

EIOPA-BoS-14/173

# Guidelines on application of outwards reinsurance arrangements to the non-life underwriting risk sub-module

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#### Introduction

- 1.1. According to Article 16 of Regulation (EU) 1904/2010 of 24 November 2010 (hereafter EIOPA Regulation)<sup>1</sup>, Article 105(2) of Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II)<sup>2</sup>, Article 119 to Article 135, Article 209 and Article 214 of Commission Delegated Regulation (EU) 2015/35 of 10 October 2014 supplementing Directive 2009/138/EC (hereafter Commission Delegated Regulation 2015/35)<sup>3</sup>, EIOPA is issuing Guidelines on the non-life catastrophe risk sub-module.
- 1.2. In particular, these Guidelines are intended to ensure a common, uniform and consistent application of the non-life catastrophe risk sub-module, including treatment of undertakings' outwards reinsurance arrangements.
- 1.3. These Guidelines are addressed to supervisory authorities under Solvency II.
- 1.4. The present Guidelines make reference to the "flowchart for the non-life underwriting risk" which represents the different sub-modules that compose the non-life catastrophe risk sub-module of the Solvency Capital Requirement standard formula, according to Commission Delegated Regulation 2015/35.
- 1.5. For the purpose of these Guidelines, the following definitions have been developed:
  - (a) 'Gross loss' means:
    - For risk mitigation being applied in a sub-module which has no dependency on other sub-modules, the loss calculated according to the formula in this sub-module;
    - ii. For risk mitigation being applied in a sub-module which does have a dependency on other sub-module(s), the loss calculated according to the formula in this sub-module but using, as inputs to the formula, the results from each sub-module net of risk mitigation applied (if any) in the sub-modules on which this sub-module depends.
  - (b) 'Aggregating catastrophe event' means a catastrophe event which accumulates and affects a group of policies together. Separate policy impacts cannot be readily identified.
  - (c) 'Risk catastrophe event' means an event which affects policies which can be identified specifically or a single policy.

<sup>&</sup>lt;sup>1</sup> OJ L 331, 15.12.2010, p. 48–83

<sup>&</sup>lt;sup>2</sup> OJ L 335, 17.12.2009, p. 1-155

<sup>&</sup>lt;sup>3</sup> OJ L 12, 17.01.2015, p. 1-797

- (d) Gross event: specification of the event with the resolution required to be able to apply the outwards reinsurance programme. This is the term applied to the gross loss after disaggregation.
- (e) Catastrophe sub-module branches: branches of one of the four main nonlife catastrophe risk sub-modules described in Article 119 of Commission Delegated Regulation 2015/35
- (f) Outwards reinsurance/outwards reinsurance protections: reinsurance arrangements where an undertaking cedes risk to a reinsurer.
- (g) Inwards reinstatement premium: any reinstatement premium which may be payable to an undertaking.
- (h) Clash cover: a reinsurance liability excess of loss contract relating to two or more coverages or policies, issued by the undertaking to be involved in a loss for coverage to apply. The attachment point of the reinsurance contract is usually above the limits of any one policy.
- (i) 1 in 200 year catastrophe event: a catastrophe event corresponding to a Value-at-Risk measure with a 99.5% confidence level as defined in Article 104 (4) of Solvency II.
- (j) Component: a self-contained calculation unit of the non-life catastrophe sub-module for which a Solvency Capital Requirement (SCR) can be determined. This may be at sub-module level or lower granularity e.g. region or EEA / non-EEA regions for the natural catastrophe perils.
- 1.6. If not defined in these Guidelines the terms have the meaning defined in the legal acts referred to in the introduction.
- 1.7. The Guideline shall apply from 1 April 2015.

#### **Section I: Order of operation of the Guidelines**

#### **Guideline 1 - Order of operation of Guidelines**

1.8. Undertakings should apply the sections of these Guidelines sequentially to assess their outwards reinsurance in respect of catastrophe risk.

#### **Section II: Specification of events**

#### Guideline 2 - Level of detail required to specify the catastrophic event

1.9. Based on Articles 119 to 135, undertakings should specify appropriate 1 in 200 year catastrophe events in enough detail to be able to apply the risk mitigation techniques.

# Guideline 3 – Specification of catastrophes as aggregating catastrophe events or risk catastrophe events

1.10. Undertakings should specify the losses defined in the various catastrophe risk sub-modules as either "aggregating catastrophe events" or "risk catastrophe events" in which case undertakings should also specify whether these events are affecting specific known policies or not.

- 1.11. For each non-life catastrophe risk sub-module, undertakings should specify the type of event as follows:
  - (a) Earthquake, windstorm, hail, flood and subsidence sub-modules specified as aggregating catastrophe event.
  - (b) Motor liability sub-module specified as risk catastrophe event affecting a single policy.
  - (c) Liability, Aviation, Marine and Fire sub-modules specified as risk catastrophe event affecting known policies
  - (d) Credit and suretyship sub-module as specified by Guidelines 13 and 14.
  - (e) Non-proportional property reinsurance sub-module as specified by Guideline 11.

# **Guideline 4 – Specification of number of events for natural catastrophe submodules in respect of EEA regions**

1.12. Undertakings should consider the number of events for EEA regions gross losses as single or double events affecting one or more regions, and not assume that multiple events occur in each region.

#### Guideline 5 – Specification of number of events for natural catastrophe submodules in respect of non-EEA regions

1.13. For non-EEA regions where the number of aggregating catastrophe events that generate the gross loss has not been defined, undertakings should follow a similar approach to that applied under Guideline 4, for each specific submodule.

#### **Guideline 6 - Catastrophe event selection**

1.14. Where a number of 1 in 200 year catastrophe events can be defined, undertakings should derive events which are consistent with their risk profile and select the event which results in the highest catastrophe charge after the application of the risk mitigation techniques.

#### **Guideline 7- Size of liability losses**

- 1.15. To determine the size of the individual claims on which the calculation of the loss in basic own funds according to Article Article 133 of Commission Delegated Regulation 2015/35 is based, undertakings should follow the process below:
  - (a) Within each risk group, the  $n_i$  risks with the largest limits should be identified. For this purpose a "risk" consists of all policies written as part of a programme with the same or closely affiliated coverage and the same insured policy-holder (where the insured policy-holder is the policy-holder of the insurance contract) that are in force at the same time.
  - (b) The resulting  $n_i$  limits should each be multiplied by 1,15.
  - (c) The  $n_i$  values calculated in (b), should be aggregated and deducted from  $L_{\text{(liability, i)}}$  and any difference should be allocated proportionally using the actual limits of the  $n_i$  values.

- (d) The final resulting  $n_i$  values should be considered as individual claims from a single event, each associated with the risk from which they have been derived.
- 1.16. Undertakings should then be able to identify for each of the  $n_i$  claims which reinsurance covers apply, given the nature of the associated risk.
- 1.17. Undertakings should be prepared to demonstrate to the supervisory authority that their purchasing of outwards reinsurances has not been materially influenced by whether the risk would be one identified under this process.

#### Section III: Disaggregating the gross loss

## Guideline 8 – Disaggregating the gross loss to individual countries or other components

- 1.18. Undertakings should use one of the methods specified below to disaggregate the gross loss to individual components where the gross impact on individual policies has not been identified so that outwards reinsurance protections can be applied:
  - (a) Max method: The gross loss is allocated to the component which is the largest contributor of the gross loss pre-diversification.
  - (b) Spread method: The gross loss is spread across relevant components in proportion to their contribution to the gross loss pre diversification; alternatively an approach using correlation matrices to share the loss may be adopted similar to that proposed for allocating the SCR to Lines of Business.
  - (c) Blend method: This method selects the maximum (on the basis of largest net capital charge) of the Max and the Spread methods above.

#### Guideline 9 – Disaggregating the gross loss for Natural catastrophe submodules in relation to EEA scenarios

- 1.19. Undertakings should use the methods defined below to disaggregate the gross loss for natural catastrophe sub-modules, in relation to EEA scenarios.
- 1.20. When disaggregating the gross loss to regions, undertakings should use the Blend method for the windstorm and flood risk sub-modules and the Max method to disaggregate the earthquake and hail risk sub-modules.
- 1.21. When disaggregating the gross loss to business units, companies and lines of business, undertakings should use the Spread method.
- 1.22. If the undertaking has a risk profile such that the method specified above is not appropriate, the undertaking should select a more suitable approach and justify it to the supervisor.

# Guideline 10 – Disaggregating the gross loss for Natural Catastrophes for non-EEA regions

1.23. Undertakings should apply to the non EEA regions, methods which are consistent with the methods applied for EEA perils in Guideline 9 to allocate the gross loss.

1.24. If the undertaking has a risk profile such that this approach is not appropriate, the undertaking should select a more suitable approach and justify it to the supervisor.

# Guideline 11 – Disaggregating the gross loss for Natural Catastrophes for Non-Proportional Property

- 1.25. Undertakings should apply the Max method for the non-proportional property reinsurance sub-module to allocate the loss to a region. Undertakings should then estimate the exposure to the highest peril in this region and the number of events specified as in the relevant aggregating catastrophe event(s) that applies to the underlying contracts. Where two aggregate catastrophe events are defined, this should imply that both events occur within the same region.
- 1.26. If the undertaking has a risk profile such that this approach is not appropriate, the undertaking should select a more suitable approach. This approach should be justified to the supervisor.

# Guideline 12 – Specifying the gross loss for man-made sub- modules: motor vehicle, marine, aviation, fire and liability risks

- 1.27. Undertakings should identify the particular policies impacted by the gross liability risk event by applying Guidelines 34 to 39. For the marine, aviation and fire scenarios the undertaking should identify the gross risks affected and hence which reinsurances apply (including per risk excess of loss protections) to the claims.
- 1.28. For motor vehicle liability risk, the undertaking should assume that the risk catastrophe event specified in Commission Delegated Regulation 2015/35 arises from a single loss event. The undertaking should assume that the loss occurs in the region and/or business unit which generates the highest contribution to the gross loss pre diversification.
- 1.29. When applying the risk specific protections the undertaking should be able to satisfy their national supervisor that the purchase of outwards reinsurances has not been materially influenced by whether the risk is one identified as the gross event or a contribution to this gross event.

# Guideline 13 – Disaggregating the gross loss for Credit and suretyship- large buyer scenario

1.30. In determining the largest credit exposures, undertakings should take account of exposure accumulations to entities within a group.

### Guideline 14 – Disaggregating the gross loss for Credit and suretyship recession scenario

1.31. Where undertakings need to allocate the recession gross loss to different territories, industries, product types, or more generally to the respective scope of applicability of the reinsurance arrangement in order to apply their reinsurance protections, they should allocate the gross loss pro-rata based on gross premium volumes.

#### **Section IV: Application of outwards reinsurance**

#### **Guideline 15 – Outwards reinsurance applicability**

- 1.32. Undertakings should apply each outwards reinsurance protection to one of the levels specified below:
  - (a) different zones within a single region single sub-module branch;
  - (b) different regions within a single sub-module branch;
  - (c) EEA/non-EEA grouping within a single sub-module; different catastrophe sub-modules branches within a catastrophe sub-module;
  - (d) different catastrophe sub-modules e.g. as could be the case for stoploss and aggregate covers across man-made and natural catastrophe submodules.
- 1.33. Undertakings can also apply line of business and business unit specific coverages.
- 1.34. Where a reinsurance protection covers other risks not captured by the catastrophe risk sub-module (e.g. a line of business stop loss), the undertaking should allow for these other risks when calculating the benefit of the protection under the catastrophe risk module.
- 1.35. Undertakings should apply outwards reinsurance consistently with Articles 209 to 214 of Commission Delegated Regulation 2015/35. Undertakings should ensure there is no double- counting of reinsurance recoveries Article 209 paragraph 1(e) of Commission Delegated Regulation 2015/35. Undertakings should ensure that the total recovery from risk mitigation methods that is allowed for in their calculation of net losses does not exceed the total amount possible under the terms of their risk transfer programme.

#### **Guideline 16 – Inwards reinstatement premiums**

- 1.36. Undertakings may allow for the receipt of inwards reinstatement premiums where it can be demonstrated to the supervisor that these will be triggered by the gross event specified in the catastrophe sub-module.
- 1.37. Undertakings should allow within their calculations of the gross loss for the additional exposures to any second or subsequent events that result from this inwards reinstatement premium.

### Guideline17 – Other impacts on basic own funds as a result of the trigger of the outwards reinsurance contract

1.38. Undertakings should allow for reinstatement premiums or other additional cashflows which may result from the trigger of the outwards reinsurance protection.

#### **Guideline 18 – Order of operation of reinsurance protections**

1.39. Undertakings should apply reinsurance protections in the order specified in their contractual agreements as they apply to the underlying risk

#### **Guideline 19 - Proportional reinsurance**

- 1.40. For quota shares, surplus reinsurance and proportional facultative contracts, undertakings should do a pro rata allocation of the gross event across these reinsurance contracts.
- 1.41. Where the undertaking's proportional reinsurance contract is subject to an "event limit" or similar, the gross loss allocated to that contract cannot exceed such limit and any excess should be added back to the "net retained" share of loss.

#### **Guideline 20 – Non-proportional reinsurance per risk**

1.42. For risk excess of loss and non-proportional facultative contracts, undertakings should only use this non-proportional reinsurance under the standard formula if the gross event allows identification of the known policies of the underlying policies exposed. Guideline 3 specifies the sub-modules where this should be the case.

#### **Guideline 21 - Non-proportional reinsurance per event**

- 1.43. Undertakings should only apply non-proportional reinsurance to defined gross events if the loss can be split appropriately.
- 1.44. The undertaking should take due care to allow for less common contract features such as franchises and for part placements or coinsurance.

#### **Guideline 22 – Non-indemnity contracts and Basis Risk**

1.45. Undertakings should not apply non-indemnity contracts under the standard formula unless it can be demonstrated that the level of basis risk is not material by virtue of the definition of the scenario.

#### Guideline 23 - Application of aggregate contracts and clash covers

- 1.46. Undertakings should consider at which level to apply the aggregate reinsurance contracts within the calculation of the non-life catastrophe SCR. The choice should be driven by the substance of the risk mitigation mechanism and where reinsurance recoveries are expected if the gross event were to occur.
- 1.47. Where undertakings are estimating reinsurance recoveries from clash contracts they should demonstrate to the supervisor that the contracts would respond to the catastrophe events defined in the standard formula.
- 1.48. Undertakings should ensure that no double counting of reinsurance recoveries occurs and must be able to explain and demonstrate the logic of application to their supervisor.

#### **Guideline 24 – Treatment of shared reinsurance covers**

1.49. Where shared reinsurance covers exist, the undertaking should follow the principles in Guideline 32.

#### **Guideline 25 – Treatment of outputs from lower aggregation levels**

1.50. Undertakings should differentiate between reinstatement costs and reinsurance recoveries when aggregating SCRs across the non-life catastrophe sub-

modules. If reinsurance at a given level does not apply to this combined amount then it will be necessary to split the costs as appropriate. In this case the spread method should be used.

#### Guideline 26 - Treatment of other contracts not specified here

1.51. Undertakings should apply the principles incorporated in the Guidelines above to other reinsurance contracts or features not explicitly captured here.

#### Section V: Re-aggregating the net losses

# Guideline 27 – Re-aggregating the net losses to derive the SCR for catastrophe risk for the undertaking

- 1.52. Where undertakings have allocated a diversified gross loss to a more granular level (i.e. "the gross event") in order to estimate their reinsurance recoveries, undertakings should add up the net components to derive the SCR.
- 1.53. Where undertakings have SCR output from different levels of the calculation, undertakings should combine the net components to derive the non-life catastrophe SCR.
- 1.54. Technical Annex I describes how to apply this Guideline.

#### **Section VI: Documentation and Validation**

#### Guideline 28 - Documentation and validation of catastrophe events selected

- 1.55. For the "Other" non-life catastrophe sub-module undertakings should explain the catastrophe events selected to their supervisor within regular supervisory report according to Article 309 (5) (a) of Commission Delegated Regulation 2015/35. The explanation should contain details of key decision points, discussion of alternatives which could be selected for these key decision points and rationale for the final selections.
- 1.56. Undertakings should also include details of any challenge that has occurred internally to devise suitable catastrophe events within their documentation.

#### Guideline 29 - Documentation of disaggregation methodology

1.57. Undertakings should document the disaggregation mechanism used in order to apply the reinsurance programme by sub-module. This should include the rationale for the selected approach, discussion of possible alternatives where there are multiple reasonable methods available and the calculations performed in order to achieve the disaggregation.

# **Guideline 30 – Documentation of netting down and re-aggregation procedures**

- 1.58. Undertakings should document the process used to net down the gross event. This includes a description of
  - a) the undertaking's reinsurance programme;
  - b) the netting down calculations;
  - c) details of the allocation of any recoveries to the relevant insurance sub-

modules;

- d) details of how the re-aggregation to derive the SCR<sub>nICAT</sub> was performed.
- 1.59. Undertakings should also demonstrate in their documentation that there is no double counting of reinsurance recoveries assumed.
- 1.60. Where undertakings have assumed adjustable premium features (e.g. inwards and outwards reinstatement premiums), the documentation should justify the methodology and assumptions used to derive these.

# Section VII: Particular considerations for solo undertakings which are part of groups

#### **Guideline 31 – Treatment of internal reinsurance arrangements**

1.61. For solo undertakings, the undertaking should treat outwards reinsurance arrangements which may exist with other group undertakings ("internal reinsurance") in the same way as they would treat arrangements with external third parties.

# Guideline 32 – Estimating the reinsurance recovery that would be due to a solo undertaking in respect of a group reinsurance contract for aggregating catastrophe events

- 1.62. When estimating the reinsurance recovery due on an aggregate reinsurance contract, (i.e. a contract which protects against accumulated aggregate losses from several group undertakings) each solo undertaking should separately follow the steps below:
  - (a) Determine the gross 1 in 200 year catastrophe loss for the solo undertaking;
  - (b) Determine the gross 1 in 200 year catastrophe loss for the group;
  - (c) Estimate reinsurance recoveries on the group reinsurance contract;
  - (d) Allocate reinsurance recoveries according to contractual agreements where these exist, otherwise estimate the reinsurance recoveries due to the solo as the ratio of gross losses (a)/(b) multiplied by the amount estimated in (c).

# Guideline 33 – Estimating the reinsurance recovery that would be due to a solo undertaking in respect of a group reinsurance contract for risk catastrophe events

- 1.63. When estimating the reinsurance recovery due on an risk specific contract (i.e. a contract which protects against specific risk(s)) solo undertakings should follow the steps below:
  - (a) Determine whether the specific risk(s) triggering the 1 in 200 year loss for the solo is the same as the specific risk(s) triggering the 1 in 200 year loss at the group level;
  - (b) If there is some overlap, estimate reinsurance recoveries due to the solo on the group reinsurance contract.

# Section VIII: Allocation of Insurance Policies to Liability Risk Groups for the Man-Made Liability Catastrophe Risk Sub-Module

#### **Guideline 34 – Liability Risk Group 1**

- 1.64. Undertakings should, for the liability risk group 1 referred to in Annex XI of Commission Delegated Regulation 2015/35 include the policies for professional malpractice liability insurance which provide coverage to professional practitioners against potential liability claims.
- 1.65. Undertakings should include in this risk group a range of liability products including:
  - (a) Medical malpractice liability insurance including specialist or general practitioners, hospitals and other healthcare providers when they bear medical malpractice liability;
  - (b) Errors and omissions (E&O) or professional indemnity insurance or other malpractice policies where there are third parties to whom the insured owes a duty of care;
  - (c) Coverage for failure to perform and associated financial loss arising from the services provided by a company;
  - (d) Coverage for breach of warranty or intellectual property;
  - (e) Coverage for all bodily injury liability or property damage (whether material or financial) and the associated damages and defence costs insurance resulting from errors or negligence of a professional in the course of its activity.

#### **Guideline 35 - Liability Risk Group 2**

- 1.66. Undertakings should, for the liability risk group 2 referred to in Annex XI of Commission Delegated Regulation 2015/35 include the policies for employers' liability which provide coverage for any liability that might be imposed on an employer if an employee is injured in the course of his or her employment.
- 1.67. Undertakings should include in this risk group obligations which cover:
  - (a) The provision of preventive or curative medical treatment or care relating to accident at work, industrial injury or occupational diseases;
  - (b) Financial compensation for such treatment;
  - (c) Financial compensation for accident at work, industrial injury or occupational diseases.

#### **Guideline - 36 Liability Risk Group 3**

1.68. Undertakings should, for the liability risk group 3 referred to in Annex XI of Commission Delegated Regulation 2015/35 include the policies for directors and officers liability insurance which provide coverage for liability and defence costs to the directors and officers of a company, or to the organization(s) itself, in the event they suffer losses as a result of a lawsuit for alleged wrongful acts while acting in their capacity as directors and officers for the organization, including

- the coverage of defence costs arising out of criminal and regulatory investigations and/or trials.
- 1.69. Undertakings should include in this risk group the policies for management liability and employment practice liability.

#### **Guideline 37 - Liability Risk Group 4**

- 1.70. Undertakings should, for the liability risk group 4 referred to in Annex XI of Commission Delegated Regulation 2015/35 include the policies which cover all liabilities arising from negligent acts and/or omissions resulting in bodily injury and/or property damage to third parties other than:
  - (a) Those included in motor vehicle liability and marine, aviation and transport
  - (b) Those included in liability risk groups 1,2,3 and 5 of Annex XI of Commission Delegated Regulation 2015/35;
  - (c) Third party liability coverage provided to individual householders, individuals in a private capacity (including when hunting) and self-employed crafts-persons or 'artisans';
  - (d) Third party liability coverage provided in respect of damage or injury caused by domestic pets.

#### **Guideline 38 - Liability Risk Group 5**

1.71. Undertakings should, for the liability risk group 5 referred to in Annex XI of Commission Delegated Regulation 2015/35 include non-proportional reinsurance policies for all liability risk groups defined in that Annex.

#### **Guideline 39 - Allocation and Unbundling**

- 1.72. Where insurance or proportional reinsurance of liability are sold on a packaged basis, including covers that fall into more than one of the above risk groups, undertakings should unbundle and allocate the premiums for each cover to the most appropriate risk group for that cover.
- 1.73. Undertakings should be able to provide supporting evidence and rationale for such allocations.
- 1.74. Undertakings should apply proportionality considerations when applying the unbundling guidance above.

#### **Section IX – Particular considerations for the group calculation**

#### **Guideline 40 - Deeming of reinsurance**

1.75. Where the intra-group reinsurance inures to the benefit of any of an undertaking's external reinsurance, the participating undertaking should 'deem' the internal reinsurance in place for the purpose of calculating the impact of the external reinsurance.

#### **Compliance and Reporting Rules**

- 1.76. This document contains Guidelines issued under Article 16 of the EIOPA Regulation. In accordance with Article 16(3) of the EIOPA Regulation, national competent authorities shall make every effort to comply with guidelines and recommendations.
- 1.77. Competent authorities that comply or intend to comply with these Guidelines should incorporate them into their regulatory or supervisory framework in an appropriate manner.
- 1.78. Competent authorities shall confirm to EIOPA whether they comply or intend to comply with these Guidelines, with reasons for non-compliance, within two months after the issuance of the translated versions.
- 1.79. In the absence of a response by this deadline, competent authorities will be considered as non-compliant to the reporting and reported as such.

#### **Final Provision on Reviews**

1.80. The present Guidelines shall be subject to a review by EIOPA.

For information on copyright and the application of these guidelines, please see https://www.bankofengland.co.uk/paper/2019/interpretation-of-eu-guidelines-and-recommendations-boe-and-pra-approach-sop.