

# SOLVENCY II SYNDICATE SCR FOR 2016 YEAR OF ACCOUNT

## WORKED EXAMPLES TO ILLUSTRATE THE TREATMENT OF RI CONTRACT BOUNDARIES

**AUGUST 2015** 



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### PURPOSE

The latest guidance for the calculation of Solvency II Technical Provisions (TPs) was published on <u>Lloyds.com in</u> <u>July 2015</u>. This guidance is to be followed for TP calculations from 2015Q2 onwards.

When implemented, the change to reinsurance (RI) contract boundaries included in the guidance is expected to have an impact on the SCR. This document provides worked examples to illustrate the implications of the reinsurance contract boundaries change on the SCR calculation.

To capture the impact of this change Lloyd's has published a template for completion by agents on the Internal Model SCR section of Lloyds.com - <u>2016 SCR CBChange SYND.xlsx</u>

Given the timing of the publication of the TP guidance we are not requiring agents to make the contract boundaries change to the projected 2015Q4 Technical Provisions underlying the 2016 year of account SCR to be submitted in September. Agents have two options for the timing of making the change to the projected TPs and completing the template:

- 1 Do not include the change in the projected 2015Q4 TPs and make no allowance for it in the SCR for the September submission. Under this option agents must complete and submit the template 2016\_SCR\_CBChange\_SYND.xlsx to the Solvency II mailbox <u>Solvency2@lloyds.com</u> by the 30<sup>th</sup> October, including consideration of the impact on projected 2015Q4 TPs.
- 2 Include the contract boundaries change in the projected 2015Q4 TPs and the SCR for the September submission. The change must be included consistently in the opening TPs and SCR. The template 2016\_SCR\_CBChange\_SYND.xlsx must be returned to Lloyd's with the September LCR on Core Market Returns through form 990 and the impact of the change on the ultimate SCR should be reported as a specific item in the significant movements column of the analysis of change template. We expect the level of the change to be consistent between the TP impact entered on the template and the modelled ultimate SCR. The change must also be submitted as a model change if it meets the criteria of the Model Change Policy. The template will be used in Lloyd's process of assessing the model change.

The principle Lloyd's will operate is that the contract boundaries change should cause no material movement to the funds available to pay policyholders, as it does not represent a change to underlying exposures. A decision will be taken on whether any adjustment for the change is necessary, after submissions have been made. Any adjustment made for this purpose will not be recorded as a loading.

Please contact Catherine Scullion (<u>catherine.scullion@lloyds.com</u>) if you have further questions regarding the contents of this document.

## SUMMARY

The most recent technical provisions (TP) guidance issued by Lloyd's in July 2015 includes a change to the consideration of contract boundaries for outwards reinsurance premium in the technical provisions. In this document the change is referred to as the 'CB change'. Previous guidance allowed for this premium to be portioned between existing and future inwards business. The current guidance requires that any reinsurance premium for contracts that are existing or legally obliged at the valuation date is included to the full level at which it is contractually obliged.

The TP guidance includes worked examples on the impact of this change on the technical provisions. This document extends these to cover the expected impact on the ultimate and one-year SCRs. Whilst the examples include references to specific YOA, agents should assume that they are relevant to the prospective YOA.

The change to the TP calculation as a result of the CB change is expected to be 'unwound' in the ultimate SCR (subject to the second order impact of items such as discounting and risk margin movements). Specifically, the costs brought forward into the opening balance sheet will no longer be incurred over the modelled time horizon meaning any increase in the TPs as a result of the change is expected to give an offsetting reduction in the mean modelled result. As the movement is of an expected cost the level of stress is not expected to change. With the balance sheet mean reduced and the stress constant, the 1:200 position is expected to reduce by the same level as the mean reduction. This will result in the overall level of TPs and the ultimate SCR remaining approximately constant.

For the one-year calculation any change to technical provisions will be expected to be made to both the T0 and T1 balance sheets. For this time horizon the change is therefore expected to have no material impact on the SCR. The opening TPs will still be increased and so the overall position will be increased.

> SCR TPs Status quo CB change Status quo CB change Ultimate One-year

The graph below illustrates the described expected impact of the CB change. It is illustrative only and does not provide a view on any expectation of the magnitude of the impact.



## WORKED EXAMPLES

These examples are purposefully simplistic and designed to show how the high-level principles above are expected to flow through the internal model in practice. The examples used in this section are consistent with those in the TP guidance, but consider the impact on the SCR. Any second order effects such as discounting and risk margin impacts are not considered as part of these examples, but are expected to be included in internal modelling.

The examples all consider a company with a single annual inwards contract that is bound on 1 July with total premium of 200, paid in equal instalments, quarterly in advance. This same inwards contract is expected to be written year on year with an expected loss ratio of 70%. The cashflows for this business are shown below, as they would be considered for the 2016 year of account SCR as at 31/12/2015 on both an ultimate and one-year basis.

		Ultin	nate	One-	year	
		Gro	oss	Gro	oss	
		Premium	Claims	Premium	Claims	
	Jul-15	50	-35	50	-35	
то	Oct-15	50	-35	50	-35	
	Jan-16	50	-35	50	-35	
	Apr-16	50	-35	50	-35	
	Jul-16	50	-35	50	-35	[
T1	Oct-16	50	-35	50	-35	Provision at TO that is cashflowed
	Jan-17	50	-35	50	-35	
	Apr-17	50	-35	50	-35	included on TO balance sheet
	Jul-17					Future provision at risk horizon
	Oct-17					balance sheet

Outwards reinsurance cover is in the form of an annual contract with total premium of 40, paid in equal instalments, quarterly in advance. In each case the same outwards contracted is expected to apply year on year. The contract has an expected loss ratio of 50%. Three different timings for this outwards XoL reinsurance cover for the company are considered:

- Incepting on 1st October
- Incepting on 1<sup>st</sup> January (but legally obliged at 31<sup>st</sup> December)
- Incepting on 1<sup>st</sup> April

Examples for quota share reinsurance are not included. Treatment of these contracts is not expected to change as a result of the guidance, as the contractually obliged premium would still be expected to be in proportion to the inwards business (subject to any minimum premiums).

#### XoL Incepting on 1<sup>st</sup> October – Ultimate SCR

If the XoL incepts on the 1<sup>st</sup> October the following cashflows are relevant to the ultimate SCR calculation under the status quo and CB change.

		L II + i m	nata	Ultimate	e - status	Ultimate - CB			
		Ultimate		qı	quo		change		
		Gross		RI		RI			
		Premium	Claims	Premium	Claims	Premium	Claims		
	Jul-15	50	-35	-10	5	-10	5		
то	Oct-15	50	-35	-10	5	-10	5		
	Jan-16	50	-35	-10	5	-10	5		
	Apr-16	50	-35	-10	5	-10	5		
	Jul-16	50	-35	-10	5	-10	5		Dravision at TO that is eachflower
T1	Oct-16	50	-35	-10	5	-10	5		over risk horizon
	Jan-17	50	-35	-10	5	-10	5		Cashflow over risk horizon not
	Apr-17	50	-35	-10	5	-10	5		included on TO balance sheet
	Jul-17								Future provision at risk horizon
	Oct-17								balance sheet

These cashflows translate to the following financial statements, with a comparison shown to how these would be treated under the status quo and CB change.

		Gro	DSS	RI		Ne	et
		Premium	Claims	Premium	Claims	Premium	Claims
A: Opening Balance sheet	Status quo	100	-70	-20	10	80	-60
A: Opening balance sneet	CB change	100	-70	-30	10	70	-60
B: Cashflows over risk horizon	Status quo	300	-210	-60	30	240	-180
b. cashilows over fisk holizoff	CB change	300	-210	-60	30	240	-180
C: Provision for future cashflows at	Status quo	0	0	0	0	0	0
risk horizon balance sheet	CB change	0	0	0	0	0	0
D: Change in balance sheet over	Status quo	300	-210	-60	30	240	-180
period (B+C)	CB change	300	-210	-60	30	240	-180
E: Balance sheet at end of risk	Status quo	200	-140	-40	20	160	-120
horizon (D-A)	CB change	200	-140	-30	20	170	-120

- The only change to the opening balance sheet position is additional provision for RI premium based on including the entire contract premium, rather than portioning this to future inwards business as under the status quo.
- Cashflows over the risk horizon are unchanged as the CB change doesn't impact the underlying position.
- There is no provision necessary for future cashflows at the ultimate balance sheet as all risks have expired.
- The change in the balance sheet over the period is a function of the cashflows and the future provision and so is also unchanged.
- The balance sheet at the end of the risk horizon is a function of the opening position and change over the period. Given the opening position has changed this has an equal and offsetting change applied. Intuitively this represents the fact that under the status quo 40 of the premium would have been paid following the T0 balance sheet while the CB change means only 30 is accounted for over this period.
- The increase in opening TPs is therefore unwound over the modelled time horizon and the overall position is the same.

		Gro	Gross		RI		et
		Premium	Claims	Premium	Claims	Premium	Claims
Total - Opening TPs plus closing	Status quo	300	-210	-60	30	240	-180
BS (A+E)	CB change	300	-210	-60	30	240	-180

#### XoL Incepting on 1<sup>st</sup> October – One-year SCR

If the XoL incepts on the 1<sup>st</sup> October the following cashflows are relevant to the one-year SCR calculation under the status quo and CB change.

		One	Vear	One-yea	r - status	6 One-year - CB			
		Une-	уса	qu	o	cha	nge		
		Gro	Gross		RI		RI		
		Premium	Claims	Premium	Claims	Premium	Claims		
	Jul-15	50	-35	-10	5	-10	5		
т0	Oct-15	50	-35	-10	5	-10	5		
	Jan-16	50	-35	-10	5	-10	5		
	Apr-16	50	-35	-10	5	-10	5		
	Jul-16	50	-35	-10	5	-10	5		Provision at TO that is cashflower
T1	Oct-16	50	-35	-10	5	-10	5		over risk horizon
	Jan-17	50	-35	-10	5	-10	5		Cashflow over risk horizon, not
	Apr-17	50	-35	-10	5	-10	5		included on TO balance sheet
	Jul-17					-10			Future provision at risk horizon
	Oct-17								balance sheet

These cashflows translate to the following financial statements, with the comparison shown to how these would be treated under the status quo and CB change.

		Gro	oss	R	l	Net	
		Premium	Claims	Premium	Claims	Premium	Claims
A: Opening Balance sheet	Status quo	100	-70	-20	10	80	-60
A. Opening balance sheet	CB change	100	-70	-30	10	70	-60
B: Cashflows over risk horizon	Status quo	200	-140	-40	20	160	-120
D. Casimows over tisk nonzon	CB change	200	-140	-40	20	160	-120
C: Provision for future	Status quo	100	-70	-20	10	80	-60
cashflows at risk horizon	CB change	100	-70	-30	10	70	-60
D: Change in balance sheet	Status quo	300	-210	-60	30	240	-180
over period (B+C)	CB change	300	-210	-70	30	230	-180
E: Balance sheet at end of risk	Status quo	200	-140	-40	20	160	-120
horizon (D-A)	CB change	200	-140	-40	20	160	-120

- The only change to the opening balance sheet position is additional provision for RI premium based on including the entire contract premium, rather than portioning this to future inwards business as under the status quo.
- Cashflows over the risk horizon are unchanged as the CB change doesn't impact the underlying position.
- At the T1 balance sheet the RI purchasing situation is the same as for the opening TPs and so the provision is again expected to include increased premium from the status quo.
- The change in the balance sheet over the period is a function of the cashflows and the future provision and so is also changed.
- The balance sheet at the end of the risk horizon is a function of the opening position and change over the period. As these have changed by equal and offsetting amounts there is no overall impact on the capital position.
- The increase in opening TPs is therefore not unwound over the modelled time horizon and the overall position is different to the status quo.

		Gross		RI		Ne	et
		Premium	Claims	Premium	Claims	Premium	Claims
Total - Opening TPs plus closing	Status quo	300	-210	-60	30	240	-180
BS (A+E)	CB change	300	-210	-70	30	230	-180

#### XoL Incepting on 1<sup>st</sup> January (legally obliged at 31<sup>st</sup> December) – Ultimate SCR

		Ultin	aata	Ultimate	- status	Ultimate - CB		
		UIII	liale	quo		change		
		Gro	oss	R	1	RI		
		Premium	Claims	Premium	Claims	Premium	Claims	
	Jul-15	50	-35	-10	5	-10	5	
то	Oct-15	50	-35	-10	5	-10	5	
	Jan-16	50	-35	-10	5	-10 5		
	Apr-16	50	-35	-10	5	-10	5	
	Jul-16	50	-35	-10	5	-10	5	Provision at TO that is cashflowed
T1	Oct-16	50	-35	-10	5	-10	5	over risk horizon
	Jan-17	50	-35	-10	5	-10	5	Cashflow over risk horizon, not
	Apr-17	50	-35	-10	5	-10	5	included on TO balance sheet
	Jul-17							Future provision at risk horizon
	Oct-17							balance sheet

If the XoL incepts on the 1<sup>st</sup> January, and is a legal obligation at the valuation date, the following cashflows are relevant to the ultimate SCR calculation under the status quo and CB change.

These cashflows translate to the following financial statements, with the comparison shown to how these would be treated under the status quo and CB change.

		Gro	Gross		RI		et
		Premium Claims		Premium	Claims	Premium	Claims
A: Opening Balance sheet	Status quo	100	-70	-20	10	80	-60
A. Opening balance sheet	CB change	100	-70	-40	10	60	-60
B: Cashflows over risk herizon	Status quo	300	-210	-60	30	240	-180
B. Cashinows over fisk horizon	CB change	300	-210	-60	30	240	-180
C: Provision for future	Status quo	0	0	0	0	0	0
cashflows at risk horizon	CB change	0	0	0	0	0	0
D: Change in balance sheet	Status quo	300	-210	-60	30	240	-180
over period (B+C)	CB change	300	-210	-60	30	240	-180
E: Balance sheet at end of risk	sheet at end of risk Status quo		-140	-40	20	160	-120
horizon (D-A)	CB change	200	-140	-20	20	180	-120

- The only change to the opening balance sheet position is additional provision for RI premium based on including the entire contract premium, rather than portioning this to future inwards business as under the status quo.
- Cashflows over the risk horizon are unchanged as the CB change doesn't impact the underlying position.
- There is no provision necessary for future cashflows at the ultimate balance sheet as all risks have expired.
- The change in the balance sheet over the period is a function of the cashflows and the future provision and so is also unchanged.
- The balance sheet at the end of the risk horizon is a function of the opening position and change over the period. Given the opening position has changed this has an equal and offsetting change applied. Intuitively this represents the fact that under the status quo 40 of the premium would have been paid following the T0 balance sheet while the contract boundaries change means only 20 is accounted for over this period.
- The increase in opening TPs is therefore unwound over the modelled time horizon and the overall position is the same.

		Gro	DSS	R	1	Net	
		Premium	Claims	Premium	Claims	Premium	Claims
Total - Opening TPs plus closing	Status quo	300	-210	-60	30	240	-180
BS (A+E)	CB change	300	-210	-60	30	240	-180

#### XoL Incepting on 1<sup>st</sup> January (legally obliged at 31<sup>st</sup> December) – One-year SCR

		One-year		One-year qu	· - status o	One-year - CB change			
		Gro	oss	RI		R	RI		
		Premium	Claims	Premium	Claims	Premium	Claims		
	Jul-15	50	-35	-10	5	-10	5		
то	Oct-15	50	-35	-10	5	-10	5		
	Jan-16	50	-35	-10	5	-10	5		
	Apr-16	50	-35	-10	5	-10	5		
	Jul-16	50	-35	-10	5	-10	5		Provision at T0 that is cashflowed
T1	Oct-16	50	-35	-10	5	-10	5		over risk horizon
	Jan-17	50	-35	-10	5	-10	5		Cashflow over risk horizon, not
	Apr-17	50	-35	-10	5	-10	5		included on TO balance sheet
	Jul-17					-10			Future provision at risk horizon
	Oct-17					-10			balance sheet

If the XoL incepts on the 1<sup>st</sup> January, and is a legal obligation at the valuation date, the following cashflows are relevant to the one-year SCR calculation under the status quo and CB change.

These cashflows translate to the following financial statements, with the comparison shown to how these would be treated under the status quo and CB change.

		Gross		RI		Ne	et
		Premium	Claims	Premium	Claims	Premium	Claims
A: Opening Palance sheet	Status quo	100	-70	-20	10	80	-60
A: Opening balance sheet	CB change	100	-70	-40	10	60	-60
R: Cashflows over risk herizon	Status quo	200	-140	-40	20	160	-120
B. Cashillows over fisk holizon	CB change	200	-140	-40	20	160	-120
C: Provision for future cashflows	Status quo	100	-70	-20	10	80	-60
at risk horizon balance sheet	CB change	100	-70	-40	10	60	-60
D: Change in balance sheet over	Status quo	300	-210	-60	30	240	-180
period (B+C)	CB change	300	-210	-80	30	220	-180
E: Balance sheet at end of risk	Status quo	200	-140	-40	20	160	-120
horizon (D-A)	CB change	200	-140	-40	20	160	-120

- The only change to the opening balance sheet position is additional provision for RI premium based on including the entire contract premium, rather than portioning this to future inwards business as under the status quo.
- Cashflows over the risk horizon are unchanged as the change doesn't impact the underlying position.
- At the T1 balance sheet the RI purchasing situation is the same as for the opening TPs and so the provision is again expected to include increased premium from the status quo.
- The change in the balance sheet over the period is a function of the cashflows and the future provision and so is also changed.
- The balance sheet at the end of the risk horizon is a function of the opening position and change over the period. As these have changed by equal and offsetting amounts there is no overall impact on the capital position.
- The increase in opening TPs is therefore not unwound over the modelled time horizon and the overall position is different from the status quo.

		Gross		RI		Net	
		Premium	Claims	Premium	Claims	Premium	Claims
Total - Opening TPs plus closing	Status quo	300	-210	-60	30	240	-180
BS (A+E)	CB change	300	-210	-80	30	220	-180

#### XoL Incepting on 1<sup>st</sup> April – Ultimate SCR

		Ultimate Gross		Ultimate	Ultimate - status		Ultimate - CB		
				qu	10	char	nge		
				RI		RI			
		Premium	Claims	Premium	Claims	Premium	Claims		
	Jul-15	50	-35	-10	5	-10	5		
т0	Oct-15	50	-35	-10	5	-10	5		
	Jan-16	50	-35	-10	5	-10	5		
	Apr-16	50	-35	-10	5	-10	5		
	Jul-16	50	-35	-10	5	-10	5		Provision at TO that is cashflowed
T1	Oct-16	50	-35	-10	5	-10	5		over risk horizon
	Jan-17	50	-35	-10	5	-10	5		Cashflow over risk horizon, not
	Apr-17	50	-35	-10	5	-10	5		included on TO balance sheet
	Jul-17								Future provision at risk horizon
	Oct-17								balance sheet

If the XoL incepts on the 1<sup>st</sup> April, and is not a legal obligation at the valuation date, the following cashflows are relevant to the ultimate SCR calculation under the status quo and CB change.

These cashflows translate to the following financial statements, with the comparison shown to how these would be treated under the status quo and CB change.

		Gross		RI		Ne	et
		Premium	Claims	Premium	Claims	Premium	Claims
A. Ononing Palance shoot	Status quo	100	-70	-20	10	80	-60
A: Opening balance sneet	CB change	100	-70	-20	10	80	-60
B: Cashflows over risk horizon	Status quo	300	-210	-60	30	240	-180
	CB change	300	-210	-60	30	240	-180
C: Provision for future cashflows	Status quo	0	0	0	0	0	0
at risk horizon balance sheet	CB change	0	0	0	0	0	0
D: Change in balance sheet over	Status quo	300	-210	-60	30	240	-180
period (B+C)	CB change	300	-210	-60	30	240	-180
E: Balance sheet at end of risk	Status quo	200	-140	-40	20	160	-120
horizon (D-A)	CB change	200	-140	-40	20	160	-120

 There is no change to the opening balance sheet position as the RI premium provision is based on one quarter to expiry of the contract and one further quarter, for which purchase is assumed as a future management action.

• Cashflows over the risk horizon are unchanged as the CB change doesn't impact the underlying position.

• There is no provision necessary for future cashflows at the ultimate balance sheet as all risks have expired.

- The change in the balance sheet over the period is a function of the cashflows and the future provision and so is also unchanged.
- The balance sheet at the end of the risk horizon is a function of the opening position and change over the period. Given neither of these has change there is no change to the status quo where the RI contract is not existing or legally obliged at the valuation date.
- The timing of the contract purchase means that there is no change from the status quo in this scenario.

		Gross		RI		Net	
		Premium	Claims	Premium	Claims	Premium	Claims
Total - Opening TPs plus closing	Status quo	300	-210	-60	30	240	-180
BS (A+E)	CB change	300	-210	-60	30	240	-180

#### XoL Incepting on 1<sup>st</sup> April – One-year SCR

		One-	year	One-	year	One-year			
		Gro	oss	R	RI		RI		
		Premium	Claims	Premium	Claims	Premium	Claims		
	Jul-15	50	-35	-10	5	-10	5		
то	Oct-15	50	-35	-10	5	-10	5		
	Jan-16	50	-35	-10	5	-10	5		
	Apr-16	50	-35	-10	5	-10	5		
	Jul-16	50	-35	-10	5	-10	5		Provision at TO that is cashflowe
T1	Oct-16	50	-35	-10	5	-10	5		over risk horizon
	Jan-17	50	-35	-10	5	-10	5		Cashflow over risk horizon, not
	Apr-17	50	-35	-10	5	-10	5		included on TO balance sheet
	Jul-17								Future provision at risk horizon
	Oct-17								balance sheet

If the XoL incepts on the 1<sup>st</sup> April, and is not a legal obligation at the valuation date, the following cashflows are relevant to the one-year SCR calculation under the status quo and CB change.

These cashflows translate to the following financial statements, with the comparison shown to how these would be treated under the status quo and CB change.

		Gross		RI		N	et
		Premium	Claims	Premium	Claims	Premium	Claims
A: Opening Palance sheet	Status quo	100	-70	-20	10	80	-60
A. Opening balance sheet	CB change	100	-70	-20	10	80	-60
B: Cashflows over risk horizon	Status quo	200	-140	-40	20	160	-120
B. Cashillows over fisk holizon	CB change	200	-140	-40	20	160	-120
C: Provision for future cashflows at	Status quo	100	-70	-20	10	80	-60
risk horizon balance sheet	CB change	100	-70	-20	10	80	-60
D: Change in balance sheet over	Status quo	300	-210	-60	30	240	-180
period (B+C)	CB change	300	-210	-60	30	240	-180
E: Balance sheet at end of risk	Status quo	200	-140	-40	20	160	-120
horizon (D-A)	CB change	200	-140	-40	20	160	-120

- There is no change to the opening balance sheet position as the RI premium provision is based on one quarter to expiry of the contract and one further quarter, for which cover purchase is assumed as a future management action.
- Cashflows over the risk horizon are unchanged as the change doesn't impact the underlying position.
- At the T1 balance sheet the RI purchasing situation is the same as for the opening TPs and so the provision is again the same as the status quo.
- The change in the balance sheet over the period is a function of the cashflows and the future provision and so is also unchanged.
- The balance sheet at the end of the risk horizon is a function of the opening position and change over the period. Given neither of these has change there is no change to the status quo where the RI contract is not existing or legally obliged at the valuation date.
- The timing of the contract purchase means that there is no change from the status quo in this scenario.

		01033		141			
		Premium	Claims	Premium	Claims	Premium	Claims
Total - Opening TPs plus closing BS	Status quo	300	-210	-60	30	240	-180
(A+E)	CB change	300	-210	-60	30	240	-180

Groce

DI

Not