

EIOPA's Insurance Stress Test 2018 Recommendations

Introduction and legal basis

1. During the course of 2018, EIOPA carried out a European-wide stress test (ST) in accordance with Articles 21(2)(b) and 32 of Regulation (EU) 1094/2010 of 24 November 2010 of the European Parliament and of the Council (hereafter the 'Regulation').
2. The Recommendations contained in this document are issued in accordance with Article 21(2)(b) of the Regulation in order to address issues identified in the stress test.
3. EIOPA will support National Competent Authorities (NCAs) and undertakings through guidance and other measures if needed.

Context

4. The results and findings of EIOPA's Insurance Stress Test 2018 exercise are set out in detail in the report "2018 Insurance Stress Test Report" published by EIOPA on 14th December 2018.¹
5. Three stress scenarios were tested in the 2018 exercise, i.e. two scenarios combining market and insurance specific risks, and one natural catastrophe (NatCat) scenario. A detailed description of both scenarios can be found in Section 1.2. of the 2018 Insurance Stress Test Report.
6. The Yield Curve Up (YCU) scenario assumes an abrupt and sizeable reversal of risk premia (RP) in global financial markets leading to a tightening of financial conditions. In the YCU scenario, market shocks are combined with an instantaneous shock to lapse rates and claims inflation.
7. The Yield Curve Down (YCD) scenario assumes a protracted period of extremely low interest rates, with very low rates prevailing for longer maturities. In the YCD scenario,

¹ See [Insurance Stress Test 2018](#).

market stresses are combined with a shock to average life expectancy, which is assumed to increase significantly across the entire population.

8. Finally, the NatCat scenario assumes a set of catastrophic losses over Europe from various perils and natural hazards.
9. The insurance ST is a bottom-up exercise, which involves calculations performed by the participating groups on the impact of the three scenarios on their group balance sheet, own funds (OF) and solvency capital requirements (SCR). As in previous exercises, the main objective of the 2018 stress test exercise is to assess the resilience of the European insurance sector to specific adverse scenarios with potential negative implications for the stability of the European financial markets and the real economy. Hence, it cannot be considered as a pass-or-fail or capital exercise for the participating groups.
10. The sample encompasses 42 (re)insurance groups,² representing an EEA market coverage of around 75% based on total consolidated assets and of around 65% based on total assets reported for solo undertakings.
11. Groups were requested to calculate their post-stress financial position by applying the same models used for their regular Solvency II reporting. The use of LTG and transitional measures was taken into account and the impact of these measures had to be reported separately.
12. The 2018 Stress Test results showed that on aggregate the insurance sector is sufficiently capitalised to absorb the combination of shocks prescribed in the three scenarios. However, it also confirms the significant sensitivity to market shocks for the European insurance sector with Groups being vulnerable not only to low yields and longevity risk, but also to a sudden and abrupt reversal of risk premia, combined with an instantaneous shock to lapse rates and claims inflation. The exercise further reveals potential transmission channels of the tested shocks to insurers' balance sheets. For instance, in the YCU scenario the assumed claim inflation shock leads to a net increase in the liabilities of those Groups more exposed to non-life business through claims inflation. Finally, both the YCD and YCU scenario have similar negative impact on post-stress SCR ratios.
13. As outlined in the Executive Summary of the 2018 Insurance Stress Test Report, further analyses of the results are required by EIOPA and the NCAs to obtain a deeper understanding of the risks and vulnerabilities of the sector.
14. In order to follow-up on the main vulnerabilities, EIOPA is issuing the present Recommendations related to the 2018 stress test exercise.

Recommendations under Article 21(2)(b) of the EIOPA Regulation

15. The Recommendations set out in this document are addressed to the relevant National Competent Authorities in the EU and EEA. The Recommendations relate to the findings of the EIOPA's 2018 Insurance Stress Test, grouped into three different subject matters:
 - Supervisory convergence and financial stability issues;
 - Efficiency and enhancing the ST exercise process; and
 - Cross-sectoral coordination.
16. EIOPA has followed a bottom-up approach to identify these Recommendations, making use of all the data available from the ST exercise. In a first step, the ST results were

² As listed in the Annex 1 – Sample of the 2018 Insurance Stress Test Report.

analysed at individual Group level. A subset of affected Groups in terms of exhibiting higher vulnerabilities to the scenarios tested was identified and prioritized for the follow-up. Subsequently, several discussions were held with Group supervisors, where deemed necessary.

17. Therefore, the Recommendations contained in this document constitute the aggregation of the discussions and assessments of the individual ST results of the 42 insurance Groups that participated in the EIOPA's 2018 Insurance Stress Test.
18. EIOPA will undertake a coordinating role in the follow up of the Recommendations addressed to the NCAs, with the aim of enhancing future exercises and contribute to a more resilient insurance sector in Europe.
19. EIOPA will engage with Members in the course of 2019 to explore what actions have been taken in light of these Recommendations.

Overview of recommended actions

20. After analysis of the ST results, EIOPA recommends a series of actions. First, concerning in particular the affected Groups, EIOPA focuses on the need to strengthen supervision (Recommendation 1), review the capital and risk management strategies (Recommendation 2) as well as the evaluation of potential management actions to mitigate the risks identified (Recommendation 3). Next, EIOPA seeks to enhance the stress-test process in light of future exercises (Recommendation 4). Lastly, there is a general recommendation aimed at cross-sectoral coordination (Recommendation 5).

<i>Recommended actions</i>	<i>NCA(s) concerned</i>
<i>Recommendations on supervisory convergence and financial stability issues</i>	
1. NCAs should strengthen supervision of the Groups identified as facing greater exposure to Yield Curve Up and/or Yield Curve Down scenarios . This affects, in particular, those Groups where transitional measures have a greater impact.	<i>All NCAs with Groups participating in the 2018 stress test exercise</i>
2. NCAs should carefully review and, where necessary, challenge the capital and risk management strategies of the affected Groups. In particular: ○ NCAs should require Groups to clarify the impact of the stress test in terms of capital and risk management. ○ For the affected Groups, stress test scenarios similar to Yield Curve Up and Yield Curve Down should be properly considered in the risk management framework, including the ORSAs. ○ Review the risk appetite framework for the affected Groups.	

3. NCAs should evaluate the potential management actions to be implemented by the affected Groups. In particular: ○ NCAs should require Groups to indicate the range of actions based on the results of the stress testing. ○ NCAs should assess if the actions identified are realistic in such stress scenarios. ○ NCAs should consider any eventual second-round effects.	
<i>Recommendations on efficiency and enhancing the ST exercise process</i>	
4. NCAs should further contribute to enhance the stress test process: ○ NCAs should check the adequacy of the systems and supporting technologies and the flexibility of the risk modelling used by Groups to run stress tests scenario/sensitivity analysis ○ Ensure availability of resources of National experts for future EIOPA Stress Test exercises	<i>All NCAs, even if they are not acting as Group Supervisor of the participating Groups</i>
<i>Recommendations on cross-sectoral coordination</i>	
5. NCAs should enhance cooperation and information exchange with other relevant Authorities, such as the ECB/SSM or other national authorities, concerning the stress test results of the affected insurers which form part of a financial conglomerate.	<i>All NCAs with financial conglomerates or banking groups with major insurance subsidiaries</i>

Recommendation 1

➤ ***NCAs should strengthen the supervision of the Groups identified as facing greater exposure to Yield Curve Up and/or Yield Curve Down scenarios. This affects, in particular, those Groups where transitional measures have a greater impact.***

21. In accordance with the EIOPA Regulation, the main objective of the stress test is to assess the resilience of financial institutions. Therefore, it provides a good basis to identify risks and vulnerabilities and, in particular, the potential systemic risk posed by financial institutions to adverse market developments, and evaluate the potential for systemic risk to increase in situations of stress.
22. The ST exercise generates a significant amount of quantitative and qualitative information both to EIOPA and the NCAs. As a next step, the assessment of the information and identification of threats should lead to specific supervisory actions to transfer, manage or mitigate such risks and vulnerabilities. NCAs should therefore strengthen the monitoring and supervision, in particular of those Groups that were more severely affected in the ST.³ In principle, this should lead to concrete supervisory initiatives adopted by NCAs.
23. Strengthened supervision should also be devoted to those Groups where transitional measures have a greater impact. As concluded by EIOPA, although the transitional measures contribute to mitigate the potential procyclicality effects of regulatory

³ In line with EIOPA Regulation, Article 23(1).

changes, the downside may be that insurers are capitalised at a level that is lower than needed from an economic perspective for a longer period.⁴

24. The ST report discloses the impact of the LTG and transitional measures on the Groups.⁵ The LTG measures foreseen under Solvency II were also designed to avoid, at least partly, some of the potential procyclical behaviour that might arise in such situations. NCAs should devote attention to those Groups that would have suffered the larger impact if, in particular, transitional measures had been deducted. This recommendation also applies to those cases where removing the LTG measures would result in non-compliance with the SCR.⁶

Recommendation 2

- **NCAs should carefully review and, where necessary, challenge the capital and risk management strategies of the affected Groups. In particular:**
- **NCAs should require Groups to clarify the impact of the stress test in terms of capital and risk management.**
 - **For the affected Groups, stress test scenarios similar to YCU and YCD should be properly considered in the risk management framework, including the ORSAs.**
 - **Review the risk appetite framework for the affected Groups.**
25. The ST includes two scenarios combining market and insurance specific risks of relevance for the insurance sector. From that point of view, the ST scenarios and/or ST results could be used to assess the capital and risk management of undertakings. In particular, it could be used to better calibrate the projections of the ORSAs or to review the tolerance limits for main categories of risk, as well as to better understand how the indicators and risks should be monitored, in order to keep them aligned within risk appetite.
26. **NCAs should require Groups to clarify the impact of the ST in terms of capital and risk management.** NCAs should discuss with Groups their capital buffer levels (i.e. the actual level of additional capital compared with the required SCR level) and risk transfer measures. The ST results showed that several Groups do not have significant buffer levels in case the ST scenarios would materialize. This is especially significant for Groups with books of life products with guarantees looking currently to de-risk and diversify their portfolios. For instance, Groups could consider measures such as adapting their product policy in order to reduce the risks inherent in their books.
27. While NCAs cannot change the Group strategies, they can require Groups to provide quantitative forecasts identifying plans, constraints and challenges also considering the risk-return trade-off, as well as in case of deviations from projections, how funding

⁴ See EIOPA, 2018, *Solvency II tools with macroprudential impact*. As stressed in Article 308e of the Solvency II Directive, supervisory authorities shall be informed as soon as an undertaking applying the transitional measures observes that they would not comply with the SCR without the application of such measures. In that case, undertakings are obliged to provide plans with measures in order to ensure, that they are sufficiently capitalised at the end of the transition period.

⁵ In the YCU scenario, the aggregate AoL ratio drops from 109.5% to 107.6% (drop of 32.2% in the eAoL). Without the use of LTG and transitional measures, the AoL ratio would drop to 105.1% (i.e. 53.1 in the eAoL) with 3 groups reporting an AoL ratio below 100%. In the YCD scenario the aggregate AoL ratio decreases from 109.5% to 106.7%, corresponding to a drop in eAoL of 27.6%. Without LTG and transitional measures, the ratio would drop to 104.8%, corresponding to a decrease of 47.7% in eAoL, with 3 groups reporting an AoL ratio below 100%.

⁶ As stated in Article 44 of the Solvency II Directive: "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". It should be noted, however, that the LTG measures are of different nature compared to transitional measures, given that the LTG measures are a permanent feature of the Solvency II Directive.

can be reliably called on and timing of effects. A crucial cornerstone is the Groups' hedging framework and how the current ST exercise may affect its revision.

28. **For the affected Groups, NCAs should ensure that ST scenarios similar to YCU and YCD are properly considered in the risk management framework, including the ORSAs of affected companies.** Article 44 of the Solvency II Directive requires undertakings to have in place an effective risk management system comprising strategies, processes and reporting procedures necessary to identify, measure, monitor, manage and report, on a continuous basis the risks, at an individual and at an aggregated level, to which they are or could be exposed, and their interdependencies. Additionally, Article 45.1(a) states that the ORSA should include, among others, "the overall solvency needs taking into account the specific risk profile, approved risk tolerance limits and the business strategy of the undertaking". For those Groups that were more impacted by either the YCU, the YCD, or both scenarios, EIOPA expects NCAs to discuss with these Groups how to enhance their risk management framework, including the ORSAs that should include scenarios of similar severity or nature.
29. As a consequence of the ST results, EIOPA observed that the stresses considered internally by the affected Groups do not consider severe or combined stresses such as those specified in the ST scenarios (e.g. a Group may currently consider a low yields scenario only, then a separate longevity scenario, etc.). Hence, NCAs should encourage the affected Groups to consider both YCD- and YCU-types of scenarios in the ORSA and pre-emptive recovery plans, where applicable, taking into account a combined set of potential risk factors or stress that would reflect their specific risk profile.⁷
30. **NCAs should ensure that the affected Groups align their appetite for risk-taking with their risk bearing capacities and their ability to manage those risks.** In order to do so, it is crucial that they have a clear understanding with regard to the risks the Group is assuming, including the risk drivers. As shown in the ST results, either low yields plus longevity risk, or an abrupt and sizeable reversal of risk premia in global financial markets leading to a tightening of financial conditions could negatively impact the financial position of the insurance Groups.
31. In that respect, NCAs should consider the calibration of risk limits or triggers for the affected Groups. For instance, the FSB states that risk limits should be understood as the allocation of the Groups' aggregate risk appetite statement to business line, legal entity levels, specific risk categories, concentrations, and as appropriate, other levels.⁸ This also involves the need for close alignment and timely monitoring of the early warning indicators and the risk limits or triggers (for example, a traffic light approach could be considered, which clearly establishes thresholds for early warnings and risk limits to trigger actions).
32. Consideration should also be given to the extent to which the reduction of future discretionary benefits can effectively be used as loss-absorbing mechanism on a going-concern basis.⁹ This should take into account policyholders' expectations to avoid any overestimation of such absorbing capacity. Some Groups recognize a significant

⁷ In line with EIOPA *Opinion to Institutions of the European Union on the Harmonisation of Recovery and Resolution Frameworks for (Re)insurers across the Member States*, in a harmonised recovery and resolution framework the insurers should be subject to pre-emptive recovery plans, in a proportionate way. These plans supplement the recovery plans envisaged in Solvency II that should be drafted by undertakings within two months from the observation of non-compliance with the SCR. Pre-emptive recovery plans are already in place for G-SIIs. Some countries have also broadened the scope and requested recovery plans to other type of institutions. These plans focus specifically on the identification of possible measures to be adopted to restore the financial position of the insurer. They are therefore relevant risk management tools to address the implications of any type of scenario such as the YCD and YCU.

⁸ FSB, 2013, "*Principles for An Effective Risk Appetite Framework*".

⁹ In line with Article 108 of the Solvency II Directive.

amount of future discretionary benefits (FDB) as part of their liabilities, which in turn serves the Groups as a basis to recognize certain loss absorbency capacity (LAC) Technical Provisions.

Recommendation 3

- ***NCA should evaluate the potential management actions to be implemented by the affected Groups. In particular:***
 - ***NCA should require Groups to indicate the range of actions based on the results of the stress testing.***
 - ***NCA should assess if the actions identified are realistic in such stress scenarios.***
 - ***NCA should consider any eventual second-round effects.***
- 33. The results of the ST exercise provide insights to supervisors on the assessment of risks and vulnerabilities of the Groups. Likewise, as stated in its Regulation, the build-up of a ST regime shall help EIOPA identify those financial institutions that may pose a systemic risk. These institutions shall be subject to strengthened supervision, and where necessary, even to recovery and resolution procedures.¹⁰
- 34. As a result of the strengthened supervision (see Recommendation 1) and after carefully reviewing the capital strategies as well as the risk appetite frameworks (see Recommendation 2), supervisors should consider potential remedial measures or actions to be taken by the affected Groups, in case of non-compliance with the SCR under the respective ST scenarios. The impact of the LTG and transitional measures on the Groups results should be taken into account in this analysis as well.
- 35. **NCA should require Groups to identify the range of actions to be taken.** Based on the analysis of ST results, EIOPA concludes that the NCAs should evaluate and discuss the potential management actions to be eventually implemented by the affected Groups. For instance, some Groups could consider increasing the current capital buffer/surplus (over SCR coverage) as a cushion to absorb losses in more severe scenarios. Others could consider a higher diversification of the product portfolio, seek measures to de-risk the portfolio, reduce the cost of guarantees to a level that is sustainable based on current asset return yields, or reduce dependency of the SCR calculation on the loss absorbing mechanisms.
- 36. The Groups, in some cases, do already provide supervisors with a list of contingency actions or measures (e.g. as part of the ORSA cycle or pre-emptive Recovery Planning).¹¹ However, for other Groups this may not be the case and could be discussed as part of the capital management process.
- 37. **NCA should assess if the management actions identified are realistic in such stress scenarios.** In some occasions, the Group may be overly optimistic about certain actions it intends to take in a potential crisis. From that perspective, it is vital that NCAs assess the feasibility, credibility and timeliness of the possible actions or measures in order to deal with the risks and vulnerabilities of the Groups in the relevant YCD and YCU scenarios.
- 38. **NCA should consider any eventual second-round effects.** To the extent possible, NCAs should also consider any potential second-round effects¹² arising within

¹⁰ As stated in the Regulation, Article 23(1).

¹¹ This request is not associated to the "request to take the necessary measures" as described under Article 138 of Solvency II.

¹² EBA defines second-round or feedback effects means the spill over effects caused by the responses of individual institutions to an external original shock, which in aggregate generally amplify (it may also mitigate) such an original shock, thereby causing an additional negative feedback loop.

their jurisdiction and stemming from the behaviour of Groups that intend to implement similar actions, simultaneously. For example, it should not be unduly assumed that capital will be entirely available to the Groups at the time it is needed, particularly in crisis times. Should several Groups suffer losses and intend to reinforce their capital buffer at the same time (e.g. large equity issues, divestment of similar run-off portfolios), such coincident actions may not yield the expected results. Subsequently, EIOPA will take a coordinating role with the involvement of the relevant NCAs to evaluate the potential second round effects at the European level.

39. EIOPA acknowledges the importance of such behaviour-based related sources of systemic risk in insurance.¹³ In this case, the behaviour-based source relates to the risk of collective behaviour by insurers that may exacerbate market price movements, in this case, stemming from potential second round-effects of the simultaneous implementation of actions in crisis times.

Recommendation 4

➤ ***NCAs should further contribute to enhance the stress test process.***

40. EIOPA is committed to continue enhancing its ST exercises to make them more methodologically sound, efficient and useful to NCAs and stakeholders in general. Two aspects were identified concerning the 2018 Insurance ST.
41. **Firstly, NCAs should check the adequacy of the systems and supporting technologies and the flexibility of the risk modelling used by Groups to run stress tests scenario/sensitivity analysis**, primarily to serve the purpose for their own risk assessment and regular dialogue with supervisors (e.g. ORSA) and to ensure readiness for demanding and complex EU wide exercises. A potential issue identified during the interaction with the participating Groups and in the calculation phase refers to the estimation of the group post-stress balance sheet and capital position. Participating Groups made clear that, given the severity of the prescribed shocks and the allowed timeframe, they were not able to re-assess the post-stress SCR and own funds using the standard models utilised for the regular calculation for reporting purposes (e.g. Solvency II reporting) and supervisory dialogue (e.g. ORSA). As a result, EIOPA recommends that NCAs should check: a) the adequacy and usability of the models used by Groups to run stress testing to support their regular supervisory dialogue; and b) the flexibility of the models used for calculation of the balance sheet and capital position to support their regular supervisory dialogue (e.g. narrow fitting range, specifically the capability of the models to work under severe but plausible shock assumptions).
42. **Secondly, NCAs should ensure availability of resources from national experts for future EIOPA ST exercises.** Stress tests can be an extremely useful tool for supervisors but are also time- and resource-intensive exercises. Synchronisation of all participants involved from the industry, institutions and supervisory community is a challenging issue, which requires significant resources at the national level in terms of coordinating with the participants, validating the data, as well as contributing to the methodological framework and analysing the results. In the context of a bottom-up exercise, EIOPA leans on the expertise and support of NCAs, which should ensure sufficient staff are available, taking into account the workload and different phases of the exercise.

¹³ EIOPA (2018): Systemic Risk and macroprudential policy in insurance.

Recommendation 5

- ***NCA should enhance cooperation and information exchange with other relevant Authorities, such as the ECB/SSM or other national authorities, concerning the stress test results of the affected insurers which form part of a financial conglomerate.***

43. EIOPA is mandated by its Regulation to act in the field of activities of financial conglomerates, among others. Financial conglomerates can be defined as large groups which provide services and products in more than one financial sector (banking, investment or insurance). Such conglomerates may be among the biggest financial groups which provide services and are active in the national markets.
44. If such conglomerates (and, in particular, credit institutions or insurance undertakings which are part of such a conglomerate) were to face financial difficulties, these could seriously destabilise the financial system and affect individual depositors, insurance policyholders and investors.¹⁴
45. In light of the individual results obtained from the insurance Groups participating in the 2018 insurance stress test exercise, EIOPA observed that some of the insurers that are more negatively affected are part of bank-led financial conglomerates. Some of these Groups appear to be vulnerable either to low yields and longevity risk, or to a sudden and abrupt reversal of risk premia combined with an instantaneous shock to lapse rates and claims inflation.
46. The 2018 insurance ST marks an important step in the reassessment of capital requirements under adverse scenarios and provides a valuable basis for continuous dialogue between group supervisors and the participating Groups. Therefore, EIOPA recommends that the NCAs increase cooperation and information exchange with the relevant Authorities. For example, those concerned with prudential supervision on a group-wide basis of financial conglomerates and banking groups with major insurance subsidiaries, such as the ECB Single Supervisory Mechanism or other relevant national authorities.
47. Furthermore, EIOPA advises the NCAs to keep EIOPA informed on the related cross-sectoral discussions. The multiplicity of Authorities involved in financial conglomerates supervision portrays a complex supervisory landscape, in which EIOPA should have a growing role. This goes in line with the mandate stated in the Regulation to assess and to promote the resilience of financial institutions, in particular the systemic risk posed by financial institutions. To this aim, effective information-exchange on the related financial conglomerate issues could be achieved, in particular, by discussing the individual ST results in the financial conglomerate's Colleges, or by activating more frequently platforms of communication between cross-sectoral EU supervisors.

¹⁴ As stated in the FICOD (Directive 2002/87/EC).