# **EXPLANATORY NOTE**

# ACTUARIAL REPORT FOR NON-LIFE TECHNICAL PROVISIONS

The Company and the Actuarial Function Holder should refer to the following publications.

- a. The Insurance and Reinsurance Business and other related matters Laws of 2016 and 2017 (the Law).
- b. The Commission Delegated Regulation (EU) 2015/35 of 10/10/2014 (DR).
- c. The Superintendents Orders dated 24/3/2015 regarding the valuation of technical provisions (Orders on TPs)

  <a href="https://eiopa.europa.eu/Publications/Guidelines/TP\_Final\_document\_EN.pdf">https://eiopa.europa.eu/Publications/Guidelines/TP\_Final\_document\_EN.pdf</a>
- d. ISAP 1 from the International Actuarial Association (IAA) (ISAP 1)

  <a href="http://www.actuaries.org/CTTEES\_ASC/isaps/Final\_ISAPs\_posted/Conforma">http://www.actuaries.org/CTTEES\_ASC/isaps/Final\_ISAPs\_posted/Conforma</a>

  nce Changes Final ISAPs posted/ISAP1 Conformance April2017.pdf
- e. The Service's Circular dated 1/3/2016 regarding the calculation of technical provisions (Circular)

  <a href="http://mof.gov.cy/assets/modules/wnp/articles/201702/223/editor/tp.pdf">http://mof.gov.cy/assets/modules/wnp/articles/201702/223/editor/tp.pdf</a>
- f. ESAP 1 from the Actuarial Association of Europe (AAE) (ESAP 1) <u>http://actuary.eu/documents/AAE\_ESAP1\_031014.pdf</u>
- g. ESAP 2 from the Actuarial Association of Europe (AAE) (ESAP 2) http://actuary.eu/documents/2016\_01\_31\_ESAP2\_final\_GA-approved.pdf

This letter relates to the reporting of Best Estimate Technical Provisions <u>only</u> within the Actuarial Function Report. There are several other aspects of the business which must be discussed within the AFR, for example effectiveness of underwriting and reinsurance policies, but these issues are outside the scope of this explanatory note.

### DATA

- 1. Claims Delay triangles (claims paid and claims incurred) for each class of business (ISAP 1 (3.2), ESAP 1 (4.2)).
- 2. The results of reconciliations between the source data and data in the claims delay triangles (ISAP 1 (2.5.2), ESAP 1 (3.5.2)).
- 3. The results of other data reconciliations and reasonableness checks (ISAP 1 (2.5.2), ESAP 1 (3.5.2)).
- 4. A description of how risks are amalgamated into homogeneous groups whilst ensuring that data remains sufficiently homogeneous and of a large enough volume to allow credible statistical analyses to be carried out (Article 34 (3) of the DR; Orders 19 (1.50) and 23 of the Orders on TPs).
- 5. A commentary on the extent to which the data used in the calculation of the technical provisions are accurate, complete and appropriate to the calculations (Article 88 of the Law; Orders 1 to 4 of the Orders on TPs). This would include (but will not be limited to):
  - an assessment of the sufficiency and quality of the data used to calculate the technical provisions (Articles 19 and 27 of the DR; ESAP 2 (3.2.5.1)),
  - o a commentary on any unusual features of the data e.g. outliers, discontinuities (ISAP 1 (2.7.4); ESAP 1 (3.7.4)),
  - a commentary on how homogeneous data groups used is appropriate for the underlying risk (ESAP 2 (3.2.5.3)),
  - a description of how material data issues were resolved (Article 272 (1c) of the DR; Order 9 of the Orders on TPs; ESAP 2 (3.2.5.2)),
  - a list of any material data issues that could not be resolved (Article 20 of the DR; Order 13 of the Orders on TPs; ESAP 2 (3.2.5.2)),
  - a description of any data adjustments and the reason for the adjustments (Order 8 (1.29e) and 11 of the Orders on TPs; ISAP 1 (2.7.1); ESAP 2 (3.7.1)).
    - This should include commentary on how events not in the data are allowed for in the calculation of the technical provisions.
- 6. Justification of the use of any external data (Article 19 (4) of the DR; Guideline 8 (1.29d) of the Orders on TPs).
- 7. Commentary on how external data has been adjusted to make it relevant and appropriate to the Undertaking's risks and profile (Guideline 8 (1.29e) of the Orders on TPs; ESAP 2 (3.2.5.4)).

## **ASSUMPTIONS**

- 8. A list of assumptions (and their values) used in the calculations of the technical provisions (ISAP 1 (3.2.1); ESAP 1 (4.2.1)).
- 9. Justification of the assumptions used in the calculations of claims reserves and premium reserves (Article 272 (1d and 2) of the DR; ISAP 1 (2.7.1 and 2.7.2), ;ESAP 1 (3.7.1 and 3.7.2); ESAP 2 (3.2.7.1 and 3.2.7.2)).
- 10. Commentary on whether the assumptions used in the calculation of the technical provisions are consistent with those used in the calculation of Own Funds and Solvency Capital Requirement (Order 24 of the Orders on TPs).
- 11. Justification of any material changes in assumptions since the previous year (Article 272 (1g) of the DR; ESAP 2 (3.2.7.3)).
- 12. A description of how any assumptions have been adjusted to allow for changes in the internal environment e.g. changes in premium structure, mix of business (ISAP 1 (2.7.1); ESAP 1 (3.7.1 and 3.7.2)).
- 13. Commentary on how past and future management actions have been allowed for in setting the assumptions e.g. bringing an outsourced function in-house, changes in commission rates or target market (Article 23 of the DR; Orders 38 to 40 of the Orders on TPs; ESAP 2 (3.2.7.4)).
- 14. A description of how any assumptions have been adjusted to allow for changes in the external environment or for changes in the way in which the assumptions have been determined over time (Order 8 (1.29e) of the Orders on TPs; ESAP 2 (3.2.5.4)).

#### ANALYSES & COMMENTARY

- 15. Disclosure of opening and closing technical provisions, along with a commentary of the main items of movement (ESAP 2 (3.2.3.1)).
- 16. Description of the process used to calculate the technical provisions (Article 19(1)(a) of the Law; ESAP 2 (3.2.4.1)).
- 17. Comment on the adequacy and reliability of the technical provisions derived, including any material shortcomings (Article 49(1) of the Law; Article 272(5) of the DR; ESAP 2 (3.2.1.1)).

- 18. Commentary on whether technical provisions are calculated in compliance with Solvency II and what further measures are needed to achieve compliance (Article 272(1) of the DR; ESAP 2 (3.2.1.2)).
- 19. A description of the sources and degree of uncertainty within the technical provision calculations (Article 272(2 & 5) of the DR; ESAP 2 (3.2.1.3)).
- 20. Description of the factors which have a material impact on the technical provisions (ESAP 2 (3.2.2.1)), including known subsequent events that occurred after the reporting date, but before the Actuarial Function Holder's report on the Technical Provisions was finalised, that could materially change the value of the best estimate technical provisions (ISAP 1 (2.12; ESAP 1 (2.13)).
- 21. Commentary on the material judgements made in the calculation of the technical provisions (ESAP 2 (3.2.2.2)).
- 22. Consideration of how changes in policyholder behaviour could impact on the calculations e.g. possible anti-selection and attitude to claiming (Articles 26 and 272 (6c) of the DR; ESAP 2 (3.2.7.4)).

# 23. Commentary on:

- outstanding large claims;
- any significant claims under litigation and how they have been allowed for in the technical provisions;
- o possible latent claims, such as asbestosis;
- o catastrophes in historic claims experience;
- o any demonstrable changes in the speed with which claims are settled (e.g. caused by changes in practises e.g. internal claims handling procedures, new IT system).
- 24. A description of how best estimates allow for expected external future developments (e.g. demographic, legal, medical, technological, social, environmental and economic developments) that will have a material impact on claims related cash-flows (Article 29 of the DR).
- 25. A description of any trends and / or seasonality in claims data (Article 19 (1a) of the DR).
- 26. An analysis of claims inflation (Article 29 of the DR).

- 27. A description of the Undertaking's allocation of expenses (overheads and claims related expenses) between different lines of business (Articles 28c and 31 of the DR; Orders 29 to 34 the Orders on TPs).
  - Justification of any change in the method of allocating expenses (Article 272 (1g) of the DR).
  - o An assessment of the reasonableness of the total expense value.
  - Commentary on how the company's overall expenses have changed over time.
  - An analysis of expense inflation.
- 28. Commentary on the adequacy of IT systems to support the actuarial and statistical procedures (Article 272(3) of the DR; ESAP 2 (3.2.6.5)).
- 29. Commentary on any concerns relating to the adequacy of the technical provisions (Article 272 (5) of the DR).
- 30. A commentary on known subsequent events that occurred after the reporting date, but before the Actuarial Function Holder's report on the Technical Provisions was finalised, that could materially change the value of the technical provisions (ISAP 1 (2.12)).

## **METHODS – CLAIMS RESERVES**

- 31. A description of the methods used to calculate claims reserves (Article 272(2) of the DR; Orders 44 to 48, 69 and 70 of the Orders on TPs; ISAP 1 (3.2.1); ESAP 1 (4.2.1); ESAP 2 (3.2.6.1)).
- 32. Justification of the method used to determine claims reserves and draw attention to any unusual or non-standard methods used. This should refer to the quality of available data and the nature of the risks insured (Order 5 of the Orders on TPs; Article 272 (2) of the DR; ESAP 2 (3.2.6.1 and 3.2.6.2)).
- 33. Commentary on the length of the claims delay table selected; selection and justification of any tail factors (Order 82 of the Orders on TPs).
- 34. Justification of the granularity of claims triangles used. For instance, if annual claims triangles were adopted, an explanation of why quarterly and/or monthly claims triangles were not adopted.
- 35. Where incurred claims methods were adopted, an explanation and justification for these being more reliable than paid claims methods.

- 36. Justification of any changes in the methods used since the previous year (Article 272 (1g) of the DR; ESAP 2 (3.2.6.7)).
- 37. Justification of any simplifications used by referring to the nature, scale and complexity of risks (Article 49(1)(f) of the Law; Article 21 and Section 6 of the DR; ESAP 2 (3.2.6.3)).
- 38. Commentary on the limitations of the methods used and whether this could lead to a material level of error (Order 49 of the Orders on TPs).
- 39. A description of alternative methods considered, why they were rejected (e.g. Order 5 (1.24) of the Orders on TPs) and the results of those alternative calculations.
- 40. A description of how subrogation/recoveries and salvage have been handled (Article 28(g) of the DR).

#### **METHODS - PREMIUM RESERVES**

- 41.A description of the methods used to calculate premium reserves (Article 49(1)(b) of the Law; Article 272(2) of the DR). In general, it is expected that a cash flow projection is used to calculate the premium reserves (Article 79 (1) of the Law; Circular), subject to any simplifications being adopted.
- 42. Justification of the method used to determine premium reserves and draw attention to any unusual or non-standard methods used. This should refer to the quality of available data and the nature of the risks insured (Orders 5 and 44 (1.83) of the Orders on TPs; Article 272 (2) of the DR; ESAP 2 (3.2.6.1 and 3.2.6.2)).
- 43. An explanation of how the method of calculating the premium reserves adequately reflects the frequency, method of collection and duration of cash flows arising from premium income (Circular).
- 44. An explanation of how the loss expected ratio for future claims has been determined. It is expected that the projected loss ratio will consider:
  - loss Ratios over the past 3 to 5 years to estimate the attritional or smaller claims component;
  - o trends in the claims experience on attritional claims;
  - an allowance for larger claims where the company's own experience may not provide sufficiently robust statistical evidence. The importance of this element will depend on the class of insurance;

- an allowance for catastrophic claims, where the company's own experience is unlikely to be statistically sufficient;
- o an allowance for latent claims, if appropriate.

(Order 73 of the Orders on TPs; Circular)

- 45. A description and full justification of the expenses allocated to the policies. Although Paragraph 55 of the Directive 2009/138/EC implies that expense assumptions should be based on a reference portfolio that reflects the amount the undertaking would have to pay if it transferred its contractual rights and obligations to another party, there is in practice no published data that would allow any insurer in Cyprus to assess an appropriate level of expenses to include on this basis. It is therefore expected that expense assumptions will be determined based on the company's own experience. (The Orders 29-34 of the Orders on TPs should be followed).
- 46. A description of how policyholder behaviour (e.g. cancellation before normal expiry of the contract, lapses etc.) has been taking into account in the calculation of the premium reserves (Order 74 of the Orders on TPs; Circular).
- 47. Justification of any changes in the methods used since the previous year (Article 272 (1g) of the DR; ESAP 2 (3.2.6.7); ESAP 2 (3.2.6.3)).
- 48. Justification of any simplifications used (Article 21, Section 6 of the DR).
- 49. Commentary on the limitations of the methods used and whether this could lead to a material level of error (Order 49 of the Orders on TPs; ESAP 2 (3.2.6.6)).

#### REINSURANCE & RISK MITIGATION

- 50. Method used to calculate recoverables from reinsurance contracts (Articles 79(1) and 87 of the Law; Orders 78 to 80 of the Orders on TPs).
- 51. Details of Reinsurance Premium Reserve showing reinsurance premiums and commission assumptions. Where any payments are variable, for example based on the result of the reinsurance arrangement or reinstatement, all elements of on the Balance Sheet should be determined consistently with the terms of the reinsurance.
- 52. A description of the method used to calculate any adjustment for counterparty default (Article 42 of the DR; Order 81 of the Orders on TPs).

#### STRESS - SCENARIO AND SENSITIVITY TESTING

- 53. A description of alternative assumptions used in sensitivity testing these tests consider variations in a single key assumption (Article 34 (4 & 5) and Article 272 (5) of the DR; ISAP 1 (2.7.7); ESAP 1 (3.7.7); ESAP 2 (3.2.9.1)).
- 54. A description of alternative assumptions used in scenario testing these tests consider consistent variations in key assumptions (Article 34 (4 & 5) and Article 272 (5) of the DR; ISAP 1 (2.7.7); ESAP 1 (3.7.7); ESAP 2 (3.2.9.1)).

# **COMPARISON WITH EXPERIENCE (BACK-TESTING)**

- 55. Commentary on the reasons for the change in technical provisions over the last year e.g. new business, change in the assessment of future inflation etc. (Article 272 (1g) of the DR; ESAP 2 (3.2.8.1)).
- 56. Descriptions of how accurate past calculations have been in the light of experience (back-testing). A description of the lessons learned from these analyses and any new processes and procedures implemented in the light of this analyses to improve the accuracy of future calculations (Article 89 of the Law; Article 272 (4) of the DR; Order 87 of the Orders on TPs; ESAP 2 (3.2.8.2)).