<table>
<tr><td colspan="2">Comments Template on the
Consultation Paper
on the methodology to derive the UFR and its implementation</td><td>Deadline
18 July 2016
23:59 CET</td></tr>
<tr><td>Name of Company: Actuaris</td><td colspan="2">Actuaris</td></tr>
<tr><td>Disclosure of comments:</td><td>Please indicate if your comments should be treated as confidential:</td><td>Public</td></tr>
<tr><td></td><td colspan="2">Please follow the following instructions for filling in the template:
⇨ <u>Do not change the numbering</u> in the column “reference”; if you change numbering, your comment cannot be processed by our IT tool
⇨ Leave the last column <u>empty</u>.
⇨ Please fill in your comment in the relevant row. If you have <u>no comment</u> on a paragraph or a cell, keep the row <u>empty</u>.
⇨ Our IT tool does not allow processing of comments which do not refer to the specific numbers below.
Please send the completed template, <u>in Word Format</u>, to CP-16-003@eiopa.europa.eu
Our IT tool does not allow processing of any other formats.

The numbering of the paragraphs refers to on the Consultation Paper on the methodology to derive the UFR and its implementation.</td></tr>
<tr><td>Reference</td><td colspan="2">Comment</td></tr>
<tr><td>General Comment</td><td>Following the consultation paper issued by EIOPA regarding the methodology to derive the UFR we realized a counter analysis to challenge the result. We implemented step by step the given methodology to replicate results. In the first step, we uploaded all the variables of interest from the AMECO data base which will then lead us to derive the UFR's components. This consultation paper truly gave us much more insight on the way to derive the UFR and its underlying hypothesis.
Nevertheless, it appeared that some of the points raised in the article are still blurred such as the way to derive the real rate component (especially the one to use) and the geometric mean.</td><td></td></tr>
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Comments Template on the Consultation Paper on the methodology to derive the UFR and its implementation		Deadline 18 July 2016 23:59 CET
	To sum up with our study we would be very grateful if you could provide us with the following points: 1) Is the real rate component from AMECO include term premium and convexity effect? 2) How can we get rid of the term premium and the convexity effect? 3) Which real rate did you really use? 4) How did you compute the weights of the geometric mean? 5) Can you provide us with the data base you used to perform this study? It will then enable us to challenge your results	
Q1. (pg. 56)		
Q2. (pg. 56)	Yes, the widening window seems to be the most accurate method since it enable us to capture long-term pattern.	
Q3. (pg. 56)		
Q4. (pg. 56)		
Q5. (pg. 56)		
Q6. (pg. 56)		
Q7. (pg. 56)	The proposed methodology is still unclear regarding the real rate component which is the one driving the UFR. Otherwise, it seems to be appropriate.	
Paragraph 1.		
Paragraph 2.		
Paragraph 3.		
Paragraph 4.		
Paragraph 5.		
Paragraph 6.		
Paragraph 7.		
Paragraph 8.		

	Comments Template on the Consultation Paper on the methodology to derive the UFR and its implementation	Deadline 18 July 2016 23:59 CET
Paragraph 9.		
Paragraph 10.		
Paragraph 11.		
Paragraph 12.		
Paragraph 13.		
Paragraph 14.		
Paragraph 15.		
Paragraph 16.		
Paragraph 17.		
Paragraph 18.		
Paragraph 19.		
Paragraph 20.		
Paragraph 21.		
Paragraph 22.	Which real rate component are you truly considering at each date ? The one from the AMECO data base or the one computed using inflation and nominal short term interest rate?	
Paragraph 23.		
Paragraph 24.		
Paragraph 25.		
Paragraph 26.		
Paragraph 27.		
Paragraph 28.		
Paragraph 29.		
Paragraph 30.		
Paragraph 31.		
Paragraph 32.		

	Comments Template on the Consultation Paper on the methodology to derive the UFR and its implementation	Deadline 18 July 2016 23:59 CET
Paragraph 33.		
Paragraph 34.		
Paragraph 35.		
Paragraph 36.		
Paragraph 37.		
Paragraph 38.		
Paragraph 39.		
Paragraph 40.		
Paragraph 41.		
Paragraph 42.		
Paragraph 43.		
Paragraph 44.		
Paragraph 45.		
Paragraph 46.		
Paragraph 47.		
Paragraph 48.		
Paragraph 49.	How did you get this figure ? As we can see, both the red and blue curves are likely the same at the very beginning and the end of the time span. It then draw our intention on the way the weighted geometric mean was computed. How come both curves are the same at the beginning and the end of the time span while we are comparing decreasing weight with constant weight. According to the formula Paragraph 22, the parameter beta should be very low at the beginning of the period compared to the end. The difference between both curves should be large at the beginning and tightened thereafter.	

	Comments Template on the Consultation Paper on the methodology to derive the UFR and its implementation	Deadline 18 July 2016 23:59 CET
Paragraph 50.		
Paragraph 51.		
Paragraph 52.		
Paragraph 53.		
Paragraph 54.		
Paragraph 55.		
Paragraph 56.		
Paragraph 57.		
Paragraph 58.		
Paragraph 59.		
Paragraph 60.		
Paragraph 61.		
Paragraph 62.		
Paragraph 63.		
Paragraph 64.		
Paragraph 65.		
Paragraph 66.		
Paragraph 67.		
Paragraph 68.		
Paragraph 69.		
Paragraph 70.		
Paragraph 71.		
Paragraph 72.		
Paragraph 73.		
Paragraph 74.		

	Comments Template on the Consultation Paper on the methodology to derive the UFR and its implementation	Deadline 18 July 2016 23:59 CET
Paragraph 75.		
Paragraph 76.		
Paragraph 77.		
Paragraph 78.		
Paragraph 79.		
Paragraph 80.		
Paragraph 81.		
Paragraph 82.		
Paragraph 83.		
Paragraph 84.		
Paragraph 85.	How did you exclude the term premium using the AMECO data base? The real rate issued by AMECO and the one computed using the formula from Paragraph 24 are way to different. Can you provide us with a clear methodology or an explicit formula to proceed accurately ?	
Paragraph 86.		
Paragraph 87.		
Paragraph 88.		
Paragraph 89.		
Paragraph 90.		
Paragraph 91.		
Paragraph 92.		
Paragraph 93.		
Paragraph 94.	We got the same figure as you but we used a widening window with arithmetic mean and real rate component from AMECO. Why not using the nominal short one to make sure we got rid of the term premium?	
Paragraph 95.		
Paragraph 96.		

	Comments Template on the Consultation Paper on the methodology to derive the UFR and its implementation	Deadline 18 July 2016 23:59 CET
Paragraph 97.		
Paragraph 98.		
Paragraph 99.		
Paragraph 100.		
Paragraph 101.		
Paragraph 102.		
Paragraph 103.		
Paragraph 104.		
Paragraph 105.		
Paragraph 106.		
Paragraph 107.		
Paragraph 108.		
Paragraph 109.		
Paragraph 110.		
Paragraph 111.		
Paragraph 112.		
Paragraph 113.		
Paragraph 114.		
Paragraph 115.		
Paragraph 116.		
Paragraph 117.		
Paragraph 118.		
Paragraph 119.		
Paragraph 120.		
Paragraph 121.		

	Comments Template on the Consultation Paper on the methodology to derive the UFR and its implementation	Deadline 18 July 2016 23:59 CET
Paragraph 122.		
Paragraph 123.		
Paragraph 124.		
Paragraph 125.		
Paragraph 126.		
Paragraph 127.		
Paragraph 128.		
Paragraph 129.		
Paragraph 130.		
Paragraph 131.		
Paragraph 132.		
Paragraph 133.		
Paragraph 134.		
Paragraph 135.		
Paragraph 136.		
Paragraph 137.	Which rate did you use to compute the UFR ? Can you provide us with the data base you truly use to challenge your results?	
Paragraph 138.		
Paragraph 139.		
Paragraph 140.		
Paragraph 141.		
Paragraph 142.		
Paragraph 143.		
Paragraph 144.		
Paragraph 145.		
Paragraph 146.		

	Comments Template on the Consultation Paper on the methodology to derive the UFR and its implementation	Deadline 18 July 2016 23:59 CET
Paragraph 147.		
Paragraph 148.		
Paragraph 149.		
Paragraph 150.		
Paragraph 151.		
Paragraph 152.		
Paragraph 153.		
Paragraph 154.		
Paragraph 155.		
Paragraph 156.		
Paragraph 157.		
Paragraph 158.		
Paragraph 159.		
Paragraph 160.		
Paragraph 161.		
Paragraph 162.		
Paragraph 163.		
Paragraph 164.		
Paragraph 165.		
Paragraph 166.		
Paragraph 167.		
Paragraph 168.		
Paragraph 169.		
Paragraph 170.		
Paragraph 171.		

	Comments Template on the Consultation Paper on the methodology to derive the UFR and its implementation	Deadline 18 July 2016 23:59 CET
Paragraph 172.		
Paragraph 173.		
Paragraph 174.		
Paragraph 175.		
Paragraph 176.		
Paragraph 177.		
Paragraph 178.		
Paragraph 179.		
Paragraph 180.		
Paragraph 181.		
Paragraph 182.		
Paragraph 183.		
Paragraph 184.		
Paragraph 185.		
Paragraph 186.		
Paragraph 187.		
Paragraph 188.		
Paragraph 189.		
Paragraph 190.		
Paragraph 191.		
Paragraph 192.		
Paragraph 193.		
Paragraph 194.		
Paragraph 195.		
Paragraph 196.		

	Comments Template on the Consultation Paper on the methodology to derive the UFR and its implementation	Deadline 18 July 2016 23:59 CET
Paragraph 197.		
Paragraph 198.		
Paragraph 199.		
Paragraph 200.		
Paragraph 201.		
Paragraph 202.		
Paragraph 203.		
Paragraph 204.		
Paragraph 205.		
Paragraph 206.		
Paragraph 207.		
Paragraph 208.		
Paragraph 209.		
Paragraph 210.		
Paragraph 211.		
Paragraph 212.		
Paragraph 213.		
Paragraph 214.		
Paragraph 215.		
Paragraph 216.		
Paragraph 217.		
Paragraph 218.		
Paragraph 219.		
Paragraph 220.		
Paragraph 221.		

	Comments Template on the Consultation Paper on the methodology to derive the UFR and its implementation	Deadline 18 July 2016 23:59 CET
Paragraph 222.		
Paragraph 223.		
Paragraph 224.		
Paragraph 225.		
Paragraph 226.		
Paragraph 227.		
Paragraph 228.		
Paragraph 229.		
Paragraph 230.		
Paragraph 231.		