ACTUARIAL ASSOCIATION OF EUROPE

Solvency II 2020 review

Webinar

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15 September 2020

Solvency II 2020 review - agenda

1) Stock-taking
2) EIOPA’s advice becoming apparent
3) Commission’s own initiative

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Amendments of Delegated Regulation / ITS

Solvency II framework applicable as of 2016

Annual amendments of technical standards on reporting and disclosure

Amendments of Delegated Regulation to support political objectives in 2016, 2017

SCR – Review: Amendment of Delegated Regulation in 2019

Directive of 18 December 2019
Article 77d(4) (Country component)

SII-Review 2020: Amendment of Solvency II framework 2021+

2016
2016
2016
2017
2017
2018
2019
202?

SII-Review: Process outlined in Article 77f

Article 77f (1):

Until 1 January 2021 EIOPA shall, on an annual basis report to the European Parliament, the Council and the Commission about the impact relating i.a. to the use of the LTG-measures → **LTG Report**

ongoing

Article 77f (2):

EIOPA shall submit to the Commission an **opinion** on the assessment of the application of i.a. the LTG-measures → **end of December 2020**

Article 77f (3)

Commission shall submit a report to the European Parliament and to the Council by ~~1 January 2021~~ (*expected 3. quarter 2021*). This report will be accompanied by legislative proposals. → **change of the SII - Framework**

SII-Review: Legislative Steps

TFEU	(Treaty on the functioning of the EU) and
EIOPA Regulation (EU)	**1094/2010** constitute the legal basis

European Commission

SII-Directive is a Level 1-document in the hierarchy of the framework. Adaptation have to be approved by the trilogue parties.

After approval it has to be transferred to national law in all member states.

In addition, amendments of Delegated Regulation, Regulatory technical standards or Guidelines might be required.

Becoming effective:
Normal process: 2023+
Acceleration?
Preparatory use?

SII - review: A two-staged process

A two-staged review of the SII - framework is required by SII-Directive and Delegated Regulation

- 1st Step: Review of SCR standard formula until December 2018

  Result: Delegated Regulation has been adapted in 2019 ✓

- 2nd Step: Review of the whole Solvency II-framework (Directive, Delegated Regulation,…)

  EU-Commission launched Request on 11 February 2019:

  Request to EIOPA for technical advice on the review of the Solvency II Directive

  EIOPA's advice is explicitly requested for 19 items, covering i.a

  - Long term guarantee (LTG)-measures and measures on equity risk
  - Methods, assumptions and standard parameters used when calculating the SCR standard formula;
  - Macroprudential elements

Request to EIOPA for technical advice

Request to EIOPA for technical advice on the review of the Solvency II Directive (11 February 2019)

LTG / SCR – Review, partly mandatory

Systemic risk

LTG!

3.1. Extrapolation

3.2. MA / VA

3.3. Transitional

3.7. SCR Standard formula

3.17. Best estimate …

3.6. Dynamic VA; int. Model

3.4. Risk Margin

3.5. CMU aspects- recalibration

3.8. Risk mitigation techniques

3.14. Group supervision

3.16. Proportionality, Thresholds

3.15. Reporting, Disclosure

3.18. Own Funds, solo, tiering

3.19.Relevance External ratings

3.11. Recovery , Resolution

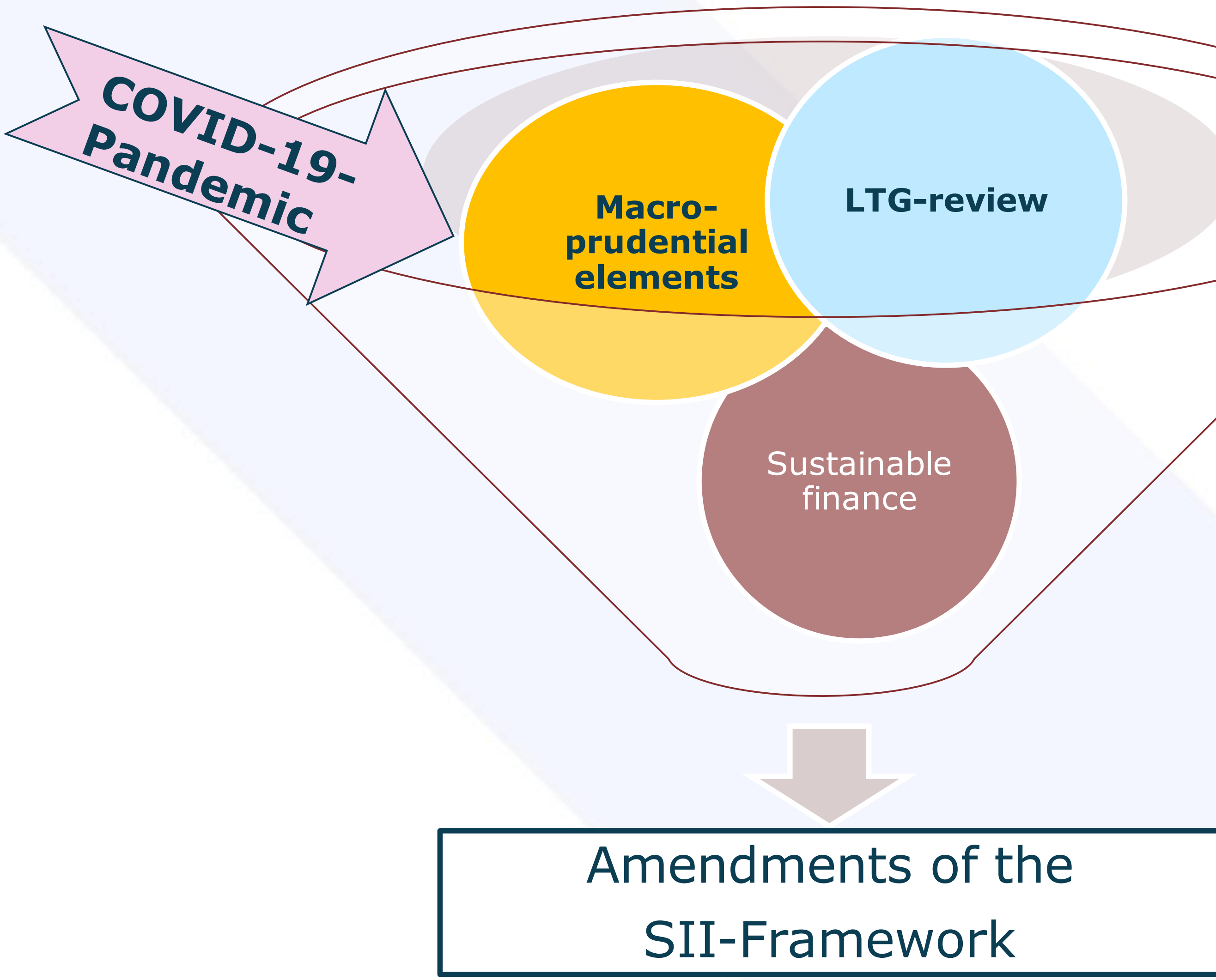
3.12. Ins. Guarantee schemes (IGS)

3.10. Macroprudential issues

3.9. MCR - Report

3.13. Freedom of services ….

SII-review 2020: Far more than LTG-review



Commission's further goals:

The framework needs to take into account the ***political priorities*** *of the EU; notably*

- *the European Green Deal,*
- *the completion of the Capital Markets Union, and*
- *the strengthening of the single market.*

It should be ***flexible*** *enough to cope with any economic and financial developments (including the unprecedented protracted low – and even negative – interest rate environment).*

SII–2020 Review: preparatory publications

LTG – Report 2016

LTG – Report 2017

LTG – Report 2018

LTG – Report 2019

LTG – Report 2020

ESRB: Enhancing the macroprudential dimension of Solvency II (19 February 2020)

Financial stability report (bi-annual). E.g. July 2020

Systemic risk and macroprudential policy in insurance. (6 February 2018).

Mitigating systemic risk through Solvency II (21 March 2018)

Other potential macroprudential tools and measures to enhance the current framework (31 July 2018)

Solvency II–review 2020

Supervisory statement on the impact of the ultra-low/negative interest rate environment (19 February 2020)

Report on insurers' asset and liability management in relation to the illiquidity of their liabilities (16 December 2019)

ICS (i.a.) Level 1 Document: ICS Version 2.0 for the monitoring period (14 November 2019)

Opinion on Sustainability within Solvency II (30 September 2019)

Commission: *Where available and to the extent possible, other public sources of information, **data gathered from the industry and existing studies** will also be used to enrich the analysis provided in the impact assessment.*

The way to Commission's report

EIOPA's technical advice (Opinion)

- Consultation on EIOPA's opinion

3 consultation papers

- Holistic impact assessment

2 information requests

Commission's Consultation

Review of prudential rules for insurance and reinsurance companies

(Solvency II)

Published 1 July 2020

Commission's roadmap:

Proposal for a Directive

3rd quarter 2021

Requirement

Fundamental principles of SII should not be questioned (confidence level underlying calibration of capital requirements and the market-consistent valuation

Covid-19 has changed timelines!

Steps towards EIOPA's opinion paper

1)
CP on proposals for Solvency II 2020 Review Package on Supervisory Reporting and Public Disclosure

12 July 2019 – 18 October 2019

2)
CP on proposals for Solvency II 2020 Review Harmonisation of National Insurance Guarantee Schemes

12 July 2019 – 18 October 2019

3)
CP on the Opinion on the 2020 review of Solvency II

15 October 2019 – 15 January 2020

4)
Holistic impact assessment: Data request

2 March 2020 – 1 June 2020

5)
Complementary information request

1 July 2020 – 24 September 2020

The AAE commented on these Consultation Papers

SII-Review 2020: AAE’s main focus

The AAE has commented on all consultation papers relating to Solvency II

Focus on:

- Extrapolation of the risk-free interest rate curve
  - Methodology and last liquid point
  - Ultimate forward rate (UFR): Convergence period and tolerance
- Volatility adjustment
- Transitional measures
- Interest rate risk
- Risk margin
- Reporting and Disclosure

Challenge: Inhomogeneity of business across Europe

Differing relevance of LTG-measures

Application and impact of LTG – measures indicate the inhomogeneity of insurance business across Europe.

This becomes also obvious in EIOPA's 's annual LTG – reports.

LTG-Report 2019

	Number of undertakings using the measures							
Type of undertaking	Total number of undertakings	VA	TTP	MA	TRFR	DBER	No measure
Life	555	255	105	19	3	1	271
Non-Life	1.593	203	10	0	0	0	1.331
Both life and non-life	395	177	43	14	2	0	210
Reinsurance	311	25	1	1	1	0	286
Total	2.797	660	159	34	6	1	2.098
Number of countries		22	11	2	4	1	

An overall "one fits it all" rules-based solution is not possible. Principle-based regulation, strengthening of Pillar II recommendable

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Holistic impact assessment (HIA)

Consultation papers

Comprehensive discussion of extrapolation, VA, risk margin,…

- Deficiencies and options analysed in depth
- Preliminary impact assessment relating to particular options
- No concrete advice concerning preferred option

Advice provided
– to extend risk management concerning VA proposed
- not to change Risk Margin calculation ….

Holistic impact assessment

(launched 2 March 2020) with reference date **31 December 2019**

Three scenarios tested:

- Baseline scenario: the current legal framework for Solvency II
- Scenario 1: changes to the baseline in accordance with EIOPA's tentative advice
- Scenario 2: The same as scenario 1, but without a change to the interest rate risk calibration

Complementary information request (launched 1 July 2020) with reference date **30 June 2020**

- Modified scenarios (extrapolation, VA, long-term equity,…)

HIA aims at considering interrelations

Risk-free interest rate term structure

- **Valuation of technical provision**
- **Volatility adjustment**
- **SCR: Interest rate risk**
- **Risk-margin: Discounting and determination of future SCR**
- **Spread risk**

VA can help to stabilise best estimate technical provisions. The stabilisation function cannot fully be realised as long as the calculation of the risk-margin does not allow its use.

DLT–assessment for the Euro: EIOPA's analysis

Swap markets analysed only for years 2016, 2017

Result: Swap market for the euro in these years is deep, liquid and transparent for maturities 1 to 15, 20, 25, 30, 40 and 50 years (not for other years)

Bond markets: no data delivered for the Euro-countries

Matching criterion: Analysed with and separately without unit-linked and index-linked business (value in brackets)

Maximum LLP:	2016: 10 years (10 years)
	2017: 15 years (15 years)
probably not complete data:	2018: 15 years (23 years)

Residual volume criterion:

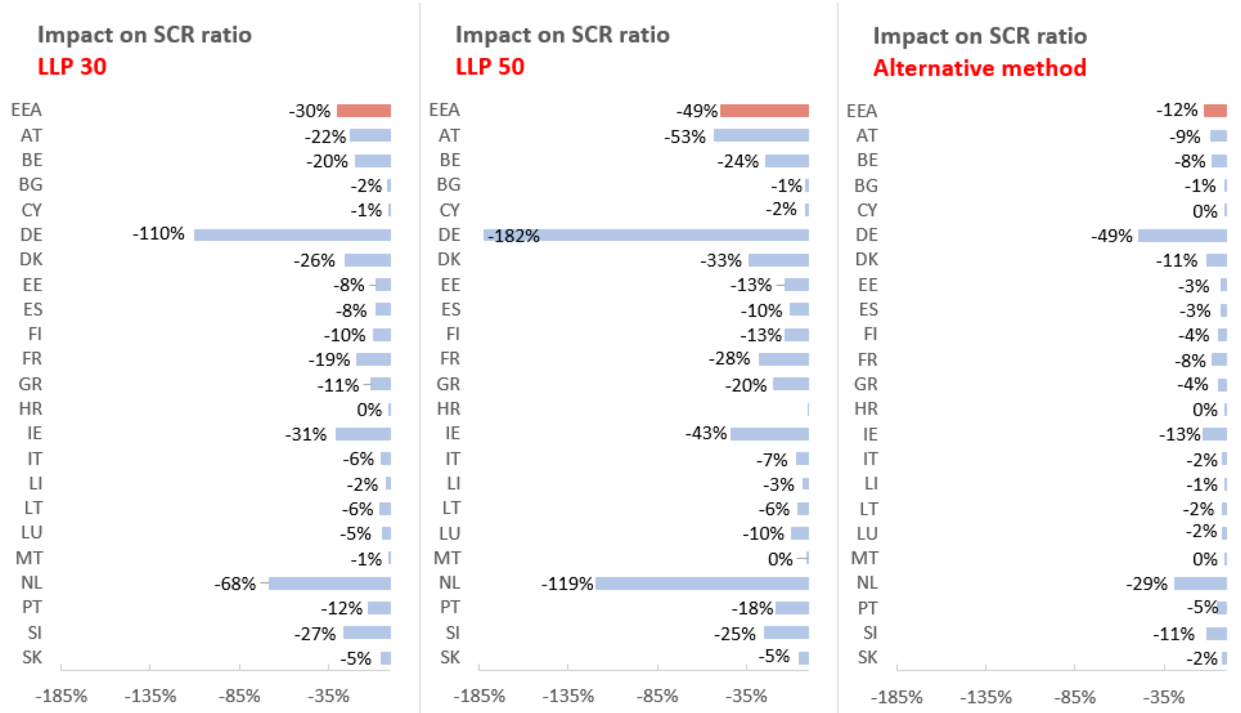
Resulting LLP:	2016: 22 years
	2017: 22 years
	2018: 21 years

The LLP depending on outstanding volumes of bond cashflows is calculated based on a threshold of 6%.

AAE comments: EIOPA fails to substantiate a shift of the current LLP of 20 years for the Euro.
The LLP of 20 years should not be changed

Extrapolation – Impact of options considered

Rfr: Year end 2018



Possible impact resulting from the use of transitional measures not recognisable

Source: Consultation paper p. 39

Scenarios discussed in EIOPA's Consultation paper:

Baseline

LLP = 20 years

LLP = 30 years

LLP = 50 years

Alternative extrapolation

Extrapolation of risk-free rate (Euro)

Current methodology

Last liquid point (LLP) = 20

Convergence point = 60 years

Convergence tolerance = 3 bp

Credit risk adjustment = 10 bp

Ultimate forward rate = 3.75%

<u>Methodology:</u>

Smith-Wilson method

Speed of convergence controlled by parameter alpha (>=0.05)

*Tested in addition: LLP = 30, Convergence Horizon 40 years

Alternative methodology

First smoothing point (FSP) = 20 (residual bond criterion used)

Last liquid forward rate (LLFR): based on weights and forward rates identified in the DLT assessment.

Ultimate forward rate = 3,75%

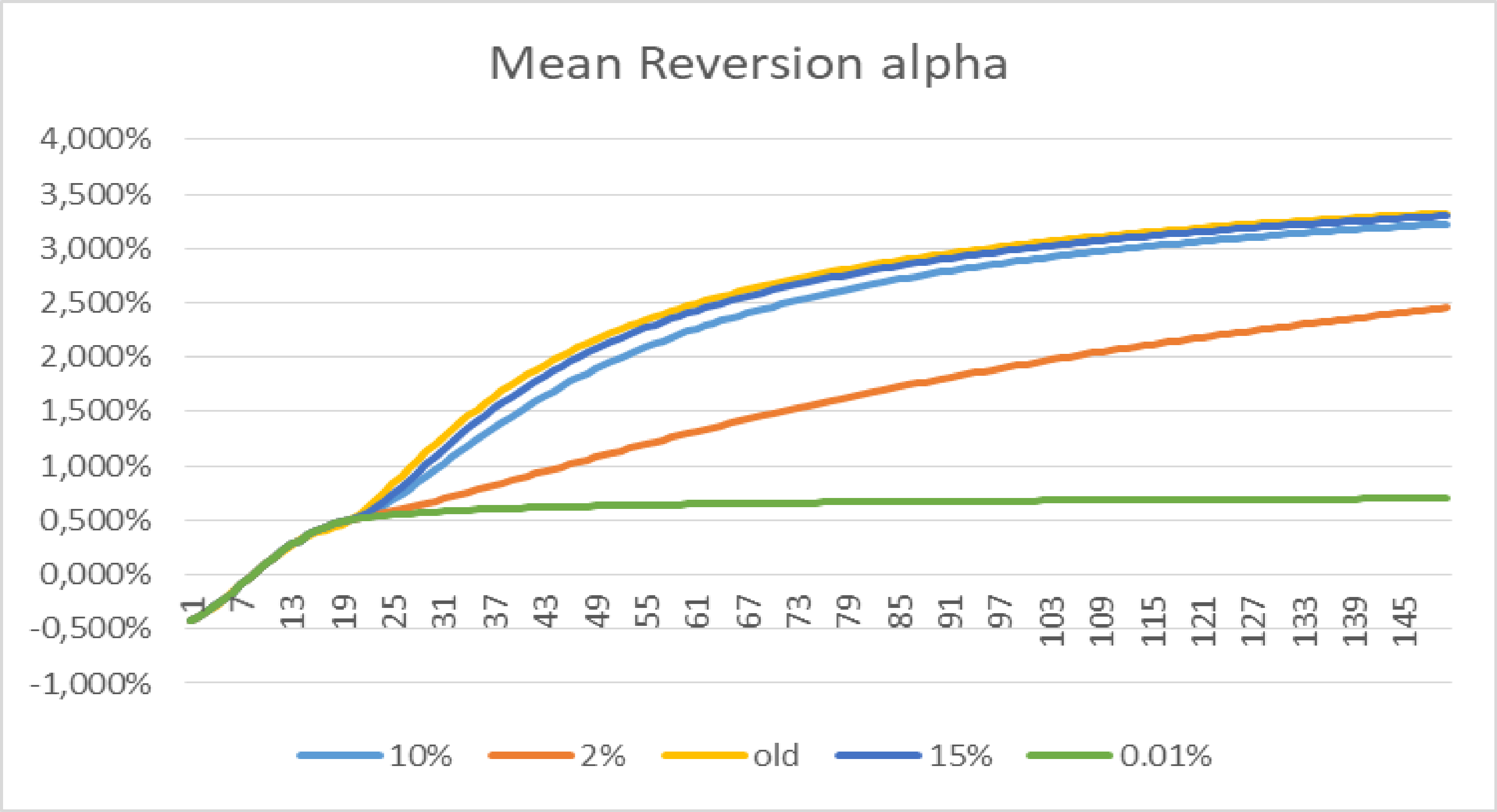
<u>Methodology:</u>

- Forward rates after FSP: weighted combination of LLFR and UFR
- Mean reversion factor alpha=10%
- No convergence tolerance prescribed

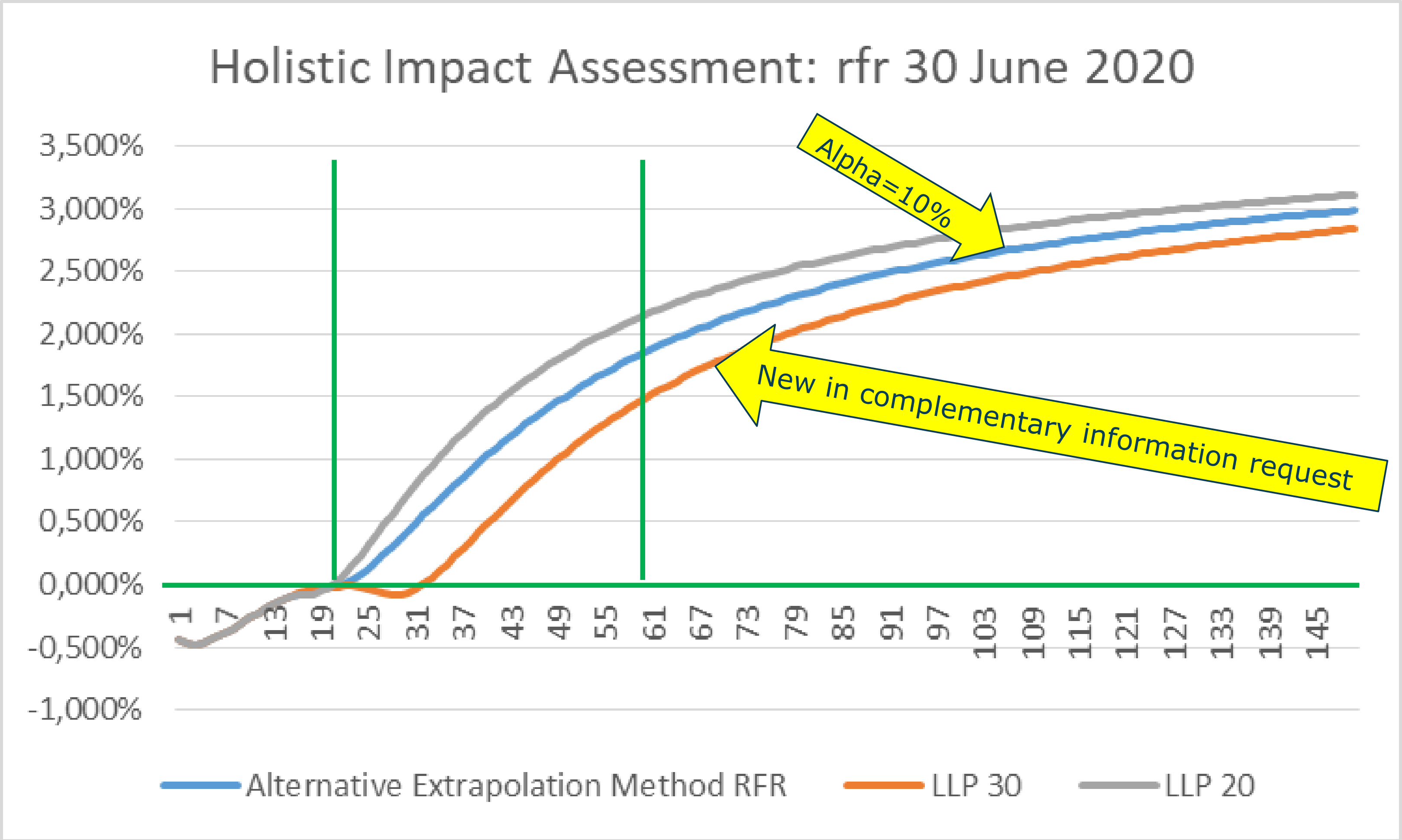
* Complementary information request for 2020 review– Risk-free interest rate term structure as of 30-06-2020

Alternative Extrapolation: Sensitivity Alpha

Shape of rfr and convergence to UFR significantly affected by alpha



Scenario for complementary information request



LLP 20 and LLP 30 extrapolated with Smith-Wilson method,
LLP 30: convergence horizon remains 40 years

Alternative extrapolation method: AAE's view

Further analysis required

- DLT-characteristic post LLP /FSP only analysed for swap-market in 2016, 2017
- Behaviour in different market situations (incl. crisis situations and significantly higher interest rates…)
- IBOR-Transition: possible effect on DLT–assessment
- Impact of ECB's asset purchase programs on interest rates. Long-term expectation vs. currently observable yields from long-term investments
- Convergence process of forward rates to UFR: neither convergence point nor convergence tolerance required → impact on stability of results (artificial volatility)

At this point in time and based on EIOPA's analysis neither changing the LLP for the Euro nor the extrapolation methodology can be supported.

In order to reduce volatility, we don't support the weakening of the role of the UFR and the loss of a reliable convergence process to the UFR.

Volatility adjustment: Commission's request

Commission requested an assessment concerning the use of volatility adjustment. The quantitative impact of two approaches should be provided.

- Approach 1: Maintaining the current concept of **representative portfolios**, but taking into account the illiquidity features and/or duration of insurers' liabilities. Such an adjustment may rely on different "application ratios";

- Approach 2: Taking into account the weights of **own assets** holdings of each insurer. An adjustment may rely on different "application ratios" depending on the level of cash-flow matching of insurance liabilities portfolios.

In addition, EIOPA is asked to review the functioning of the country component given its purpose and suggest amendments to the measure where necessary.

AAE comments: Preference for Approach 2

Supervisory practice differs: Prior approval from NSAs required for the application of the VA in ten member states (not used: grey writing) : Croatia, Denmark, Estonia, Germany, Ireland, Poland, Portugal, Romania, Slovenia, UK

Volatility adjustment: Permanent VA

EIOPA's tentative proposal: The total VA will consist of a permanent VA and a macroeconomic VA (calculated as a country-specific VA for country j). This conforms to approach 1 in Commission's request.

Total VA^i = $VA_{\mathbf{perm}}{}^{i} + VA_{\mathbf{macro,j}}{}^{i}$ (for undertaking i located in country j)

The permanent VA is calculated as

$$VA_{\text{perm}} = GAR \cdot AR_4 \cdot AR_5 \cdot Scale_c \cdot RC\_S_c$$

where

- AR_4, to correct mismatches in fixed income assets and liabilities
- AR_5, to account for the illiquidity characteristic of liabilities
- GAR is the general application ratio *(set to 85%)*
- $Scale_c$ scaling-factor for currency *c* *(set to 139% for the EURO)*
- RC_S_c risk-corrected spread of the representative portfolio for currency c *(set to 0.274% for the EURO)*

Observations: Spread determined for representative portfolio. But AR_4 and AR_5 are undertaking-specific.

Illiquidity solely considered via AR_5. This deserves further analysis. A spread of zero does not eliminate this characteristic of liabilities.

Calculation of the macroeconomic VA

The macroeconomic VA for country j:

$$VA_{\mathbf{macro,j}} = GAR \cdot AR_4 \cdot AR_5 \cdot \boldsymbol{\omega_j} \cdot \mathbf{max}\,(Scale_{c,j} \cdot RC\_S_{c,j} - \mathbf{1.3} \cdot Scale_c \cdot RC\_S_c; \mathbf{0})$$

- $Scale_c$ scaling-factor for currency *c* *for representative portfolio*
- $Scale_{c,j}$ scaling-factor for country j using currency *c*
- RC_S_c risk-corrected spread representative portfolio for currency c
- $RC\_S_{c,j}$ risk-corrected spread representative portfolio for country j using currency c

$$\omega_j = \begin{cases} 0 & RC\_S_{c,j} \leq 60 \text{ bps} \\ \dfrac{RC\_Sc_{,j} - 60}{30} & 60 \text{ bps} < RC\_S_{c,j} \leq 90 \text{ bps} \\ 1 & RC\_S_{c,j} > 90 \text{ bps} \end{cases}$$

ω_j for gradual and smooth activation of country component, mitigating cliff effects.

Risk margin: Modification proposed in HIA

The weight of future SCR is attenuated by application of a factor λ;
CoC-rate remains unchanged

$$RM_{scenario} = CoC \cdot \sum_{t \geq 0} \frac{SCR(t)}{(1+r(t+1))^{t+1}} \times \max(\lambda^t, 0.5),\ \lambda = 0.975$$

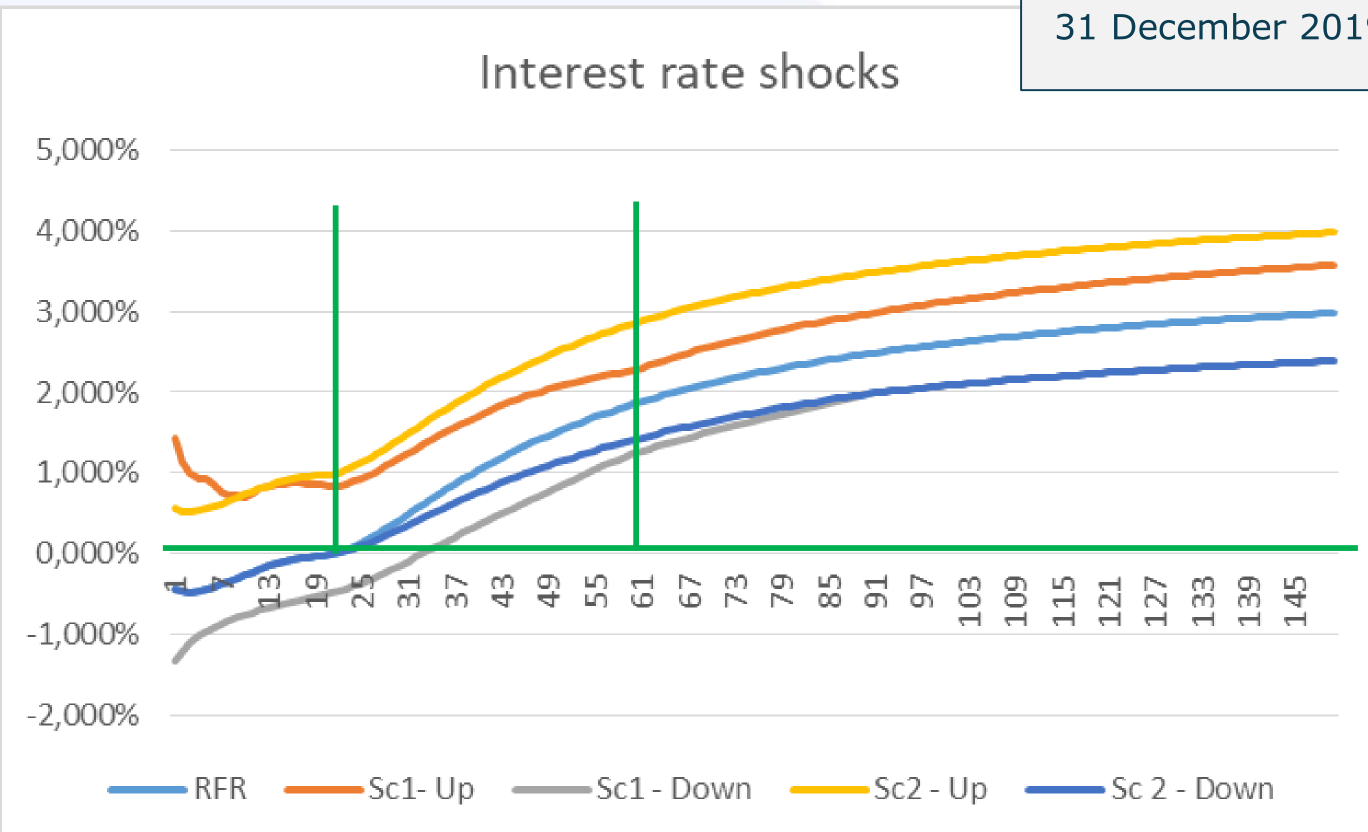
- SCR(t): SCR after t years;
- r(t+1): basic risk-free rate for the maturity of t+1 year
- CoC = 6%

This factor λ reduces the risk margin considerably.
Effect comparable to a significant reduction of the CoC –rate.
No justification for the size of the factor λ is given

For further consideration: The risk margin has a binary character:

- No risk margin required in case of full hedge,
- Full risk margin required undifferentiated in all other cases – even in case of partial hedges

Interest rate stress



Term structures
31 December 2019

Proposed stress:

Proportional stress
+
Additive component, after FSP linearly decreasing to 0 until year 60

Criticism: We don't support the stress of the UFR. SII requires a one-year-horizon.

Invitation to calculate SCR with a modified calibration of scenario:
A floor of -1.25% to shocked interest rates.

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The way to Commission's report

EIOPA's technical advice (Opinion)

- Consultation on EIOPA's opinion
  3 consultation papers
- Holistic impact assessment
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Commission's Consultation

Review of prudential rules for insurance and reinsurance companies (Solvency II)

Published 1 July 2020

Commission's roadmap:

Proposal for a Directive

3rd quarter 2021

Covid-19 has changed timelines!

Requirement

Fundamental principles of SII should not be questioned (confidence level underlying calibration of capital requirements and the market-consistent valuation

Commission's review: Broad spectrum covered

Commission's consultation paper covers four main areas

1)	2)	3)	4)
- Long-termism and sustainability of insurers' activities - Priorities of the European framework	- Proportionality of the European framework and - Transparency towards the public	- Improving citizens' trust, - Deepening the single market in insurance services - Enhancing policyholder protection and financial stability	New emerging risks and opportunities that may need to be addressed by the European framework

Together with results from EIOPA's technical consultations the results will all feed into Commission's review process.

Source: Review of prudential rules for insurance and reinsurance companies (Solvency II)

EU-Commission: Some goals and concerns

Solvency II as a prudential framework should

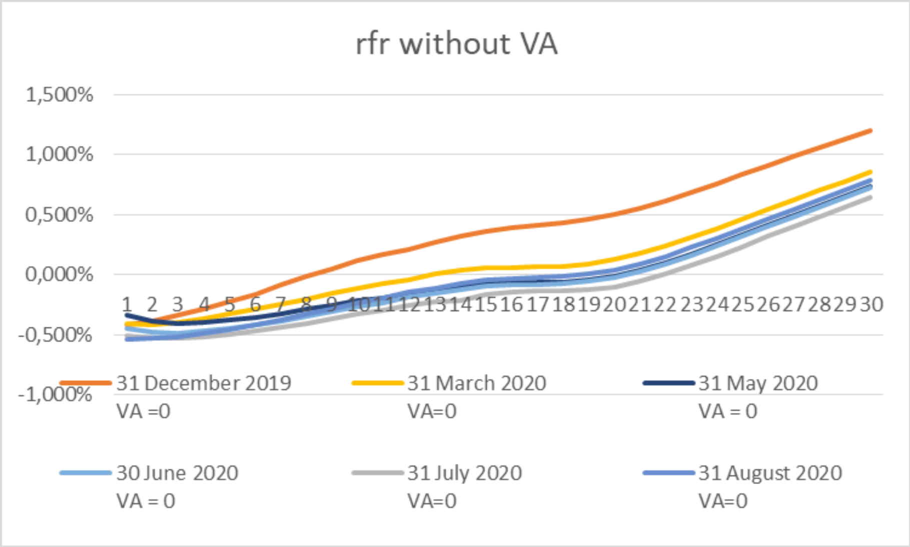
- provide the right incentives for robust risk management while avoiding excessive risk-taking, and limiting financial stability implications.
- avoid procyclical behaviour and
- not unduly prevent insurers from contributing to the long-term financing of the economic recovery of the EU in the aftermath of the current crisis.

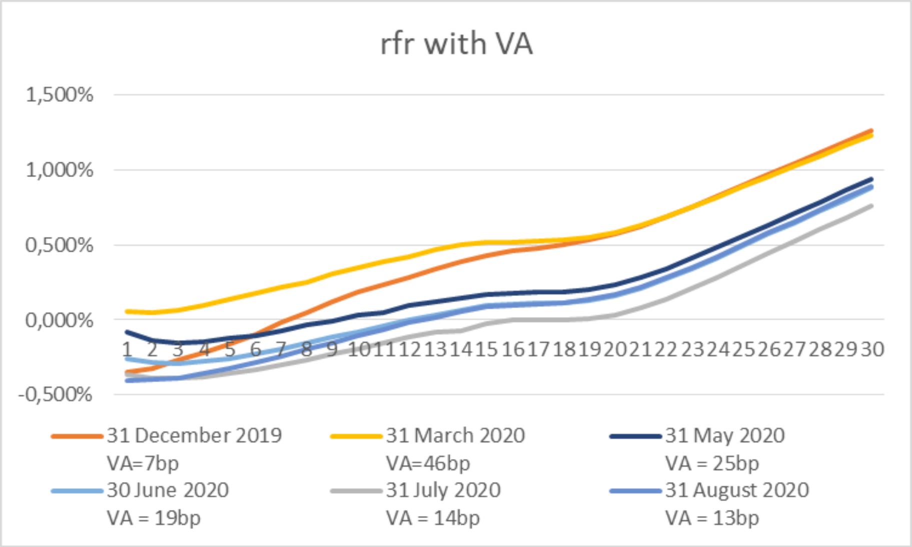
Concerns relating to the unprecedented environment of low interest rates, which is progressively deteriorating the profitability of insurers:

1) Despite the prudential framework, it can incentivise insurers to “search for yield” by taking more risks and investing in more complex securities
2) The low interest rate environment can affect the life insurance landscape, and the ability of insurers to offer insurance products with guarantees. The current trend of risk shifting to policyholders can result in new challenges, depending on customers’ risk tolerance and financial literacy.

Source: Review of prudential rules for insurance and reinsurance companies (Solvency II)

Low interest rate environment





Low interest rate environment remain a challenge- especially for undertakings offering long-term life insurance tariffs with guarantees.

Interest rates (already affected by ECB-activities) lowered after outbreak of COVID-19-pandemic.

- RFR since March significantly below RFR end of 2019.
- Volatility adjustment cannot compensate for the loss.

Development VA
2019

31 December **7bp**

2020

24 March:	**51bp**
31 March:	**46bp**
30 April:	**33bp**
15 May:	**35bp**
31 May:	**25bp**
30 June:	**19bp**
31 July:	**14bp**
11 August:	**12bp**
31 August:	**13bp**

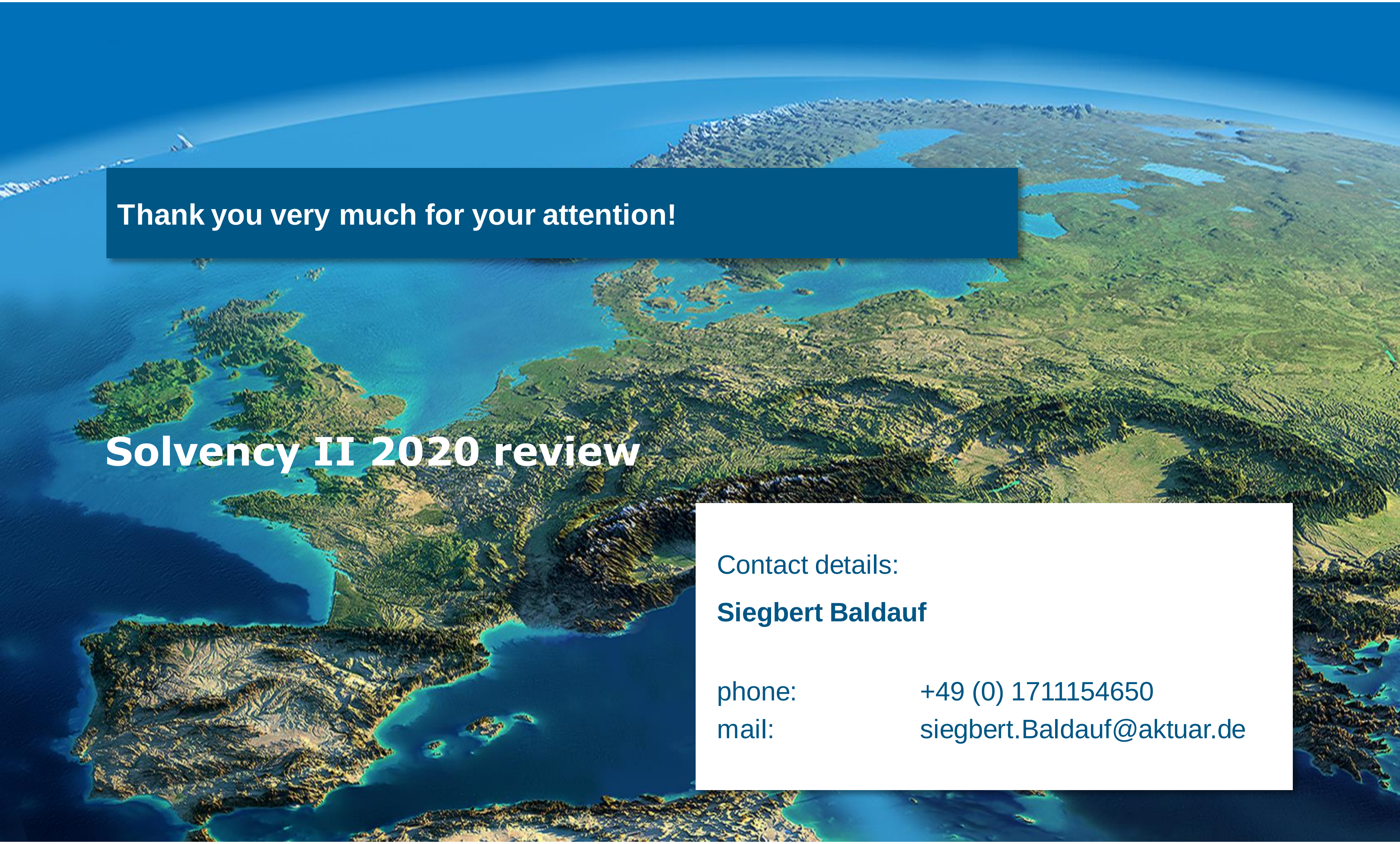
SII-Working group

The Solvency II Working Group of the AAE will

- Monitor all upcoming activities relating to the SII review 2020
- Respond to consultation or discussion papers relating to SII
- Develop own views on actuarial issues of high importance within SII

Next important activity:

Commenting on EU-Commission's aforementioned paper.



Thank you very much for your attention!

Solvency II 2020 review

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