

**Comments Template on the  
Consultation Paper  
on  
the methodology to derive the UFR and its implementation**

**Deadline  
18 July 2016  
23:59 CET**

Name of Company:	Deutsche Aktuarvereinigung (DAV) – German Association of Actuaries	
Disclosure of comments:	Please indicate if your comments should be treated as confidential:	Public
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<b>Reference</b>	<b>Comment</b>	
General Comment	<p>DAV welcomes EIOPA’s transparency and the invitation to comment on this consultation. We have the following general comments:</p> <ul style="list-style-type: none"> <li>• We note that Article 47 states: “The UFR is stable and only changes as a result of changes in long-term expectations.” In our opinion, a proposal to make a material change to the level of the UFR within the first year of the new Solvency II regime seems to be somewhat inconsistent with this requirement of Article 47. It would seem to be more consistent with</li> </ul>	

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the spirit and intent of the UFR rules to consider a review at a later date, taking into account (a) the findings from the EIOPA 2016 stress testing exercise (which includes data collection of UFR sensitivities), (b) EIOPA's review of the impact of long-term guarantee measures, and (c) EIOPA's review of the standard formula.

- In addition to the quantitative analysis provided in the consultation, we would recommend that EIOPA include a qualitative analysis of the views of central banks, macro-economic forecasters, and other bodies to assess whether the market's view of long-term expectations beyond the LLP have indeed really changed. This acts as a useful sense check against the data analysis.
- Despite of all methodology of UFR derivation, predicting capital markets over a time span of well over 50 years remains a complex task and any result derived will always remain a best estimate driven by exogenous factors and presumptions. For this very reason, our efforts put into the evaluation of EIOPA's suggested methods focus on stability of the UFR parameter. The change in UFR (before any limit) for the Euro currency is a material 50bps step reduction if the method were applied today. Sharp movements in the UFR are not practical for insurance undertakings to hedge and factor into their risk management. We welcome the consideration of an annual limit and certainly recommend phasing in of changes to the UFR, but it is preferable from an actuarial perspective, for both phasing-in and steady-state, to have a more restrictive limitation of the annual changes in the UFR, i.e. 5 to 10 bps given that the UFR should not rely on short term changes in the economic situation but represent changes to long-term expectations only. DAV considers it more appropriate to take the arithmetic average of the historic real rates to derive the expected real rate than the weighted average proposed by EIOPA given that recent data is not likely to have more influence on the far future than past data; the arithmetic average therefore does not overestimate recent trends and leads to a stable UFR.
- The impact analysis provided in section 4 of EIOPA's paper is based on some illustrative examples for certain contracts. For a change of the proposed magnitude, we would

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	recommend that an aggregate impact analysis is performed, based on more recent aggregate data for the insurance	
Q1. (pg. 56)	<p>Yes, DAV agrees with the basic principle that UFR should equal the sum of the expected real rate and expected inflation. However, we have concerns over the approach used to determine each component and the frequency with which the UFR would be refreshed – these are referred to elsewhere in this consultation response.</p> <p>Apart from this, DAV appreciates the date proposed when the UFR is expected to be publicly available to enable companies to forecast the UFR development.</p>	
Q2. (pg. 56)	<p>DAV acknowledges the approach of calculating the expected real rate using a widening window of past real rates since 1960 of the seven nations specified in the consultation paper. This approach takes into account two important aspects from the actuarial point of view. First of all, it ensures that isolated extreme amplitudes do not gain too much weight as they are not significant from a long term perspective. Second, calculating the UFR will become more and more stable over time as further data are included in the calculation of the expected real rate.</p> <p>It should be noted that the question on the appropriateness of the widening window approach can only be considered in conjunction with whatever weighting methodology is applied to the periods within the window. We note the chart on page 20 of the consultation paper which seems to imply that the average calculated from the widening window seems to exhibit material variation over time using a simple average of the real rate component and even much higher variation using a geometric weighted average proposed by EIOPA. It can also be seen that the simple average gets even more stable the longer the time series extends and represents the most stable development compared to the other averages tested.</p>	
Q3. (pg. 56)	DAV considers it more appropriate to take the arithmetic average of the historic real rates to derive the expected real rate than the weighted average proposed by EIOPA. As the UFR is the	

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	<p>forward rate used to extrapolate the risk free yield curve, i.e. for validating very long term guarantees, recent data are not likely to have more influence on the far future than past data. In fact, given that there is no statistical evidence that can be used to prove that more recent data would be a better predictor of the long-term average, the arithmetic average would seem like a reasonable default approach. This is an expert judgement – there is no theoretically correct weighting approach.</p>	
<p>Q4. (pg. 56)</p>	<p>We have no major objections to the bucketing approach. DAV considers it appropriate to use the buckets with specified values for the expected inflation rate as suggested by EIOPA. The specified buckets cover the current data satisfactory. More buckets do not seem adequate with respect to the data sources available.</p>	
<p>Q5. (pg. 56)</p>	<p>A limit on the annual change of the UFR is necessary from an actuarial point of view to smooth significant changes in the inflation rate over several periods. A stable UFR is necessary for stable Solvency results and covers the essential part of the UFR, a long-term expectation of real rates and inflation.</p> <p>A limit on the annual change of the UFR would provide greater predictability for the purposes of risk management and interest rate hedging.</p> <p>The proposed magnitude of the annual change of 20bps appears too high without any further impact analysis. For both phasing-in and steady-state, it would be preferable to have a more restrictive limitation of the annual changes in the UFR, i.e. 5 to 10 bps instead of 20 bps. EIOPA’s proposal of the UFR methodology allows the UFR to change by 100 bps within 5 years as required e.g. in projections of Solvency requirements in the ORSA. We regard this change too high from the perspective of a particularly long term parameter. Our proposal would limit the change of the UFR over a typical ORSA horizon of 5 years to 25 bps to 50 bps and hence only half of the change of the EIOPA proposal. For the ORSA a predictable and stable UFR is an indispensable requirement.</p>	

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	In case a company wants to analyse the influence of more significant changes to the UFR to their risk profile, it can include such sensitivities in the companies individual ORSA process.	
Q6. (pg. 56)	We have no major objections to the rounding approach. The UFR will be more stable and continuous over time if the expected real rate is rounded to 5 bps towards the expected real rate of the previous year. Therefore, the rounding is appropriate and necessary from an actuarial perspective.	
Q7. (pg. 56)	<p>No. The main challenges we have are in relation to the</p> <ul style="list-style-type: none"> <li>(a) limit of the annual change of the UFR of 20 bps. From an actuarial perspective, for both phasing-in and steady-state, it would be preferable to have a more restrictive limitation of the annual changes in the UFR, i.e. 5 to 10 bps. A limit on the annual change of the UFR would provide greater predictability for the purposes of risk management and interest rate hedging.</li> <li>(b) the frequency of recalibration – this does not seem aligned to the intent of the UFR being a long-term counter-cyclical measure. Regular changes to the UFR will introduce volatility that cannot easily be hedged.</li> </ul> <p>The statistical analysis seems transparent and robust – although we note that this long-term assumption is still in essence an expert judgement. However, our concern is primarily with the potential size and frequency of change. EIOPA should consider a more restrictive annual change and less frequent updates and/or phasing in of changes to UFR. Furthermore, the first update should arguably be scheduled after the stress testing exercise and the formal reviews of the long-term guarantees measures.</p>	
Paragraph 1.		

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Paragraph 25.	We appreciate that the data used to derive the expected real rate and the expected inflation rate	

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	are publicly available to enable companies to forecast the UFR development.	
Paragraph 26.		
Paragraph 27.		
Paragraph 28.	It is not specified how the expected inflation will be chosen in accordance with the past inflation experience and the projection of inflations. However, this does not seem to be important for the European insurance market.	
Paragraph 29.		
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