Guidelines on health catastrophe risk sub-module
Introduction


1.2. These Guidelines are addressed to supervisory authorities under Solvency II.

1.3. These Guidelines aim at facilitating convergent practices across Member States and at helping undertakings to appropriately identify and compute the quantities involved in the calculation of the health catastrophe capital requirement in different possible cases and situations.

1.4. The calculations for the determination of the capital requirement for the health catastrophe risk sub-module should be consistent with the design and calibration of the underlying scenarios.

1.5. Insurance and reinsurance undertakings may face different situations depending on the characteristics of their products and the national legislations.

1.6. For the purpose of these Guidelines the following definition has been developed:

- ‘Single claim’ means a claim following the occurrence of one particular event to one identified insured person.

1.7. If not defined in these Guidelines, the terms have the meaning defined in the legal acts referred to in the introduction.

1.8. The Guidelines shall apply from 1 April 2015.

Guideline 1 – General provisions for the calculation of Health Catastrophe capital charges

1.9. Where the determination of the cause of a catastrophe scenario is necessary in the calculations of the capital requirements for the health catastrophe risk sub-module and the effects described in the scenarios can have different causes, undertakings should use in the calculation the cause resulting in the highest loss in basic own funds. In particular, undertakings should not exclude the scenario where some potential causes of the catastrophe scenario are excluded by policy terms and conditions (e.g. terrorism).

¹ OJ L 331, 15.12.2010, p. 48–83
³ OJ L 12, 17.01.2015, p. 1-797
Guideline 2 – Calculation of the sum insured for accidental death benefits

1.10. Where an insurance contract provides for benefits in case of death, irrespective of the cause, and for additional benefits in case of death caused by an accident, undertakings should take only the additional benefits into account when calculating the value of the benefits referred to in Article 161 (3)(b) and Article 162 (4) (c) of Commission Delegated Regulation 2015/35, provided the following conditions are met:

(a) the benefits have been unbundled;
(b) the risks related to the benefits in case of death irrespective of the cause are properly captured in the life underwriting risk module.

1.11. Where additional recurring benefit payments are provided for in case of death caused by an accident, undertakings should base the calculation of the value of the benefits payable on best estimate parameters (mortality table and discount rate curve) taking into account relevant demographic characteristics. Undertakings should also reflect in the calculation the contractual duration of the recurring benefit payments.

1.12. Where no or insufficient demographic data is available undertakings should use realistic assumptions on the demographic parameters based on public or internal statistics in the calculation of the value of the benefits. Undertakings should be able to justify these assumptions to the satisfaction of the supervisory authority.

1.13. In the calculation of the value of the benefits, undertakings should account for expected increases in the amount of recurring benefit payments and claims management expenses.

Guideline 3 – Calculation of the sum insured for permanent disability benefits

1.14. Where benefits for disability can be paid either as a single payment or as recurring payments, undertakings should follow a three step approach to determine the value of the benefits referred to in Article 161 (3) (b) and Article 162 (4) (c) of Commission Delegated Regulation 2015/35:

(a) Step 1: determination of the expected proportion of benefit payments in the form of a single payment.
(b) Step 2: determination, for each insured person, of the benefits in the case of a single payment and the best estimate of the recurring benefits.
(c) Step 3: calculation of the average between the two values determined in step 2 weighted by the proportion calculated in step 1.

1.15. Notwithstanding paragraph 1 of this Guideline, when the choice between a single payment and recurring payments is at the discretion of the beneficiary, the undertaking should use the maximum of the two values instead of the weighted average.
1.16. Undertakings should justify the assumptions underlying the calculation of the proportions referred to in paragraph 1. Where undertakings cannot justify the calculation of the proportions to the satisfaction of the supervisory authority, they should calculate the value of the benefits as the maximum between the single payment and the best estimate of the recurring benefits.

1.17. Where the amount of the disability benefit payments depends on the degree of disability of injured persons, undertakings should calculate the value of the benefits for all persons in the following way:

   (a) derive a distribution of the degrees of disability amongst injured persons;
   
   (b) calculate the claim costs associated with each degree of disability;
   
   (c) apply the distribution of degrees to the associated claim costs accordingly.

1.18. Undertakings should justify the assumptions underlying the calculation of the distribution of degrees referred to in paragraph 4. Where undertakings cannot justify the calculation of the proportions to the satisfaction of the supervisory authority, they should use for all insured persons the maximum claim cost across all degrees of disability.

1.19. In the calculation of the best estimate of the recurring benefit payments for the event type “Permanent disability caused by an accident”, undertakings should assume that payments are made over the full benefit period specified in the terms and conditions of the policy, but that exits due to mortality may occur.

1.20. For the calculation undertakings should make realistic assumptions on the mortality rates for permanently disabled people based on public or internal statistics. Undertakings should be able to justify these assumptions.

1.21. In the calculation of the value of benefits, undertakings should account for expected increases in the amount of recurring benefit payments and claims management expenses.

Guideline 4 – Calculation of the sum insured for ten year disability and twelve month disability benefits

1.22. Where the beneficiary can receive either a single payment or recurring benefit payments in the case of the event types “Disability that lasts 10 years caused by an accident” or “Disability that lasts 12 months caused by an accident”, undertakings should apply the same approach as set out in Guideline 3.

1.23. Where the amount of the disability benefit payments depends on the degree of disability of injured persons, undertakings should apply the same approach as set out in Guideline 3 paragraph 4 and 5.

1.24. When calculating the best estimate of the recurring benefit payments for the event type “Disability that lasts 10 years caused by an accident” or “Disability
that lasts 12 months caused by an accident”, undertakings should exclude any exit cause and take into account all future payments between:

(a) the end of any deferred period;
(b) the end of the 10 years or 12 months period or, if this is earlier, the end of the coverage period.

1.25. In the calculation undertakings should account for expected increases in the amount of recurring benefit payments and claims management expenses.

Guideline 5 – Calculation of the sum insured for medical treatment caused by accident

1.26. Undertakings should calculate the average amounts in the case of the event type “Medical treatment caused by an accident” as the benefits for medical treatment caused by an accident observed during prior years, including related expenses, divided by the number of single claims corresponding to these benefits.

1.27. Undertakings should ensure that the observation period is long enough to minimise statistical errors.

1.28. For the calculation of the average amounts, undertakings should adjust past data for the inflation rate of medical payments.

1.29. Where a medical treatment is expected to last more than one year, undertakings should take into account the expected inflation rate of medical payments.

1.30. Undertakings should appropriately discriminate between benefits paid for medical treatment caused by an accident and other benefits on the basis of past observations. Where necessary, undertakings should complement this analysis by expert judgement. Undertakings should base all estimations on public or internal statistics. Undertakings should be able to justify these assumptions to the satisfaction of the supervisory authority.

Guideline 6 – Calculation of the sum insured in the accident concentration risk sub-module

1.31. For the calculation of the value of the benefits referred to in Article 162 (4) (c) of Commission Delegated Regulation 2015/35, undertakings should apply the same principles as set out in Guidelines 2 to 4.

1.32. Where an insured person is covered by two or more contracts with benefit payments in the case of the event type e and which are not mutually exclusive, undertakings should add up the benefit payments for the different contracts to determine $SI(e,i)$ as referred to in Article 162 (4) (c) of Commission Delegated Regulation 2015/35.
Guideline 7 – Calculation of the income protection pandemic exposure

1.33. Where the contract provides for recurring benefit payments, undertakings should calculate the best estimate of the benefit payments in case of a permanent work disability caused by an infectious disease as referred to in Article 163 (2) (b) of Commission Delegated Regulation 2015/35, in the same way as set out in Guideline 3 for the best estimate of the benefit payments in case of the event type “Permanent disability caused by an accident”.

Guideline 8 – Calculation of the best estimate of medical expense amounts

1.34. Undertakings should calculate the best estimate of amounts payable for healthcare utilisation \( h \) as referred to in Article 163 of Commission Delegated Regulation 2015/35 as the product of:

(a) the expected number of healthcare treatments \( h \) for an insured person;
(b) the expected average claim cost for a single healthcare treatment \( h \)

where the expected number of healthcare treatments has at least a value of 1.

1.35. Undertakings should make an accurate estimation, based on their own experience, of:

(a) the expected number of uses of each healthcare treatment \( h \);
(b) the average claim cost for a single use of each healthcare treatment \( h \).

1.36. When undertakings can justify that past experience does not allow for an accurate estimation, they should use as the expected number of healthcare treatments for the healthcare utilisation type “Hospitalisation” and “No formal medical care sought” a value of 1 and for healthcare utilisation type “Consultations with a medical practitioner” a value of 2.

1.37. Undertakings should adjust the estimation of the average claim cost for the inflation rate of medical payments, and complement it if necessary by expert judgement. The observation period should be long enough to avoid statistical errors.

Compliance and Reporting Rules

1.38. 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.

1.39. Competent authorities that comply or intend to comply with these Guidelines should incorporate them into their regulatory or supervisory framework in an appropriate manner.

1.40. 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.
1.41. 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**

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