking shall be deducted from the own funds eligible for the coverage of the group solvency.

In that case, any unrealised gains connected with such participation shall not be recognised as own funds eligible for the coverage of the group solvency.

Subsection 3 – Calculation methods

Art. 76. - Method 1 (Default method): Accounting consolidation-based method

- (1) The calculation of the group solvency of the participating insurance or reinsurance undertaking shall be carried out on the basis of the consolidated accounts.

The group solvency of the participating insurance or reinsurance undertaking is equal to the difference between the following:

- a) the own funds eligible to cover the Solvency Capital Requirement, calculated on the basis of consolidated data; and
 - b) the Solvency Capital Requirement at group level calculated on the basis of consolidated data.
- (2) The rules laid down in Articles 102 to 111 of the law and Articles 25 to 51 of the present regulation shall apply for the calculation of the own funds eligible for the

Solvency Capital Requirement and of the Solvency Capital Requirement at group level based on consolidated data.

- (3) The Solvency Capital Requirement at group level based on consolidated data shall be calculated on the basis of either the standard formula or an approved internal model, in a manner consistent with the general principles contained:
- “a) in Articles 104 to 109 of the law and Articles 32 to 38 of the present regulation in case of use of the standard formula, or
 - b) in Articles 104 to 106, 110 and 111 of the law and Articles 32 and 39 to 51 of the present regulation in case of use of an internal model.”¹⁵
- (4) The Solvency Capital Requirement referred to in paragraph 3 shall be at least equal to the sum of the following:
- a) the Minimum Capital Requirement as referred to in Article 52 of the present regulation of the participating insurance or reinsurance undertaking; and
 - b) the proportional share of the Minimum Capital Requirement of the related insurance and reinsurance undertakings.

That minimum shall be covered by eligible basic own funds as determined in Article 31, paragraph 4, of the present regulation.

For the purposes of determining whether such eligible own funds qualify to cover the above minimum consolidated group Solvency Capital Requirement, the principles set out in Articles “67 to 75”¹⁶ of the present regulation shall apply. Article 125, paragraphs 1 and 2 of the law shall apply.

Art. 77. Group internal model

- (1) In the case where an insurance or reinsurance company and its related companies, or jointly the relevant companies of an insurance holding company or a mixed financial holding company, request an authorisation to calculate, on the basis of an internal model, the Solvency Capital Requirement required by the group at a consolidated level and the Solvency Capital Requirement required by the insurance and reinsurance companies within the group, the CAA shall cooperate with the other supervisory authorities concerned to decide whether or not to grant that permission and to determine the terms and conditions, if any, to which such permission is subject.

An application as referred to in the first subparagraph shall be submitted to the group supervisor.

When the CAA acts as group supervisor, it shall inform the other members of the college of supervisors and forward the complete application to them, without delay.

- (2) The CAA shall do everything within its power to reach a joint decision with the other supervisory authorities on the application within six months from the date of receipt of the complete application by the group supervisor.
- (3) If, within the six-month period referred to in paragraph 2, any of the supervisory authorities concerned has referred the matter to EIOPA, the CAA, when acting as group supervisor, shall defer its decision and await any decision that EIOPA may take provided such a decision is taken within one month of the referral, and shall ensure that its decision is in conformity with EIOPA's decision.

When a supervisory authority other than the CAA acts as group supervisor, the CAA may refer the matter to EIOPA within six months and as long as no joint decision

¹⁵ RCAA 16/01 of 3 May 2016

¹⁶ RCAA 16/01 of 3 May 2016

has yet been taken. When this other supervisory authority makes its own decision by complying, insofar as it exists, with the decision of EIOPA, it is considered binding on the CAA and must be applied by it.

- (5) Where the supervisory authorities concerned have reached a joint decision referred to in paragraph 2, the CAA, when acting as group supervisor, shall provide the applicant with a document setting out the full reasons.
- (6) In the absence of the adoption of a joint decision within six months from the date of receipt of the complete application by the group, the CAA, when acting as the group supervisor shall make its own decision on the application.

When taking its decision, the CAA acting as group supervisor shall duly take into account any views and reservations of the other supervisory authorities concerned expressed during that six-month period.

The CAA, when acting as group supervisor, shall provide the applicant and the other supervisory authorities concerned with a document setting out its fully reasoned decision.

In the absence of the adoption of a joint decision within six months from the date of receipt of the complete application by the group, and where a supervisory authority other than the CAA acts as group supervisor and makes a its own decision on the application, that decision shall be recognised by the CAA as determinative and shall be applied by it.

- (6) Where the CAA considers that the risk profile of an insurance or reinsurance undertaking under its supervision deviates significantly from the assumptions underlying the internal model approved at group level, and as long as that undertaking has not properly addressed the CAA's concerns, it may, in accordance with Article 64 of the law, impose a capital add-on to the Solvency Capital Requirement of that insurance or reinsurance undertaking resulting from the application of such internal model.

In exceptional circumstances, where such capital add-on would not be appropriate, the CAA may require the undertaking concerned to calculate its Solvency Capital Requirement on the basis of the standard formula referred to Articles 104 to 109 of the law and Articles. In accordance with Article 64, paragraph 1, points a) and c) of the law, the CAA may impose a capital add-on to the Solvency Capital Requirement of that insurance or reinsurance undertaking resulting from the application of the standard formula.

The CAA shall explain any decision referred to in the first and second subparagraphs to both the insurance or reinsurance undertaking and the other members of the college of supervisors.

Art. 78. - Method 2 (Alternative method): Deduction and aggregation method

- (1) The group solvency of the participating insurance or reinsurance undertaking shall be the difference between the following:
 - a) the aggregated group eligible own funds, as provided for in paragraph 2; and
 - b) the value in the participating insurance or reinsurance undertaking of the related insurance or reinsurance undertakings plus the aggregated group Solvency Capital Requirement, as provided for in paragraph 3.
- (2) The aggregated group eligible own funds are the sum of the following:
 - a) the own funds eligible for coverage of the Solvency Capital Requirement of the participating insurance or reinsurance undertaking; and

- b) the proportional share of the participating insurance or reinsurance undertaking in the own funds eligible for the Solvency Capital Requirement of the related insurance or reinsurance undertakings.
- (3) The aggregated group Solvency Capital Requirement is equal to the sum of the following:
- a) the Solvency Capital Requirement of the participating insurance or reinsurance undertaking; and
 - b) the proportional share of the Solvency Capital Requirement of the related insurance or reinsurance undertakings.
- (4) Where the participation in the related insurance or reinsurance undertakings consists, wholly or in part, of an indirect ownership, the value in the participating insurance or reinsurance undertaking of the related insurance or reinsurance undertakings shall incorporate the value of such indirect ownership, taking into account the relevant successive interests, and the items referred to in paragraph 2, point b), and in paragraph 3, point b), shall include the corresponding proportional shares, respectively, of the own funds eligible for coverage of the Solvency Capital Requirement of the related insurance or reinsurance undertakings and of the Solvency Capital Requirement of the related insurance or reinsurance undertakings.
- (5) In the case of an application for permission to calculate the Solvency Capital Requirement of insurance and reinsurance undertakings in the group on the basis of an internal model, submitted by an insurance or reinsurance undertaking and its related undertakings, or jointly by the related undertakings of an insurance holding company or mixed financial holding company, Article 77 of the present regulation shall apply.

Art. 79. - Group capital add-on requirement

In determining whether the group Solvency Capital Requirement on a consolidated or an aggregated basis appropriately reflects the risk profile of the group, the CAA, when it acts as group supervisor shall pay particular attention to any situation where the circumstances referred to in Article 64, paragraph 1, points a) to "d)"¹⁷ of the law could arise at group level, in particular where:

- a) a specific risk existing at group level would not be sufficiently covered by the standard formula or the internal model used, because it is difficult to quantify;
- b) a capital add-on to the Solvency Capital Requirement for the related insurance or reinsurance undertakings is imposed by the supervisory authorities concerned, in accordance with Article 64 of the law and Article 77, paragraph "6"¹⁸, of the present regulation.

Where the risk profile of the group is not adequately reflected, a capital add-on to the consolidated group Solvency Capital Requirement on a consolidated or an aggregated basis may be imposed.

Article 64 of the law, together with the delegated acts and implementing technical standards relating thereto, shall apply.

¹⁷ RCAA 19/2 of 26 February 2019

¹⁸ RCAA 16/01 of 3 May 2016

Subsection 4 – Control of the group solvency for insurance and reinsurance companies which are subsidiary of an insurance holding company or a mixed financial holding company

Art. 80. – Group solvency for an insurance holding company or a mixed financial holding company

- (1) Where insurance and reinsurance undertakings are subsidiaries of an insurance holding company or mixed financial holding company, the calculation of the solvency of the group is carried out at the level of the insurance holding company or mixed financial holding company in accordance with Article 66, subparagraphs 2 and 3, to Article 79 of the present regulation.
- (2) For the purpose of that calculation, the parent undertaking shall be treated as if it were an insurance or reinsurance undertaking subject to the rules laid down in Articles 104 to 111 of the law and Articles 32 to 51 of the present regulation as regards the Solvency Capital Requirement, and subject to the same conditions as laid down in Articles 102 and 103 of the law and Articles 25 to 31 of the present regulation as regards the own funds eligible for coverage of the Solvency Capital Requirement

Subsection 5 - Solvency control of centrally managed risk groups

Art. 81. - Subsidiaries of an insurance or reinsurance undertaking: conditions

The rules laid down in Articles 83 and 84 of the present regulation shall apply to any insurance or reinsurance undertaking which is the subsidiary of an insurance or reinsurance undertaking where all of the following conditions are satisfied:

- a) the subsidiary, in relation to which the group supervisor has not made a decision under Article 186, paragraph 3 of the law , is included in the group supervision carried out by the group supervisor at the level of the parent undertaking in accordance with the present Title;
- b) the risk-management processes and internal control mechanisms of the parent undertaking cover the subsidiary and the parent undertaking satisfies the supervisory authorities concerned regarding the prudent management of the subsidiary;
- c) the parent undertaking does not have its registered office in a state outside the EEA for which the verification carried out in accordance with Article 203 of the law has revealed that there is no equivalent control to that provided for in Articles 203 to 206 of the law.
- d) the parent undertaking has received the approval referred to in article 90, paragraph 4, third subparagraph, of the present regulation;
- e) the parent undertaking has received the agreement referred to in Article 200, paragraph 2, of the law;
- f) an application for permission to be subject to Articles 83 and 84 of the present regulation has been submitted by the parent undertaking and a favourable decision has been made on such application in accordance with the procedure set out in Article 82 of the present regulation.

Art. 82. - Subsidiaries of an insurance or reinsurance undertaking: decision on the application

- (1) In the case of applications for permission to be subject to the rules laid down in Articles 83 and 84 of the present regulation, the CAA shall work together with the other supervisory authorities within the college of supervisors, in full cooperation, to

decide whether or not to grant the permission sought and to determine the other terms and conditions, if any, to which such permission should be subject.

The application referred to in the first subparagraph shall be submitted only to the supervisory authority having authorised the subsidiary. When receiving such a request, the CAA shall inform the other members of the college of supervisors and forward the complete application to them, without delay.

- (2) The CAA shall do everything within its power to reach a decision on the application within three months from the date of receipt of the complete application jointly by all supervisory authorities within the college of supervisors.
- (3) If, within the three-month period referred to in paragraph 2, any of the supervisory authorities concerned has referred the matter to EIOPA, the CAA, when acting as group supervisor, shall defer its decision and await any decision that EIOPA may take provided such a decision is taken within one month of the referral, and shall take its decision in conformity with EIOPA's decision.

When a supervisory authority other than the CAA acts as group supervisor, the CAA may refer the matter to EIOPA within three months and as long as no joint decision has been taken. When this other supervisory authority makes its own decision by complying, insofar as such exists, with the decision of EIOPA, it is considered binding on the CAA and must be applied by it.

- (4) Where the supervisory authorities concerned have reached a joint decision and where the CAA has approved the subsidiary referred to in paragraph 1, subparagraph 2, it shall provide the applicant with the decision stating the full reasons.
- (6) In the absence of a joint decision of the supervisory authorities concerned within the three-month period, the CAA, when acting as group supervisor, shall take its own decision with regard to the application.

During that period the CAA shall duly take account of the following:

- a) any views and reservations of the other supervisory authorities concerned within the set time frame;
- b) any reservations expressed by the other supervisory authorities within the college of supervisors;
- c) the opinion of EIOPA if it has been consulted.

The decision shall state the full reasons and shall contain an explanation of any significant deviation from the reservations of the other supervisory authorities concerned. The CAA shall provide the applicant and the other supervisory authorities concerned with a copy of the decision.

In the absence of a joint decision of the supervisory authorities concerned within the three-month period, and when a supervisory authority other than the CAA acts as group supervisor and takes its own decision with regard to the application, this is considered binding on the CAA and must be applied by it.

Art. 83. - Subsidiaries of an insurance or reinsurance undertaking: calculation of the Solvency Capital Requirement

- (1) Without prejudice to Article 77 of the present regulation, the Solvency Capital Requirement of the subsidiary shall be calculated as set out in paragraphs 2, 4, and 5 of this Article.
- (2) Where the Solvency Capital Requirement of a Luxembourg subsidiary is calculated on the basis of an internal model approved at group level in accordance with Article 77 of the present regulation and the CAA considers that its risk profile deviates

significantly from this internal model, and as long as that undertaking does not properly address the concerns of the CAA, it may, in the cases referred to in Article 64 of the law, propose to set a capital add-on to the Solvency Capital Requirement of that subsidiary resulting from the application of the internal model or, in exceptional circumstances where such capital add-on would not be appropriate, to require that undertaking to calculate its Solvency Capital Requirement on the basis of the standard formula. The CAA shall discuss its proposal within the college of supervisors and communicate the grounds for such proposal to both the subsidiary and the college of supervisors.

- (3) Where the Solvency Capital Requirement of the Luxembourg subsidiary is calculated on the basis of the standard formula and the CAA considers that its risk profile deviates significantly from the assumptions underlying the standard formula, and as long as that undertaking does not properly address the concerns of the CAA, it may, in exceptional circumstances, propose that the undertaking replace a subset of the parameters used in the standard formula calculation by parameters specific to that undertaking when calculating the "life underwriting risk", "non- life underwriting risk" and "health underwriting risk" modules, as set out in Article 109 of the law, or, in the cases referred to in Article 64 of the law, to set a capital add-on to the Solvency Capital Requirement of that subsidiary.

The CAA shall discuss its proposal within the college of supervisors and communicate the grounds for such proposal to both the subsidiary and the college of supervisors.

- (4) Within the college of supervisors, the CAA shall do everything within its power to reach an agreement on the proposal of the supervisory authority having authorised the subsidiary or on other possible measures.

That agreement shall be recognised as determinative on the CAA and, where the CAA is the supervisory authority having "authorised"¹⁹ the subsidiary, must be applied by it.

- (5) Where the CAA, as the supervisory authority having authorised the subsidiary, and the group supervisor disagree, or, where the CAA, when acting as group supervisor and another supervisory authority having authorised a subsidiary of the group, disagree, each of them may, within one month from the proposal made regarding the subsidiary, refer the matter to EIOPA and request its assistance.

The CAA, as the supervisory authority having authorised that subsidiary, shall defer its decision and await any decision that EIOPA may take and shall take its decision in conformity with EIOPA's decision, provided that such decision was taken by the latter within one month of the referral.

The duly reasoned decision of the CAA shall be forwarded to the subsidiary and the college of supervisors.

Art. 84. - Subsidiaries of an insurance or reinsurance undertaking: non-compliance with the Solvency and Minimum Capital Requirements

- (1) In the event of non-compliance with the Solvency Capital Requirement by a Luxembourg subsidiary and without prejudice to Article 124 of the law, the CAA shall, without delay, forward to the college of supervisors the recovery plan submitted by the subsidiary in order to achieve, within six months from the observation of non-compliance with the Solvency Capital Requirement, the re-establishment of the level of eligible own funds or the reduction of its risk profile to ensure compliance with the Solvency Capital Requirement, together with the CAA's proposal regarding the approval of such recovery plan.

¹⁹ RCAA 16/01 of 3 May 2016

Within the college of supervisors, the CAA shall do everything within its power to reach an agreement on the proposal regarding the approval of the recovery plan within four months from the date on which non-compliance with the Solvency Capital Requirement was first observed.

In the absence of such agreement regarding the Luxembourg subsidiary, the CAA shall decide whether the recovery plan should be approved, taking due account of the views and reservations of the other supervisory authorities within the college of supervisors.

- (2) Where the CAA identifies, in accordance with Article 122 of the law, deteriorating financial conditions of a Luxembourg subsidiary, it shall notify the college of supervisors without delay of the proposed measures which it intends to take. Save in emergency situations, the measures to be taken shall be discussed within the college of supervisors.

Within the college of supervisors, the CAA shall do everything within its power to reach an agreement on the proposed measures to be taken within one month of notification.

In the absence of such agreement regarding the Luxembourg subsidiary, the CAA shall decide whether the proposed measures should be approved, taking due account of the views and reservations of the other supervisory authorities within the college of supervisors

- (3) In the event of non-compliance with the Minimum Capital Requirement by a Luxembourg subsidiary and without prejudice to Article 125 of the law, the CAA shall, without delay, forward to the college of supervisors the short-term finance scheme submitted by the subsidiary in order to achieve, within three months from the date on which non-compliance with the Minimum Capital Requirement was first observed, the re-establishment of the level of eligible own funds covering the Minimum Capital Requirement or the reduction of its risk profile to ensure compliance with the Minimum Capital Requirement. The college of supervisors shall also be informed by the CAA of any measures taken by it to enforce the Minimum Capital Requirement at the level of the subsidiary.
- (4) The CAA, as the supervisory authority having authorised the subsidiary or the group supervisor may refer the matter to EIOPA and request its assistance where they disagree regarding either of the following:
- a) on the approval of the recovery plan, including any extension of the recovery period, within the four-month period referred to in paragraph 1; or
 - b) on the approval of the proposed measures, within the one-month period referred to in paragraph 2.

The matter shall not be referred to EIOPA by the CAA when:

- a) the four-month or one-month deadlines foreseen in subparagraph 1 has expired;
- b) an agreement has been reached within the college in accordance with the second subparagraph of paragraph 1 or the second subparagraph of paragraph 2;
- c) an emergency situation as foreseen in paragraph 2 arises.

The four-month or the one-month deadlines respectively shall be deemed the conciliation period within the meaning of Article 19, paragraph 2 of regulation (EU) no 1094/2010.

The CAA shall defer its decision until any decision has been taken by EIOPA and shall take its final decision in conformity with EIOPA's decision provided that such decision is taken by the latter within one month of the referral.

The duly reasoned decision of the CAA shall be forwarded to the subsidiary and the college of supervisors.

Art. 85. - Subsidiaries of an insurance or reinsurance undertaking: end of derogations for a subsidiary

- (1) The rules provided for in Articles 83 and 84 of the present regulation shall cease to apply where:
- a) the condition referred to in Article 81, point a), of the present regulation is no longer complied with;
 - b) the condition referred to in Article 81, point b), of the present regulation is no longer complied with and the group does not restore compliance with this condition in an appropriate period of time;
 - c) the conditions referred to in Article 81, points d) and e), of the present regulation are no longer complied with.

In the case referred to in point a) of the first subparagraph of the present regulation, where the CAA, when acting as the group supervisor, decides, after having consulted the college of supervisors, no longer to include the subsidiary in the group supervision it carries out, it shall immediately inform the supervisory authority concerned and the parent undertaking.

For the purposes of Article 81, points b), d) and e), of the present regulation, the parent undertaking shall be responsible for ensuring that the conditions are complied with on an ongoing basis. In the event of non-compliance, the parent undertaking shall inform the CAA, when acting as group supervisor and the supervisor of the subsidiary concerned without delay. The parent undertaking shall present a plan to restore compliance within an appropriate period of time.

Without prejudice to the third subparagraph, the CAA, when acting as group supervisor, shall verify at least annually, on its own initiative, that the conditions referred to in Article 81, points b), d) and e), of the present regulation continue to be complied with. It shall also perform such verification upon request from the supervisory authority concerned, where the latter has significant concerns related to the ongoing compliance with those conditions.

Where the verification performed identifies weaknesses, the CAA shall require the parent undertaking to present a plan to restore compliance within an appropriate period of time.

Where, after consulting the college of supervisors, the CAA determines that the plan referred to in the third or fifth subparagraph is insufficient or subsequently that it is not being implemented within the agreed period of time, it shall confirm with its reasons that the conditions referred to in Article 81, points b), d) and e), of the present regulation are no longer complied with and it shall immediately inform the supervisory authority concerned and the Luxembourg parent undertaking.

- (2) The regime provided for in Articles 83 and 84 of the present regulation shall be applicable again where the parent undertaking submits a new application and obtains a favourable decision in accordance with the procedure set out in Article 82 of the regulation.

Art. 86. - Subsidiaries of an insurance holding company and mixed financial holding company

Articles 81 to 85 of the present regulation shall apply to insurance and reinsurance undertakings which are the subsidiary of an insurance holding company or mixed financial holding company.

Subsection 6 – Third countries

Art. 87. – Parent undertaking having its registered office in a third country not having obtained equivalence

The Solvency Capital Requirement for the purposes of Article 205, paragraph 1, subparagraph 3, of the law is determined as follows:

- a) in accordance with the principles of Article 72 of the present regulation for an insurance holding company;
- b) in accordance with the principles of Article 73 of the present regulation for a third-country insurance or reinsurance undertaking.

Section 2 – Risk concentration and intragroup transactions

Art. 88. Supervision of risk concentration

- (1) Supervision of the risk concentration at group level shall be exercised in accordance with paragraphs 2 and 3 of this Article, Article 90 of the present regulation and Articles 192 to 202 of the law.
- (2) Luxembourg insurance and reinsurance undertakings or Luxembourg insurance holding companies or Luxembourg mixed financial holding companies shall report on a regular basis and at least annually to the group supervisor any significant risk concentration at the level of the group.

The necessary information shall be submitted to the group supervisor by the insurance or reinsurance undertaking which is at the head of the group or, where the group is not headed by a insurance or reinsurance undertaking, by the insurance holding company, the mixed financial holding company or the insurance or reinsurance undertaking in the group identified by the group supervisor after consulting the other supervisory authorities concerned and the group.

The risk concentrations referred to in the first subparagraph shall be subject to supervisory review by the CAA, when acting as group supervisor.

- (3) The CAA, when acting as group supervisor, after consulting the other supervisory authorities concerned and the group, shall identify the type of risks insurance and reinsurance undertakings in a particular group shall report in all circumstances.

When defining or giving their opinion about the type of risks, the CAA and the other supervisory authorities concerned shall take into account the specific group and the risk-management structure of the group.

In order to identify significant risk concentration to be reported, the CAA, when acting as group supervisor, after consulting the other supervisory authorities concerned and the group, shall impose appropriate thresholds based on solvency capital requirements, technical provisions, or both.

When reviewing the risk concentrations, the CAA, when acting as group supervisor, shall in particular monitor the possible risk of contagion in the group, the risk of a conflict of interests, and the level or volume of risks.

Art. 89. - Supervision of intra-group transactions

- (1) Supervision of intra-group transactions shall be exercised in accordance with paragraphs 2 and 3 of this Article, Article 90 of the present regulation and Articles 192 to 202 of the law.
- (2) Luxembourg insurance and reinsurance undertakings, Luxembourg insurance holding companies and Luxembourg mixed financial holding companies shall report on a

regular basis and at least annually to the group supervisor all significant intra-group transactions by insurance and reinsurance undertakings within a group, including those performed with a natural person with close links to an undertaking in the group.

In addition, very significant intra-group transactions shall be reported as quickly as practicable.

The necessary information shall be submitted to the group supervisor by the insurance or reinsurance undertaking which is at the head of the group or, where the group is not headed by an insurance or reinsurance undertaking, by the insurance holding company, the mixed financial holding company or the insurance or reinsurance undertaking in the group identified by the group supervisor after consulting the other supervisory authorities concerned and the group.

Intra-group transactions shall be subject to supervisory review by the group supervisor

- (3) The CAA, when acting as group supervisor, after consulting the other supervisory authorities concerned and the group, shall identify the type of intra-group transactions insurance and reinsurance undertakings in a particular group must report in all circumstances. Article 88, paragraph 3, of the present regulation shall apply.

Section 3 – Risk management and internal control

Art. 90. - Supervision of the system of governance

- (1) The requirements set out in Articles 71 to 75, 77 to 79 and 81 of the law shall apply at the level of the group.

Without prejudice to the first subparagraph, the risk management and internal control systems and reporting procedures shall be implemented consistently in all the undertakings included in the scope of group supervision pursuant to Article 185, paragraph 2, points a) and b) of the law so that those systems and reporting procedures can be controlled at the level of the group.

- (2) Without prejudice to paragraph 1, the group internal control mechanisms shall include at least the following:
 - a) adequate mechanisms as regards group solvency to be able to identify and measure all material risks incurred and to appropriately relate eligible own funds to risks;
 - b) sound reporting and accounting procedures to monitor and manage the intra-group transactions and the risk concentration.
- (3) The systems and reporting procedures referred to in paragraphs 1 and 2 shall be subject to supervisory review by the group supervisor, in accordance with the provisions of Articles 192 to 202 of the law.
- (4) Where a Luxembourg participating insurance undertaking or reinsurance undertaking, a Luxembourg insurance holding company or a Luxembourg mixed financial holding company is the parent undertaking of a group, it shall undertake at the level of the group the assessment required by Article 75 of the law. The own-risk and solvency assessment conducted at group level shall be subject to supervisory review by the group supervisor in accordance with Articles 192 to 202 of the law.

Where the calculation of the solvency at the level of the group is carried out in accordance with method 1, as referred to in Article 76 of the present regulation, the parent undertaking referred to in subparagraph 1, shall provide to the group supervisor a proper analysis of the difference between the sum of the Solvency

Capital Requirements of all the related insurance or reinsurance undertakings of the group and the group consolidated Solvency Capital Requirement.

Where the parent undertaking referred to under subparagraph 1 so decides, it may, subject to the approval of the group supervisor, at the same time undertake any assessments required pursuant to Article 75 of the law at the level of the group and at the level of any subsidiary in the group, and may produce a single document covering all the assessments.

Before granting an approval in accordance with the third subparagraph, the CAA, acting as group supervisor, shall consult the members of the college of supervisors and duly take into account their views or reservations.

Where the group exercises the option provided in the third subparagraph, it shall submit the document to all supervisory authorities concerned at the same time. The exercise of that option shall not exempt the subsidiaries concerned from the obligation to ensure that the requirements of Article 75 of the law are met.

Section 4 – Levels of group supervision

Art. 91. – Ultimate parent undertaking at Luxembourg level

- (1) Where the CAA decides to apply Articles 190 and 191 of the law and Articles 66 to 86 of the present regulation to the ultimate parent undertaking at Luxembourg level, the choice of method made by the group supervisor in respect of the ultimate parent undertaking at Community level referred to in Article 187 of the law shall be applied by the CAA.
- (2) Where the CAA decides to apply to the ultimate parent undertaking at Luxembourg level the provisions of Articles 190 and 191 of the law and of Articles 66 to 86 of the present regulation, and where the ultimate parent undertaking at Community level referred to in Article 187 of the law has obtained permission to calculate the group Solvency Capital Requirement, as well as the Solvency Capital Requirement of insurance and reinsurance undertakings in the group, on the basis of an internal model, that decision shall be applied by the CAA.

In such a situation, where the CAA considers that the risk profile of the ultimate parent undertaking at national level deviates significantly from the internal model approved at Community level, and as long as that undertaking does not properly address the concerns of the CAA, the latter may decide that the application of this model justifies the imposition of capital add-on to the group Solvency Capital Requirement of that undertaking resulting from the application of such model or, in exceptional circumstances where such capital add-on would not be appropriate, to require that undertaking to calculate its group Solvency Capital Requirement on the basis of the standard formula.

The CAA shall explain these decisions to the undertaking and to the group supervisor who shall inform the college of supervisors thereof.

- (3) Where the CAA decides to apply the provisions of Articles 190 and 191 of the law and the Articles 66 to 86 of the present regulation to the ultimate parent undertaking at Luxembourg level, that undertaking shall not be permitted to introduce, in accordance with Articles 81 ou 86 of the present regulation, an application for permission to subject any of its subsidiaries to Articles 83 and 84 of the present regulation.
- (4) No decisions referred to in Article 188, paragraph 1, of the law, can be made or maintained where the ultimate parent undertaking at Luxembourg level is a subsidiary of the ultimate parent undertaking at Community level referred to in Article 187 of the law and the latter has obtained in accordance with Articles 82 or

86 of the present regulation permission for that subsidiary to be subject to Articles 83 and 84.

Section 5 – International Cooperation

Art. 92. – Content of the coordination agreements in the context of group supervision

Pursuant to Article 193, paragraph 4, of the law, the coordination agreements referred to in Article 193, paragraph 3 of the law shall specify the procedures:

- a) to be followed by the supervisory authorities concerned when taking decisions in accordance with Articles 77 and 79 of the present regulation and Article 192 of the law;
- b) for the consultation under Article 190, paragraph 5, and Article 193, paragraph 3, of the law.

Without prejudice to the rights and duties allocated by the law and the present regulation to the group supervisor and to other supervisory authorities, the coordination arrangements may entrust additional tasks to the group supervisor, other supervisory authorities or EIOPA where this results in the more efficient supervision of the group and does not impair the supervisory activities of the members of the college of supervisors in respect of their individual responsibilities.

In addition, the coordination arrangements may set out procedures for:

- a) consultation between the supervisory authorities concerned, in particular as referred to in Articles 185 to 189, 191, 195, 200, 203 and 205 of the law, as well as to Articles 66, 67, 73, 88, 89 and 90 of the present regulation;
- b) cooperation with other supervisory authorities.

Chapter IX - Financial conglomerates for which the CAA acts as group coordinator

Art. 93. - Principles and methods applicable to financial conglomerates

Where the CAA acts as coordinator, the calculation of the additional capital adequacy requirements for regulated entities in a financial conglomerate shall be carried out in accordance with the principles of Articles 94 and 95 and with one of the methods set out in Article 96 of the present regulation.

The CAA as coordinator shall decide, after consultation with the competent authorities concerned and the conglomerate itself, which method is to be applied by this financial conglomerate.

Art. 94. - Solvency deficit of a subsidiary

Regardless of the method used, when the entity is a subsidiary with a solvency deficit or, in the case of a non-regulated entity of the financial sector, a notional solvency deficit, the total solvency deficit of the subsidiary is taken into account. Where in such a case, in the opinion of the CAA, the liability of the parent undertaking holding a capital share is limited, strictly and unambiguously, to that capital share, the CAA may allow the subsidiary's solvency deficit to be taken into account on a proportional basis.

Where there is no capital link between undertakings in the same financial conglomerate, the CAA, after consultation with the other competent authorities concerned, shall determine which proportional share shall be considered, taking into account the liability arising from the existing relationship.

Art. 95. - Principles applicable to the calculation of own funds at the level of the financial conglomerate

Regardless of the method used to calculate the additional capital adequacy requirements of the regulated entities in a financial conglomerate, the CAA and, where appropriate, the other competent authorities concerned shall ensure that the following principles are applied:

- a) the multiple use of elements eligible for the calculation of own funds at the level of the financial conglomerate, hereinafter referred to as 'double use of own funds', as well as the inadequate creation of intra-group own funds, must be excluded; to ensure that double use of own funds and intra-group creation of own funds are excluded, the relevant principles set out in the corresponding sectorial rules shall apply;
- b) pending further harmonisation of sectorial rules, the solvency requirements applicable to the different financial sectors represented in a financial conglomerate shall be covered by own funds items in accordance with the corresponding sectorial rules. In the event of a capital deficit at the level of the financial conglomerate, only the own-fund items accepted by all these sectorial rules, hereinafter referred to as "cross-sectorial capital", shall be taken into account for the verification of compliance with the additional solvency requirements;

Where the sectorial rules provide for limits on the eligibility of certain own funds instruments that could be considered as cross-sectorial capital, these limits shall apply to the calculation of own funds at the level of the financial conglomerate;

- c) when calculating own funds at the level of the financial conglomerate, the competent authorities shall also take into account the effective availability and transferability of own funds between the different legal entities of the group, taking into account the objectives set by the capital adequacy rules.

Art. 96. - Permissible technical calculation methods

- (1) The technical methods of calculation allowed for the application of the first paragraph of Article 93 of the present regulation are as follows:

1. Method 1: Accounting consolidation-based method

The calculation of the additional capital adequacy requirements of the regulated entities in a financial conglomerate shall be based on the consolidated accounts.

The additional capital adequacy requirements result from the difference between:

- i) the financial conglomerate's own funds, calculated on the basis of its consolidated financial position, the elements included in this calculation being those permitted by the applicable sectorial rules,
and
- ii) the sum of the solvency requirements applicable to the different financial sectors represented in the group, the solvency requirements being calculated for each of these sectors in accordance with the corresponding sectorial rules.

The sectorial rules referred to are in particular: Articles 71 to 73 of Directive 2006/48/EC for credit institutions; Title III, Chapter 1 of Directive 2009/138/EC for insurance and reinsurance undertakings and Articles 2 and 3 of Directive 2006/49/EC for investment firms.

In case of non-regulated entities in the financial sector, which are not included in the calculation of the above-mentioned sectorial solvency requirements, a notional solvency requirement as defined in paragraph 2 below shall be calculated.

The result of this calculation must not be negative.

2. Method 2: Deduction and aggregation

The calculation of the additional capital adequacy requirements of the regulated entities in a financial conglomerate shall be based on the accounts of each of the entities in the group.

The additional capital adequacy requirements result from the difference between:

i) the sum of the own funds of all regulated and non-regulated financial sector entities in the financial conglomerate, the elements included in this calculation being those permitted by the relevant sectorial rules,

and

ii) the sum of

- the solvency requirements of all regulated and non-regulated financial sector entities in the group, these solvency requirements being calculated in accordance with the relevant sectorial rules,

and

- the book value amount of holdings in other group entities.

In the case of non-regulated entities in the financial sector, a notional solvency requirement, as defined in paragraph 2 below, shall be calculated. Without prejudice to Article 94 of the present regulation, own funds and solvency requirements shall be taken into account for their proportional share in accordance with the second paragraph of Article 97 of the present regulation.

The result of this calculation must not be negative.

3. Method 3: Combination method

The CAA, following consultations in accordance with Article 93, subparagraph 2 of the present regulation, may authorise the combination of methods 1 and 2.

The result of this calculation must not be negative.

- (2) The notional solvency requirement means the own capital requirement that an unregulated entity in the financial sector would have to comply with under the sectorial rules that would apply if it were a regulated entity in the financial sector concerned; in the case of asset management companies, the notional solvency requirement shall mean the capital requirement referred to in Article 7, paragraph 1, point a), of Directive 2009/65/EC; the notional solvency requirement of a mixed financial holding company shall be calculated in accordance with the sectorial rules of the financial sector having the most significance within in the financial conglomerate.

Art. 97. - Additional rules to be taken into account according to the calculation method applied

When calculating, in accordance with method 1 described in Article 96 of the present regulation, the additional capital adequacy requirements of a financial conglomerate, the own funds and solvency requirements of the entities in the group shall be calculated by applying the corresponding sectorial rules on the form and extent of consolidation, as

laid down, in particular, in Articles 133 and 134 of Directive 2006/48/EC and Article 221 of Directive 2009/138/EC.

When applying method 2 (deduction and aggregation) referred to in Article 96 of the present regulation, the calculation shall take into account the proportion of subscribed capital held, directly or indirectly, by the parent undertaking or by the undertaking which holds a participation in another entity of the group.

Chapter X - Transitional provisions

Art. 98. - Transitional measures concerning the standard parameters to be used for the calculation of certain risk sub-modules

Notwithstanding Articles 104, 105, paragraph 3 and 107 of the law and Article 34(3) of the present regulation, the following rules shall apply:

a) until 31 December 2017, the standard parameters to be used to calculate the concentration risk sub-module and the spread risk sub-module according to the standard formula for exposures to Member States' central governments and central banks that are denominated and funded in the national currency of any other Member State shall be the same as those that would apply to such exposures denominated and funded in the national currency of those exposures;

b) in 2018, the standard parameters to be used to calculate the concentration risk sub-module and the spread risk sub-module according to the standard formula shall be reduced by 80% for exposures to Member States' central governments and central banks that are denominated and funded in the national currency of any other Member State;

c) in 2019, the standard parameters to be used to calculate the concentration risk sub-module and the spread risk sub-module according to the standard formula shall be reduced by 50% for exposures to Member States' central governments and central banks that are denominated and funded in the national currency of any other Member State;

d) as from 1 January 2020, the standard parameters to be used to calculate the concentration risk sub-module and the spread risk sub-module according to the standard formula shall not be reduced for exposures to central governments and central banks of Member States that are denominated and funded in the national currency of any other Member State.

Art. 99. - Transitional measure on risk-free interest rates

(1) Luxembourg insurance and reinsurance undertakings may, subject to prior approval by the CAA, apply a transitional adjustment to the risk-free interest rate term structure to admissible insurance and reinsurance obligations within the meaning of paragraph 3.

(2) For each currency, the adjustment shall be calculated as portion of the difference between:

a) the interest rate as determined by the insurance or reinsurance undertaking in accordance with the laws, regulations and administrative provisions adopted pursuant to Article 20 of Directive 2002/83/EC on 31 December 2015;

“b) the annual effective rate, calculated as the single discount rate that, where applied to the cash flows of the portfolio of admissible insurance and reinsurance obligations, results in a value that is equal to the value of the best estimate of the portfolio of admissible insurance and reinsurance obligations where the time value

of money is taken into account using the relevant risk-free interest rate term structure, referred to in Article 11 of the present regulation."²⁰

The interest rate referred to in point a) of the first subparagraph shall be determined by using the methods used by the insurance or reinsurance undertaking at 31 December 2015.

The portion referred to in the first subparagraph shall decrease in a linear manner at the end of each year, from 100% for the first year beginning on 1 January 2016 to 0% on 1 January 2032.

Where insurance and reinsurance undertakings apply the volatility adjustment referred to in Article 15 of the present regulation, the relevant risk-free interest rate term structure referred to in point b) shall be the relevant risk-free interest rate term structure defined in that Article.

- (3) The admissible insurance and reinsurance obligations shall comprise only admissible obligations that meet the following requirements:
 - a) the contracts giving rise to the insurance and reinsurance obligations were concluded before 1 January 2016, excluding contract renewals on or after that date;
 - b) until 31 December 2015, technical provisions for insurance and reinsurance obligations were determined in accordance with the laws, regulations and administrative provisions adopted pursuant to Article 20 of Directive 2002/83/EC at 31 December 2015;
 - c) Article 13 of the present regulation is not applied to insurance and reinsurance obligations.
- (4) Insurance and reinsurance undertakings applying paragraph 1 shall:
 - a) not include admissible insurance and reinsurance obligations in the calculation of the volatility adjustment set out in Article 15 of the present regulation;
 - b) not apply Article 100 of the present regulation;
 - c) as part of their report on their solvency and financial condition referred to in Article 82 of the Law, publicly disclose that they apply the transitional risk-free interest rate term structure and quantify the impact of a non-application of this transitional measure on their financial position.

Art. 100. - Transitional measure on technical provisions

- (1) Luxembourg insurance and reinsurance undertakings may, subject to prior approval by the CAA, apply a transitional deduction to technical provisions. This deduction may be applied at the level of homogeneous risk groups defined pursuant to Article 19 of the present regulation.
- (2) The transitional deduction shall correspond to a portion of the difference between the following two amounts:
 - a) the technical provisions after deduction of the amounts recoverable from reinsurance contracts and special purpose vehicles, calculated in accordance with Article 100 of the Law, as at 1 January 2016;
 - b) the technical provisions after deduction of the amounts recoverable from reinsurance contracts, calculated in accordance with the laws, regulations and administrative provisions adopted pursuant to Article 15 of Directive 73/239/EC, Article 20 of Directive 2002/83/EC and Article 32 of Directive 2005/68/EC on 31 December 2015.

²⁰ RCAA 16/01 of 3 May 2016

The maximum portion deductible shall decrease in a linear manner at the end of each year, from 100% for the first year beginning on January 1, 2016 to 0% on January 1, 2032.

Where insurance and reinsurance undertakings apply on 1 January 2016 the volatility adjustment referred to in Article 15 of the present regulation, the amount referred to in point (a) shall be calculated with the volatility adjustment of that date.

- (3) Subject to prior approval or on the initiative of the CAA, the amounts of technical provisions, including, where applicable, the amount of the volatility adjustment, used to calculate the transitional deduction referred to in paragraph 2 (a) and (b), may be recalculated every 24 months, or more frequently where the risk profile of the undertaking has materially changed.
- (4) The CAA may limit the deduction referred to in paragraph 2 if its application could result in a reduction of the financial resources requirements applicable to the undertaking when compared with those calculated in accordance with the laws, regulations and administrative provisions adopted pursuant to Directive 73/239/EEC, Directive 2002/83/EC and Directive 2005/68/EC on 31 December 2015.
- (5) Insurance and reinsurance undertakings applying paragraph 1 shall:
 - a) not apply Article 99 of the present regulation;
 - b) in the event that they do not comply with the Solvency Capital Requirement without the application of the transitional deduction, submit annually a report to the CAA setting out measures taken and progress made to re-establish, at the end of the transitional period defined in paragraph 2, a level of eligible own funds covering the Solvency Capital Requirement or reduce their risk profile in order to restore compliance with the Solvency Capital Requirement;
 - c) as part of their report on their solvency and financial condition referred to in Article 82 of the Law, publicly disclose that they apply the transitional deduction on the technical provisions and quantify the impact of a non-application of this transitional measure on their financial position.

Art. 101. - Monitoring the phasing-in of transitional measures on risk-free interest rates and on technical provisions

Luxembourg insurance and reinsurance undertakings applying the transitional measures set out in Article 99 or Article 100 of the present regulation shall inform the CAA as soon as they become aware that they would not comply with the Solvency Capital Requirement without the application of these transitional measures. The CAA shall require the insurance or reinsurance undertaking concerned to take the necessary measures to ensure compliance with the Solvency Capital Requirement at the end of the transitional period.

Within two months from observation of non-compliance with the Solvency Capital Requirement without the application of these transitional measures, the insurance or reinsurance undertaking concerned shall submit to the CAA a phasing-in plan setting out the measures planned to establish the level of eligible own funds covering the Solvency Capital Requirement or to reduce its risk profile in order to ensure compliance with the Solvency Capital Requirement at the end of the transitional period. The insurance or reinsurance undertaking concerned may update the phasing-in plan during the transitional period.

The insurance and reinsurance undertakings concerned shall submit annually a report to the CAA setting out the measures taken and progress made to ensure compliance with the Solvency Capital Requirement at the end of the transitional period. The CAA shall revoke the approval for the application of the transitional measure where that progress

report shows that compliance with the Solvency Capital Requirement at the end of the transitional period is an unrealistic prospect.

Chapter XI - Entry into force

Art. 102. - Entry into force

- (1) The present regulation enters into force on January 1, 2016.
- (2) By way of derogation from paragraph 1, four days after the publication of the present regulation in the Mémorial, the CAA shall have the power to decide on the approval of:
 - a) an application of the equalisation adjustment to the risk-free interest rate term structure in accordance with Article 13, paragraph 1, of the present regulation;
 - b) an application of the transitional measure on risk-free interest rates in accordance with Article 99 of the present regulation;
 - c) an application of the transitional measure on technical provisions in accordance with Article 100 of the present regulation.
- (3) By way of derogation from paragraph 1, four days after the publication of the present regulation in the Mémorial, the CAA shall have the power:
 - a) to determine the choice of calculation method of the group's solvency, in accordance with Article 66 of the present regulation;
 - b) to determine equivalence, where necessary, in accordance with Article 73, paragraph 2 of the present regulation;
 - c) to decide to deduct any participation in accordance with of Article 74, paragraph 2, of the present regulation;
 - d) to take the decision referred to in Article 81, point f), of the present regulation.

Luxembourg, 7 December 2015

COMMISSARIAT AUX ASSURANCES

Claude WIRION
Director of the Commissariat aux Assurances

Annick FELTEN
Member of the Directorate

ANNEX

SOLVENCY CAPITAL REQUIREMENT (SCR) STANDARD FORMULA

1. Calculation of the Basic Solvency Capital Requirement

The Basic Solvency Capital Requirement (« Basic SCR ») set out in Article 35 of the present regulation 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 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 :

i \ j	Market	Default	Life	health	Non-life
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 module

The non-life underwriting risk module set out in Article 35, paragraph 2, of the present regulation shall be calculated as follows:

$$SCR_{non-life} = \sqrt{\sum_{i,j} Corr_{i,j} \times SCR_i \times SCR_j}$$

where SCR_i denotes the sub-module i and SCR_j 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:

- $SCR_{nl\ premium\ and\ reserve}$ denotes the non-life premium and reserve risk;
- $SCR_{nl\ catastrophe}$ denotes the non-life catastrophe risk sub-module.

3. Calculation of the life underwriting module

The life underwriting risk module set out in Article 35, paragraph 3, of the present regulation shall be calculated as follows:

$$SCR_{life} = \sqrt{\sum_{i,j} Corr_{i,j} \times SCR_i \times SCR_j}$$

where SCR_i denotes the sub-module i and SCR_j 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:

- $SCR_{mortality}$ 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. Calculation of the market risk module

Structure of the market risk model

The market risk module, set out in Article 35, paragraph 5, of the present regulation shall be equal to:

$$SCR_{market} = \sqrt{\sum_{i,j} Corr_{i,j} \times SCR_i \times SCR_j}$$

where SCR_i denotes the sub-module i and SCR_j 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, SCRi and SCRj are replaced by the following:

- $SCR_{interest\ rate}$ 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.

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