4th Capacity Building Seminar in Life Insurance
26th October 2023

IFRS 17 – Reinsurance Held

Institute of Actuaries of India

Speaker Name – Dr. Rajesh Dalmia
Designation – Partner, EY India

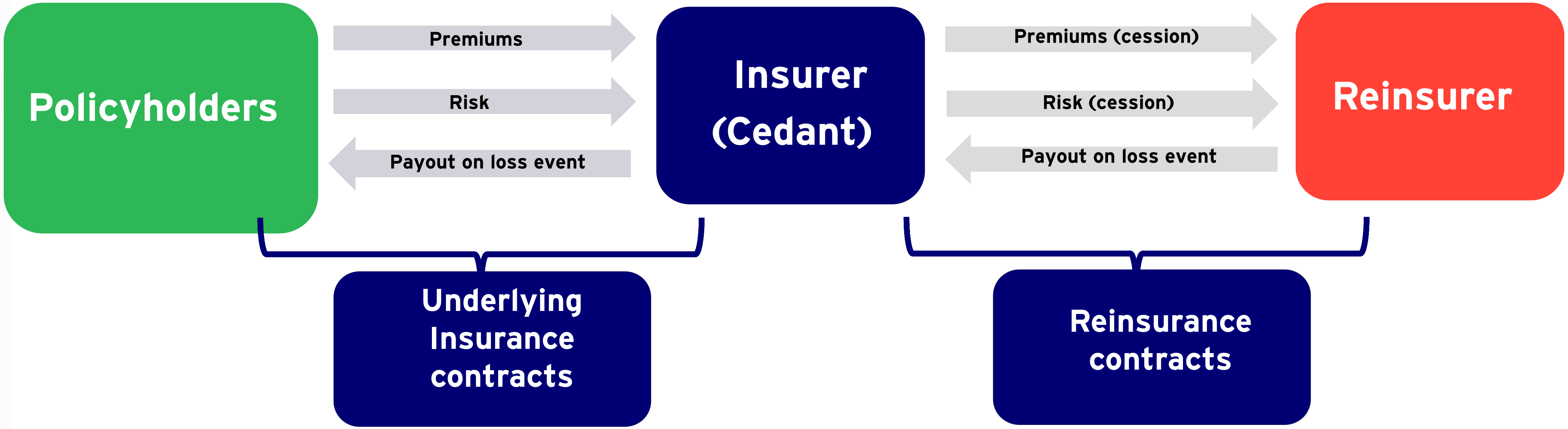
Objective of this session

- Background
- Initial recognition requirements for reinsurance contracts held
- Contract Boundaries & Level of Aggregation
- Initial & subsequent measurement of reinsurance contracts held
- Presentation for reinsurance contracts held

Background

Institute of Actuaries of India

What is reinsurance?



Current presentation of Balance Sheet & P/L (IGAAP)

Institute of Actuaries of India

Liabilities	
Trade & Other payables	xxx
Net Claims O/s	xxx
Total liabilities	**xxx**
Profit & Loss Statement	**xxx**
Net Earned Premium	xxx
Interest Income	xxx
Net Incurred Claims	xxx
Opex	xxx
Profit Before Tax	**xxx**

Initial Recognition

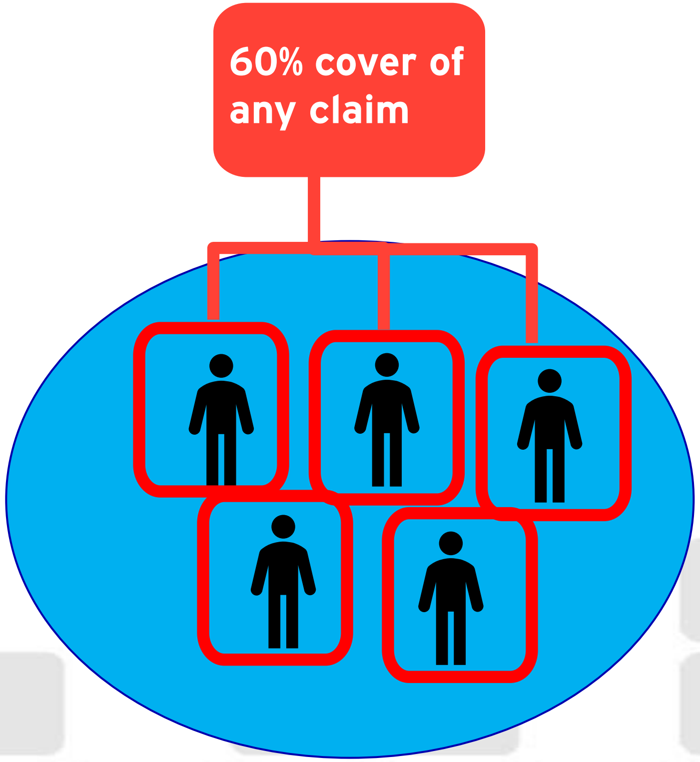
Institute of Actuaries of India

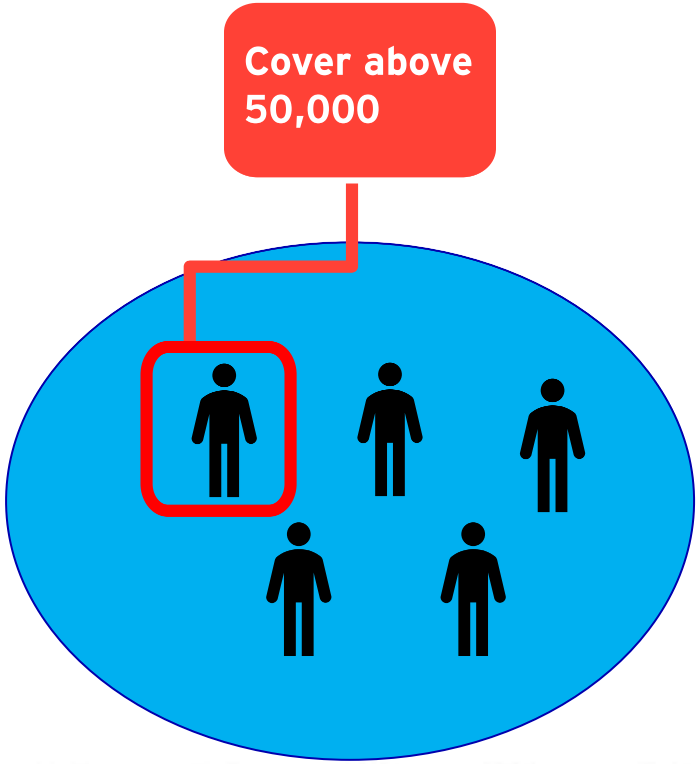
Proportionate and Non-Proportionate Cover

Institute of Actuaries of India

What is proportionate cover ?

What is non - proportionate cover?





Proportionate and Non-Proportionate Cover

Institute of Actuaries of India

IFRS 17.62(a)

Group of proportionate cover

- Cover losses of separate insurance contracts on a proportionate basis
- Recognition at the later of
  - The beginning of the coverage period of the group; or
  - The initial recognition of any underlying insurance contract

IFRS 17.62(b)

Group of non - proportionate cover

- Reinsurance contract held covers aggregate losses from underlying contracts in excess of a specified amount.
- Recognised at the beginning of the coverage period

Initial Recognition: Example

Institute of Actuaries of India

Scenario A: Entity A holds a reinsurance contract in respect of a life insurance portfolio, and 20% of all premiums and claims are ceded to a reinsurer. The reinsurance contract incepts on 1st January 2023,but the first underlying contract is recognized on 1st February 2023.

1 Jan 2023
(Contract Inception)

1 Feb 2023
(Initial Recognition)

As the above contract provides proportionate cover (i.e. 20% cover), the reinsurance contract held is recognized on 1st February when underlying insurance contract is initially recognized. This is despite the fact that the coverage commences on 1st January.

Scenario B: Entity B holds a reinsurance contract which provides excess loss protection for a life insurance portfolio. The reinsurance contract provides cover for claims arising from individual events in the portfolio in the excess of Rs 50,000 up to a limit of Rs 20,000. The reinsurance contract incepts on 1st January 2023, but the first underlying contract is recognised on 1st February 2023.

1 Jan 2023
(Contract Inception)

1 Feb 2023
(Initial Recognition)

As the above contract provides non-proportionate cover (i.e. cover for aggregate losses exceeding Rs 50,000), the reinsurance contract held is recognized on 1st January on the same date the coverage is provided

Separation of components?

Should a reinsurance contract held be separated into components for measurement purposes to reflect the underlying contracts covered? For example, should a reinsurance contract held that provides coverage to underlying contracts that are included in different groups of insurance contracts be separated? [TRG meeting February 2018 – Agenda paper no. 1, Log S19]

Contract Boundary & Level of Aggregation

Institute of Actuaries of India

Measurement overview: Contract boundary

Institute of Actuaries of India

When are cash flows part of a boundary of a contract?

- Arise from **substantive rights** and **obligations** that exist during the reporting period in which the reinsurer can compel the insurer to pay the premiums or
- The reinsurer has a **substantive obligation** to provide the cedant with reinsurance contract services.

When do substantive rights to receive services end?

- The reinsurer is able to practically reassess the risks transferred to the reinsurer and can set a price or level of benefits for the contract to fully reflect the reassessed risk; or
- The reinsurer has a substantive right to terminate the contract.

What is the implication of this for underlying insurance contracts?

- The boundary of a reinsurance contract held could include cash flows from underlying contracts covered by the reinsurance contract that are **expected** to be **issued** by the cedant in the **future**.

Contract Boundary

How should an entity read paragraph 34 of IFRS 17 regarding the boundary of an insurance contract with respect to reinsurance contracts held? [TRG meeting February 2018 – Agenda paper no. 3, Log S15 and S18; TRG meeting September 2018 – Agenda paper no. 5]

Cash flows are within the boundary of an insurance contract if they arise from substantive rights and obligations that exist during the reporting period in which the entity can compel the policyholder to pay the premiums or in which the entity has a substantive obligation to provide the policyholder with services (see paragraphs B61–B71). A substantive obligation to provide services ends when:

(a) the entity has the practical ability to reassess the risks of the particular policyholder and, as a result, can set a price or level of benefits that fully reflects those risks; or

(b) both of the following criteria are satisfied:

(i) the entity has the practical ability to reassess the risks of the portfolio of insurance contracts that contains the contract and, as a result, can set a price or level of benefits that fully reflects the risk of that portfolio; and

(ii) the pricing of the premiums for coverage up to the date when the risks are reassessed does not take into account the risks that relate to periods after the reassessment date.

Contract Boundary

How should the boundary of a reinsurance contract held be determined when the reinsurer has the right to reprice remaining coverage prospectively? [TRG meeting May 2018 – Agenda paper no. 4, Log S39]

Measurement overview: Level of aggregation

Institute of Actuaries of India

At contract inception

1 **Portfolio**

Portfolio = A group of contracts
(a) subject to similar risks &
(b) managed together

IFRS 17.14

2 **Cohorts**

Permitted to group only contracts issued no more than one year apart

IFRS 17.22

3

- Group of contracts where there is a net gain at initial recognition
- Group of contracts where there is no significant possibility of a net gain arising subsequent to initial recognition
- Group of Remaining contracts in the portfolio

At a <u>minimum</u>, a <u>portfolio</u> of contracts is Divided into these categories

IFRS 17.61

Assessment is done at contract inception

No subsequent re-assessment

IFRS 17.24

Potential Mismatch

Institute of Actuaries of India

Accounted for & presented separately from each other

Reinsurance Contracts Held

Underlying insurance contracts

Potential accounting mismatches may arise such as:

- ►Different contract boundaries between underlying contracts and reinsurance contracts held
- ►Underlying contracts using- different measurement model to that used for reinsurance contracts held
- ►Variable Fee Approach model is prohibited for reinsurance contracts held, even though underlying contracts can use the VFA

Initial & Subsequent Measurement

Institute of Actuaries of India

Measurement: Initial measurement

Future cash flows and Risk Adjustment

Institute of Actuaries of India

IFRS 17.63 Future cashflows (FCFs)		IFRS 17.64 Risk Adjustment (for non-financial risk)		
✓ Measured using same criteria for fulfilment cash flow and CSM as an insurance contract issued.	+	✓ Represent amount of risk being transferred by the holder of the group of reinsurance contracts to the reinsurer	=	Fulfilment Cash Flows
✓ Consistent Assumption must be used for the reinsurance contract held and their underlying contracts.				
✓ Should include risk of non-performance by the reinsurer.		✓ NB!! Excludes risk of non-performance		

Measurement: Initial measurement

Contractual Service Margin(CSM)

Institute of Actuaries of India

Net gain on purchasing reinsurance

- Expected cash inflow from reinsurer
- Risk adjustment
- Expected cash outflow to reinsurer
- **CSM (net gain)**

Net cost on purchasing reinsurance

- Expected cash inflow from reinsurer
- Risk adjustment
- **CSM (net cost)**
- Expected cash outflow to reinsurer

IFRS 17.65

CSM should equal sum of:

- Fulfilment cash flows
- Cash flows arising on initial recognition

+

- Any income recognised in P/L for onerous underlying insurance contract
- Derecognition of any asset/liability previously recognised

Measurement: Overview

Institute of Actuaries of India

Differences from and similarities to the general model applied to the underlying contract

Differences

Non-performance risk of the reinsurer should be included in the measurement of fulfilment cash flows

Risk Adjustment for non-financial risk reflects the amount of the risk transferred from the insurer to the reinsurer

Assumptions used for reinsurance contracts held must be consistent with those used for underlying contracts

Similarities

Changes in FCF adjust CSM for future coverage and services.

Changes in FCF are recognized in P/L. If related changes in underlying contracts are also recognized in P/L or when underlying contracts are onerous.

Day 1 gains/losses are recognized in the SOFP as a P/L as reinsurer provides services, except for any portion of day 1 loss that relates to events before initial recognition.

Measurement

Paragraph 63 of IFRS 17 requires the use of assumptions for the measurement of the estimates of the present value of the future cash flows for a group of reinsurance contracts held that are consistent with those used to measure the underlying insurance contracts. Does this means that the use of an identical discount rate is required? [TRG meeting February 2018 – Agenda paper no. 7, Log S17]

What discount rate should be used to measure the present value of future cash flows of a reinsurance contract held if the liquidity characteristics of the underlying contracts are different from those of the reinsurance contract held? [TRG meeting May 2018 – Agenda paper no. 7, Log S40]

Measurement

Paragraph 63:

In applying the measurement requirements of paragraphs 32–36 to reinsurance contracts held, to the extent that the underlying contracts are also measured applying those paragraphs, the entity shall use consistent assumptions to measure the estimates of the present value of the future cash flows for the group of reinsurance contracts held and the estimates of the present value of the future cash flows for the group(s) of underlying insurance contracts. In addition, the entity shall include in the estimates of the present value of the future cash flows for the group of reinsurance contracts held the effect of any risk of non-performance by the issuer of the reinsurance contract, including the effects of collateral and losses from disputes.

Example: Contract Details & Assumptions

Entity A has written a group of insurance contracts. The details of the arrangement is as follows:

- Single premium of CU30,000 at the start of the contract
- Expected Claims of CU5,000 per annum for 4 years
- Attributable maintenance expenses of CU500 per annum for 4 years
- Insurance Acquisition cost of CU3,000

In order to reduce its insurance risk, Entity A purchased a 4-year reinsurance contract with Entity B (Reinsurer). The details of the agreement is as follows:

- Reinsurance contract provides a proportionate cover of 30% of claims incurred by Entity A on underlying contracts
- Entity A pays a single premium of CU5,000 at the start of the reinsurance

Assume the following for all scenarios:

- Time Value of Money is negligible else stated otherwise
- Non-Performance Risk is negligible else stated otherwise
- All event happen as expected
- Realisation of CSM is spread evenly over 4 years for both the underlying contract and reinsurance contract held
- Assuming a Risk Adjustment of 5% of Claims for underlying and RI

Scenario 1: Initial Recognition- Underlying

Underlying Contract and Reinsurance Contract held are profitable

	Underlying Insurance contracts	Comments
Future cash inflows	(30,000)	Single Premium of 30,000
Future cash outflows	25,000	Sum of all outflows
Claims	20,000	Claims of CU 5,000 p.a. for 4 years
Maintenance costs	2,000	Maintenance expenses of CU 500 p.a. for 4 years
Acquisition costs	3,000	Acquisition cost of CU 3,000
Reinsurance premium	0	
Net future cashflows	**(5,000)**	
Risk adjustment (RA)	1,000	RA calculated as 5% of the claims
Fulfilment Cash Flows	**(4,000)**	
Contractual Service Margin (CSM)	4,000	No profit should be made on day1. Therefore, CSM is spread over the contract term.
Carrying value on initial recognition	0	
Loss on initial recognition	0	

Scenario 1: Initial Recognition- RI

Underlying Contract and Reinsurance Contract held are profitable

	Reinsurance Contract held	Comments
Future cash inflows	(6,000)	Reinsurance covers 30% of claims from the underlying contract (CU 20,000 * 30%)
Future cash outflows	5,000	
Claims	0	
Maintenance costs	0	
Acquisition costs	0	
Reinsurance premium	5,000	Single reinsurance premium of CU 5,000 paid
Net future cashflows	**(1,000)**	
Risk adjustment (RA)	(300)	RA of 5% applied to claim recoveries
Fulfilment Cash Flows	**(1,300)**	
Contractual Service Margin (CSM)	1,300	Net gain on writing reinsurance
Carrying value on initial recognition	0	
Loss on initial recognition	0	

Scenario 1: Subsequent Measurement- Underlying

Underlying Contract and Reinsurance Contract held are profitable

Institute of Actuaries of India

Calculation

- Premium has been received & Reinsurance premium has been paid.
- All Expenses & Claims have been incurred and paid.

Roll Forward of Insurance contract liability	Future cash flow	RA	CSM	Total	Comments
Opening balance	0	0	0	0	
Initial recognition	(5,000)	1,000	4,000	0	Amounts taken from initial recognition
Cash flow during the year					
Acquisiiton cash flows	3,000			3,000	Incurred expenses for the year paid
Maintenance expenses	500			500	
Premium receipt	(30,000)			(30,000)	Premium due received
Claims incurred	5,000			5,000	Incurred claims for the year paid
Total cash flow during the year	**(21,500)**	**0**	**0**	**(21,500)**	
Recognition in Profit/ (Loss)		250	1,000	1,250	Release of RA = Opening RA – Closing RA Release of CSM basis coverage period (4,000/4 = 1000)
Closing balance	**16,500**	**750**	**3,000**	**20,250**	

Scenario 1: Subsequent Measurement- RI

Underlying Contract and Reinsurance Contract held are profitable

Institute of Actuaries of India

Calculation

- Premium has been received & Reinsurance premium has been paid.
- All Expenses & Claims have been incurred and paid.

Roll forward of reinsurance contract asset	Future cash flow	RA	CSM	Total	Comments
Opening balance	0	0	0	0	
Initial recognition	(1,000)	(300)	1,300	0	Amounts taken from initial recognition
Cash flow during the year					
Premium receipt	5,000			5,000	RI premium due paid
Claims recovered	(1,500)			(1,500)	Recovery of 30% on claims for the year (5000 * 30%)
Total cash flow during the year	**3,500**	**0**	**0**	**3,500**	
Recognition in Profit/ (Loss)		75	325	250	Release of RA = Opening RA - Closing RA Release of CSM basis coverage period (1,300/4 = 325)
Closing balance	(4,500)	225	975	(3,750)	

Scenario 2: Initial Recognition- Underlying

Underlying Contract is profitable, and Reinsurance Contract held is Loss Making

Change from 1: Reinsurance Premium is now CU7,000

	Underlying Insurance contracts	Comments
Future cash inflows	(30,000)	Single Premium of 30,000
Future cash outflows	25,000	Sum of all outflows
Claims	20,000	Claims of CU 5,000 p.a. for 4 years
Maintenance costs	2,000	Maintenance expenses of CU 500 p.a. for 4 years
Acquisition costs	3,000	Acquisition cost of CU 3,000
Reinsurance premium	0	
Net future cashflows	**(5,000)**	
Risk adjustment (RA)	1,000	RA calculated as 5% of the claims
Fulfilment Cash Flows	**(4,000)**	
Contractual Service Margin (CSM)	4,000	No profit should be made on day1. Therefore, CSM is spread over the contract term.
Carrying value on initial recognition	0	
Loss on initial recognition	0	

Scenario 2: Initial Recognition- RI

Underlying Contract is profitable, and Reinsurance Contract held is Loss Making

Institute of Actuaries of India

Change from 1: Reinsurance Premium is now CU7,000

	Reinsurance Contract held	Comments
Future cash inflows	(6,000)	Reinsurance covers 30% of claims from the underlying contract (CU 30,000 * 30%)
Future cash outflows	7,000	
Claims	0	
Maintenance costs	0	
Acquisition costs	0	
Reinsurance premium	7,000	Single reinsurance premium of CU 7,000 paid
Net future cashflows	**1,000**	
Risk adjustment (RA)	(300)	RA of 5% applied to claim recoveries
Fulfilment Cash Flows	**700**	
Contractual Service Margin (CSM)	(700)	Net cost on writing reinsurance
Carrying value on initial recognition	0	
Loss on initial recognition	0	

Scenario 2: Subsequent Measurement- Underlying

Underlying Contract is profitable, and Reinsurance Contract held is Loss Making

Change from 1: Reinsurance Premium is now CU7,000

Institute of Actuaries of India

Calculation

- Premium has been received & Reinsurance premium has been paid.
- All Expenses & Claims have been incurred and paid.

Roll Forward of Insurance contract liability	Future cash flow	RA	CSM	Total	Comments
Opening balance	0	0	0	0	
Initial recognition	(5,000)	1,000	4,000	0	Amounts taken from initial recognition
Cash flow during the year					
Acquisition cash flows	3,000			3,000	Incurred expenses for the year paid
Maintenance expenses	500			500	
Premium receipt	(30,000)			(30,000)	Premium due received
Claims incurred	5,000			5,000	Incurred claims for the year paid
Total cash flow during the year	**(21,500)**	**0**	**0**	**(21,500)**	
Recognition in Profit/ (Loss)		250	1,000	1,250	Release of RA = Opening RA – Closing RA Release of CSM basis coverage period (4,000/4 = 1000)
Closing balance	**16,500**	**750**	**3,000**	**20,250**	

Scenario 2: Subsequent Measurement- RI

Underlying Contract is profitable, and Reinsurance Contract held is Loss Making

Institute of Actuaries of India

Change from 1: Reinsurance Premium is now CU7,000

Calculation

- Premium has been received & Reinsurance premium has been paid.
- All Expenses & Claims have been incurred and paid.

Roll forward of reinsurance contract asset	Future cash flow	RA	CSM	Total	Comments
Opening balance	0	0	0	0	
Initial recognition	1,000	(300)	(700)	0	Amounts taken from initial recognition
Cash flow during the year					
Premium receipt	7,000			7,000	RI premium due paid
Claims recovered	(1,500)			(1,500)	Recovery of 30% on claims for the year (5000 * 30%)
Total cash flow during the year	**5,500**	**0**	**0**	**5,500**	
Recognition in Profit/ (Loss)		(75)	(175)	(250)	Release of RA = Opening RA – Closing RA Release of CSM basis coverage period (700/4 = 175)
Closing balance	(4,500)	(225)	(525)	(5,250)	

Scenario 3: Initial Recognition- Underlying

Underlying Contract is Onerous, and Reinsurance Contract held is Profitable

Change from 1: Underlying Contract Premium is now Single Premium of CU20,000

	Underlying Insurance contracts	Comments
Future cash inflows	(20,000)	Single Premium of 20,000
Future cash outflows	25,000	Sum of all outflows
Claims	20,000	Claims of CU 5,000 p.a. for 4 years
Maintenance costs	2,000	Maintenance expenses of CU 500 p.a. for 4 years
Acquisition costs	3,000	Acquisition cost of CU 3,000
Reinsurance premium	0	
Net future cashflows	**5,000**	
Risk adjustment (RA)	1,000	RA calculated as 5% of the claims
Fulfilment Cash Flows	**6,000**	
Contractual Service Margin (CSM)	0	CSM is zero as there is a loss at inception.
Carrying value on initial recognition	6,000	
Loss on initial recognition	(6,000)	Loss at inception immediately recognised in P/L

Scenario 3: Initial Recognition- RI

Underlying Contract is Onerous, and Reinsurance Contract held is Profitable

Institute of Actuaries of India

Change from 1: Underlying Contract Premium is now Single Premium of CU20,000

	Reinsurance Contract held	Comments
Future cash inflows	(6,000)	Reinsurance covers 30% of claims from the underlying contract (CU 30,000 * 30%)
Future cash outflows	5,000	
Claims	0	
Maintenance costs	0	
Acquisition costs	0	
Reinsurance premium	5,000	Single reinsurance premium of CU 5,000 paid
Net future cashflows	**(1,000)**	
Risk adjustment (RA)	(300)	RA of 5% applied to claim recoveries
Fulfilment Cash Flows	**(1,300)**	
Contractual Service Margin (CSM)	1,300	Net gain on writing reinsurance
Carrying value on initial recognition	0	
Loss on initial recognition	0	

Scenario 3: Subsequent Measurement- Underlying

Underlying Contract is Onerous, and Reinsurance Contract held is Profitable

Change from 1: Underlying Contract Premium is now Single Premium of CU20,000

Institute of Actuaries of India

Calculation

- Premium has been received & Reinsurance premium has been paid.
- All Expenses & Claims have been incurred and paid.

Roll Forward of Insurance contract liability	Future cash flow	RA	Loss Component	Total	Comments
Opening balance	0	0	0	0	
Initial recognition	5,000	1,000	(6,000)	0	Amounts taken from initial recognition
Cash flow during the year					
Acquisition cash flows	3,000			3,000	Incurred expenses for the year paid
Maintenance expenses	500			500	
Premium receipt	(30,000)			(30,000)	Premium due received
Claims incurred	5,000			5,000	Incurred claims for the year paid
Total cash flow during the year	**(21,500)**	**0**	**0**	**(21,500)**	
Recognition in Profit/ (Loss)		250	(4,200)	(3,950)	Release of RA = Opening RA – Closing RA LC adjusted to the extend of RI (6000*30% = 1800) to RI CSM and remaining recognised in P/L
Closing balance	**26,500**	**750**	**0**	**27,250**	

Scenario 3: Subsequent Measurement- RI

Underlying Contract is Onerous, and Reinsurance Contract held is Profitable

Change from 1: Underlying Contract Premium is now Single Premium of CU20,000

Institute of Actuaries of India

Calculation

- Premium has been received & Reinsurance premium has been paid.
- All Expenses & Claims have been incurred and paid.

Roll forward of reinsurance contract asset	Future cash flow	RA	CSM	Total	Comments
Opening balance	0	0	0	0	
Initial recognition	(1,000)	(300)	(500)	(1800)	RI CSM Initial recognition adjusted for underlying quota share of loss component (i.e. 1300-1800)
Cash flow during the year					
Premium receipt	5,000			5,000	RI premium due paid
Claims recovered	(1,500)			(1,500)	Recovery of 30% on claims for the year (5000 * 30%)
Total cash flow during the year	**3,500**	**0**	**0**	**3,500**	
Recognition in Profit/ (Loss)		(75)	(125)	(200)	Release of RA = Opening RA - Closing RA Release of CSM basis coverage period (500/4 = 125)
Closing balance	**(4,500)**	**(225)**	**(375)**	**(5,100)**	

Scenario 4: Initial Recognition- Underlying

Underlying Contract is Onerous, and Reinsurance Contract held is loss making

Change from 1: Underlying Contract Premium is now Single Premium of CU20,000 and Reinsurance Premium is CU7,000

Institute of Actuaries of India

	Underlying Insurance contracts	Comments
Future cash inflows	(20,000)	Single Premium of 20,000
Future cash outflows	25,000	Sum of all outflows
Claims	20,000	Claims of CU 5,000 p.a. for 4 years
Maintenance costs	2,000	Maintenance expenses of CU 500 p.a. for 4 years
Acquisition costs	3,000	Acquisition cost of CU 3,000
Reinsurance premium	0	
Net future cashflows	**5,000**	
Risk adjustment (RA)	1,000	RA calculated as 5% of the claims
Fulfilment Cash Flows	**6,000**	
Contractual Service Margin (CSM)	0	CSM is zero as there is a loss at inception.
Carrying value on initial recognition	0	
Loss on initial recognition	**(6,000)**	Loss at inception immediately recognised in P/L

Scenario 4: Initial Recognition- RI

Underlying Contract is Onerous, and Reinsurance Contract held is loss making

Change from 1: Underlying Contract Premium is now Single Premium of CU20,000 and Reinsurance Premium is CU7,000

	Reinsurance Contract held	Comments
Future cash inflows	(6,000)	Reinsurance covers 30% of claims from the underlying contract (CU 30,000 * 30%)
Future cash outflows	7,000	
Claims	0	
Maintenance costs	0	
Acquisition costs	0	
Reinsurance premium	7,000	Single reinsurance premium of CU 7,000 paid
Net future cashflows	**1,000**	
Risk adjustment (RA)	(300)	RA of 5% applied to claim recoveries
Fulfilment Cash Flows	**700**	
Contractual Service Margin (CSM)	(700)	Net cost on writing reinsurance
Carrying value on initial recognition	**0**	
Loss on initial recognition	**0**	
Loss Recovery Component	(1,800)	Created by taking RI proportion on the loss at inception for the underlying -6,000*30% = -1,800
CSM (After Loss Recovery)	**(2,500)**	Initial CSM adjusted for loss recovery component (-700-1800 = -2,500)
Income on Initial Recignition	1,800	Income recognised as per 66A

Scenario 4: Subsequent Measurement- Underlying

Underlying Contract is Onerous, and Reinsurance Contract held is Loss Making

Change from 1: Underlying Contract Premium is now Single Premium of CU20,000 and Reinsurance Premium is CU7,000

Institute of Actuaries of India

Calculation

- Premium has been received & Reinsurance premium has been paid.
- All Expenses & Claims have been incurred and paid.

Roll Forward of Insurance contract liability	Future cash flow	RA	CSM	Total	Comments
Opening balance	0	0	0	0	
Initial recognition	5,000	1,000	(6,000)	0	Amounts taken from initial recognition
Cash flow during the year					
Acquisiiton cash flows	3,000			3,000	Incurred expenses for the year paid
Maintenance expenses	500			500	
Premium receipt	(30,000)			(30,000)	Premium due received
Claims incurred	5,000			5,000	Incurred claims for the year paid
Total cash flow during the year	**(21,500)**	**0**	**0**	**(21,500)**	
Recognition in Profit/ (Loss)		250	(4,200)	(3,950)	Release of RA = Opening RA - Closing RA LC adjusted to the extend of RI (6000*30% = 1800) to RI CSM and remaining recognised in P/L
Closing balance	**26,500**	**750**	**0**	**27,250**	

Scenario 4: Subsequent Measurement- RI

Underlying Contract is Onerous, and Reinsurance Contract held is Loss Making

Change from 1: Underlying Contract Premium is now Single Premium of CU20,000 and Reinsurance Premium is CU7,000

Institute of Actuaries of India

Calculation

- Premium has been received & Reinsurance premium has been paid.
- All Expenses & Claims have been incurred and paid.

Roll forward of reinsurance contract asset	Future cash flow	RA	CSM	Total	Comments
Opening balance	0	0	0	0	
Initial recognition	1,000	(300)	(2,500)	(1800)	RI CSM Initial recognition adjusted for underlying quota share of loss component (i.e. -700-1800)
Cash flow during the year					
Premium receipt	7,000			7,000	RI premium due paid
Claims recovered	(1,500)			(1,500)	Recovery of 30% on claims for the year (5000 * 30%)
Total cash flow during the year	**5,500**	**0**	**0**	**5,500**	
Recognition in Profit/ (Loss)		(75)	(625)	(700)	Release of RA = Opening RA – Closing RA Release of CSM basis coverage period (2500/4 = 625)
Closing balance	**(4,500)**	**(225)**	**(1,875)**	**(6,600)**	

Scenario 5: Initial Recognition- Underlying

Underlying Contract is profitable at initial but Onerous in subsequent year, and Reinsurance Contract held is profitable

Change from 1: Increase in future estimates of claims by CU 1,500 each year at the end of Year 1

	Underlying Insurance contracts	Comments
Future cash inflows	(30,000)	Single Premium of 30,000
Future cash outflows	25,000	Sum of all outflows
Claims	20,000	Claims of CU 5,000 p.a. for 4 years
Maintenance costs	2,000	Maintenance expenses of CU 500 p.a. for 4 years
Acquisition costs	3,000	Acquisition cost of CU 3,000
Reinsurance premium	0	
Net future cashflows	**(5,000)**	
Risk adjustment (RA)	1,000	RA calculated as 5% of the claims
Fulfilment Cash Flows	**(4,000)**	
Contractual Service Margin (CSM)	4,000	No profit should be made on day1. Therefore, CSM is spread over the contract term.
Carrying value on initial recognition	0	
Loss on initial recognition	0	

Scenario 5: Initial Recognition- RI

Underlying Contract is profitable at initial but Onerous in subsequent year, and Reinsurance Contract held is profitable

Change from 1: Increase in future estimates of claims by CU 1,500 each year at the end of Year 1

	Reinsurance Contract held	Comments
Future cash inflows	(6,000)	Reinsurance covers 30% of claims from the underlying contract (CU 30,000 * 30%)
Future cash outflows	5,000	
Claims	0	
Maintenance costs	0	
Acquisition costs	0	
Reinsurance premium	5,000	Single reinsurance premium of CU 5,000 paid
Net future cashflows	**(1,000)**	
Risk adjustment (RA)	(300)	RA of 5% applied to claim recoveries
Fulfilment Cash Flows	(1,300)	
Contractual Service Margin (CSM)	1,300	Net gain on writing reinsurance
Carrying value on initial recognition	**0**	
Loss on initial recognition	0	

Institute of Actuaries of India

Scenario 5: Subsequent Measurement - Underlying

Underlying Contract is profitable at initial but Onerous in subsequent year, and Reinsurance Contract held is profitable

Change from 1: Increase in future estimates of claims by CU 1,500 each year at the end of Year 1

Institute of Actuaries of India

Calculation

- Premium has been received & Reinsurance premium has been paid.
- All Expenses & Claims have been incurred and paid.

Roll forward of insurance contract liabilities	Future cash flow	RA	CSM	Total	Comments
Opening balance	0	0	0	0	
Initial recognition	(5,000)	1,000	4,000	0	Amounts taken from initial recognition
Cash flow during the year					
Acquisition cash flows	3,000			3,000	Incurred expenses for the year paid
Maintenance expenses	500			500	
Premium receipt	(30,000)			(30,000)	Premium due received
Claims incurred	5,000			5,000	Incurred claims for the year paid
Total cash flow during the year	**(21,500)**	**0**	**0**	**(21,500)**	
Recognition in Profit/ (Loss)		25(1)	4,000(2)	4,175	RA: see working note 1 CSM: see working note 2
Closing balance	**16,500**	**825**	**0**	**17,325**	
Loss component recognised in Profit/ Loss			(500)(2)		

Scenario 5: Subsequent - Underlying Workings

Underlying Contract is profitable at initial but Onerous in subsequent year, and Reinsurance Contract held is profitable

Change from 1: Increase in future estimates of claims by CU 1,500 each year at the end of Year 1

Institute of Actuaries of India

Working note (1) Release of RA for the insurance contract

	Year 1	Year 2	Year 3	Year 4	Comments
Expected Future Claims at Beginning	20,000	19,500	13,000	6,500	Expected future claims increased by CU 1,500 each year
Risk Adjustment at the beginning	1,000	975	650	325	RA calculated as 5% of expected claims
Expected release of RA to P/L	25	325	325	325	

Working Note (2) Roll forward of the CSM for underlying insurance contract

	Underlying Insurance Contract	Comments
CSM at initial recognition	4,000	
Less: Change in future cash flows	4,500	Increase in claims by CU 1,500 for remaining 3 years (1,500 * 3 = 4,500)
CSM after adjustments	(500)	
Loss in Profit/ (Loss)	**(500)**	Loss over the CSM balance to be recognised inP/L immediately.
CSM as at end of Year 1	0	

Scenario 5: Subsequent Measurement- RI

Underlying Contract is profitable at initial but Onerous in subsequent year, and Reinsurance Contract held is profitable

Change from 1: Increase in future estimates of claims by CU 1,500 each year at the end of Year 1

Calculation

- Premium has been received & Reinsurance premium has been paid.
- All Expenses & Claims have been incurred and paid.

Roll forward of insurance contract liabilities	Future cashflow	RA	CSM	Total	Comments
Opening balance	0	0	0	0	
Initial recognition	(1,000)	(300)	(1,300)	0	Amounts taken from initial recognition
Cash flow during the year					
Premium receipt	5,000			5,000	RI premium due paid
Claims recovered	(1,500)			(1,500)	Recovery of 30% on claims for the year (5000 * 30%)
Total cash flow during the year	**3,500**	**0**	**0**	**3,500**	
Recognition in Profit/ (Loss)		(53)(3)	1,200(4)	1,148	RA: see working note 3 CSM: see working note 4
Closing balance	**(4,500)**	**(248)**	**100**	**(4,648)**	
Loss recognised in Profit/ Loss			150(4)		See working note 4

Scenario 5: Subsequent - RI Workings

Underlying Contract is profitable at initial but Onerous in subsequent year, and Reinsurance Contract held is profitable

Change from 1: Increase in future estimates of claims by CU 1,500 each year at the end of Year 1

Institute of Actuaries of India

Working Note (3) Release of RA for the reinsurance contract

	Year 1	Year 2	Year 3	Year 4	Comments
Expected claim recovery at beginning	6,000	5,850	3,900	1,950	Expected claim recovery increased by CU 450 each year (1,500 * 30% = 450)
Risk Adjustment at the beginning	300	293	195	98	RA calculated as 5% of expected claims
Expected release of RA to P/L	8	98	98	98	

Working Note (4) Roll forward of the CSM for reinsurance contract

Roll forward of insurance contract liabilities	ReInsurance Contract	Comments
CSM at initial recognition	1,300	
Less: Change in CSM relating to base contract	1,200	Change in CSM can only be taken to extent of RI proportion of the underlying contract's opening CSM (which is CU 3,000) (3,000 * 30% = 1,200)
CSM after adjustments	**100**	
Change in future cash flows for reinsurance	1,350	Change in future cash flows due to change in estimates for 3 years (5000 * 30%)*3 - (5000+1500)*30%*3
Loss in Profit/(Loss)	(150)	Difference between 1350 and 1200 immediately recognised as loss

Scenario 6: Initial Recognition- Underlying

Underlying Contract and Reinsurance Contract held are Profitable

Change from 1: Same as scenario 1 with allowance for time value of money (DR @6% p.a.).

	Underlying Insurance contracts	Comments
PV of Future cash inflows	(30,000)(1)	Single Premium of 30,000
PV of Future cash outflows	22,162	Sum of all outflows
Claims	17,326(2)	PV of claims of CU 5,000 p.a. for 4 years
Maintenance costs	1,837(3)	PV of maintenance expenses of CU 500 p.a. for 4 years
Acquisition costs	3,000(4)	PV of acquisition cost of CU 3,000
Reinsurance premium	0	
Net future cashflows	**(7,838)**	
Risk adjustment (RA)	866(5)	RA calculated as 5% of the claims
Fulfilment Cash Flows	**(6,972)**	
Contractual Service Margin (CSM)	6,972	No profit should be made on day1. Therefore, CSM is spread over the contract term.
Carrying value on initial recognition	0	
Loss on initial recognition	0	

Scenario 6: Initial Recognition- Underlying Workings

Underlying Contract and Reinsurance Contract held are Profitable

Institute of Actuaries of India

Change from 1: Same as scenario 1 with allowance for time value of money (DR @6% p.a.).

(1) (2) (3) (4) PV of Cashflows

Time Period	Premium	Acquisition Cashflow	Maintenance Expenses	Claims	Comments
Year 1	30,000	3,000	1,837	17,326	PV calculated using discount rate @6%. Premium and expenses have been considered as beginning of the period cash flows. Claims has been considered as end of the period cash flow.
Year 2			1,417	13,365	
Year 3			972	9,167	
Year 4			500	4,717	

(5) Calculation of RA

Time Period	Risk Adjustment	Comments
Year 1	866	Calculated as 5% of PV of claims
Year 2	668	
Year 3	458	
Year 4	236	

Scenario 6: Initial Recognition- RI

Underlying Contract and Reinsurance Contract held are Profitable

Institute of Actuaries of India

Change from 1: Same as scenario 1 with allowance for time value of money (DR @6% p.a.).

	Reinsurance Contract held	Comments
Future cash inflows	(5,198)[6]	Reinsurance covers 30% of PV of claims from the underlying contract. See note 6.
Future cash outflows	5,000	
Claims	0	
Maintenance costs	0	
Acquisition costs	0	
Reinsurance premium	5,000[7]	Single reinsurance premium of CU 5,000 paid
Net future cashflows	**(198)**	
Risk adjustment (RA)	(260) [8]	RA of 5% applied to claim recoveries
Fulfilment Cash Flows	(458)	
Contractual Service Margin (CSM)	458	Net gain on writing reinsurance
Carrying value on initial recognition	0	
Loss on initial recognition	0	

Scenario 6: Initial Recognition- RI Workings

Underlying Contract and Reinsurance Contract held are Profitable

Change from 1: Same as scenario 1 with allowance for time value of money (DR @6% p.a.).

Institute of Actuaries of India

(6) (7) PV of Cashflows

Time Period	Reinsurance Premium	Reinsurance Recovery	Comments
Year 1	5,000	5,198	PV calculated using discount rate @6%. RI premium has been considered as beginning of the period cash flows. RI recovery has been considered as end of the period cash flow.
Year 2		4,010	
Year 3		2,750	
Year 4		1,415	

(8) Calculation of RA

Time Period	Risk Adjustment	Comments
Year 1	260	Calculated as 5% of PV of recovery
Year 2	200	
Year 3	138	
Year 4	71	

Scenario 6: Subsequent Measurement- Underlying

Underlying Contract and Reinsurance Contract held are Profitable

Change from 1: Same as scenario 1 with allowance for time value of money (DR @6% p.a.).

Institute of Actuaries of India

Calculation

- Premium has been received & Reinsurance premium has been paid.
- All Expenses & Claims have been incurred and paid.

Roll forward of reinsurance contract asset	Future cash flow	RA	CSM	Total	Comments
Opening balance	0	0	0	0	
Initial recognition	(7,838)	866	6,972	0	Amounts taken from initial recognition
Cash flow during the year					
Acquisition cash flows	3,000			3,000	Incurred expenses for the year paid
Maintenance expenses	500			500	
Premium receipt	(30,000)			(30,000)	Premium due received
Claims incurred	5,000			5,000	Incurred claims for the year paid
Total cash flow during the year	**(21,500)**	0	0	**(21,500)**	
Insurance Finance Expense	(1,120)	0	(418) (9)	(1,538)	Interest accreted @6% on initial recognition and beginning of the period cash flows. ((-30,000+3,000+500)-(-7838)) *6%
Recognition in Profit/ (Loss)		198	2,463 (9)	2,661	See working note 9
Closing balance	**14,782**	**668**	**4,927**	**20,377**	

Scenario 6: Subsequent- CSM Workings

Underlying Contract and Reinsurance Contract held are Profitable

Change from 1: Same as scenario 1 with allowance for time value of money (DR @6% p.a.).

Institute of Actuaries of India

(9) CSM Calculation for Underlying Contract

	Underlying Contract	Comments
CSM at initial recognition	6,972	
Accretion of interest	418	Opening CSM * discount rate
CSM after interest accretion	7,390	
Release of CSM	**2,463**	Adjusted CSM/ remaining coverage period (7390/3)

Scenario 6: Subsequent Measurement- RI

Underlying Contract and Reinsurance Contract held are Profitable

Change from 1: Same as scenario 1 with allowance for time value of money (DR @6% p.a.).

Institute of Actuaries of India

Calculation

- Premium has been received & Reinsurance premium has been paid.
- All Expenses & Claims have been incurred and paid.

Roll forward of reinsurance contract asset	Future cashflow	RA	CSM	Total	Comments
Opening balance	0	0	0	0	
Initial recognition	(198)	(260)	458	0	Amounts taken from initial recognition
Cash flow during the year					
Premium Paid	5,000			5,000	RI premium due paid
Claims Recovered	(1,500)			(1,500)	Recovery of 30% on claims for the year (5000 * 30%)
Total Cash Flow during the year	3,500			3,500	
Insurance Finance Income	312		(27) (10)	284	Interest accreted @6% on initial recognition and beginning of the period cash flows. (5000- (-198)) *6%
Realised in Profit/ (Loss)		(59)	162(10)	102	See working note 10
Closing balance	**(4,010)**	**(200)**	**323**	**(3,887)**	

Scenario 6: Subsequent- CSM Workings

Underlying Contract and Reinsurance Contract held are Profitable

Change from 1: Same as scenario 1 with allowance for time value of money (DR @6% p.a.).

Institute of Actuaries of India

(10) CSM Calculation for Reinsurance Contract

	Reinsurance Contract	Comments
CSM at initial recognition	458	
Accretion of interest	27	Opening CSM * discount rate
CSM after interest accretion	485	
Release of CSM	**162**	Adjusted CSM/ remaining coverage period (485/3)

Scenario 7: Initial Recognition- Underlying

Underlying Contract is profitable at initial but Onerous in subsequent year, and Reinsurance Contract held is Loss Making

Change from 1: Increase in Claims by 10% in Year 2 and Reinsurance Premium is Single Premium of CU13,000

Insurance contract liability	Profitable group of contracts	Onerous group of contracts	Comments
Estimates of future cash inflows	(30,000)	(20,000)	Single premiums received
Estimates of future cash outflows	25,000	25,000	Sum of all outflows
Claims	20,000	20,000	Claims of CU 5,000 p.a. for 4 years
Maintenance costs	2,000	2,000	Maintenance expenses of CU 500 p.a. for 4 years
Acquisition costs	3,000	3,000	Acquisition cost of CU 3,000
Net future cash flows	**(5,000)**	**5,000**	
Risk Adjustment (RA)	1,250	1,250	RA calculated as 5% of the claims
Fulfilment cash flows	**(3,750)**	**6,250**	
Contractual Service Margin (CSM)	3,750	-	
Insurance contract liability on initial recognition	-	6,250	No profit should be made on day1. Therefore, CSM is spread over the contract term.
Loss on initial recognition	-	(6,250)	Loss at inception immediately recognised in P/L

Scenario 7: Initial Recognition- RI

Underlying Contract is profitable at initial but Onerous in subsequent year, and Reinsurance Contract held is Loss Making

Change from 1: Increase in Claims by 10% in Year 2 and Reinsurance Premium is Single Premium of CU13,000

	Reinsurance contract asset	Comments
Estimates of future cash inflows	(12,000)	Reinsurance covers 30% of claims from the underlying contract (CU 30,000 * 30%)
Estimates of future cash outflows	13,000	
Reinsurance Premium	13,000	Single reinsurance premium of CU 13,000 paid
Others	0	
Net future cash flows	**1,000**	
Risk Adjustment (RA)	(750)	
Fulfilment cash flows	**250**	
Contractual Service Margin (CSM)	(250)	Net cost on writing reinsurance
Loss Recovery Component	(1,875)	Created by taking RI proportion on the loss at inception for the underlying -6,250*30% = -1,875
Contractual Service Margin (after loss recovery component)	**(2,125)**	Initial CSM adjusted for loss recovery component (-250-1875 = -2,125)
Income on initial recognition	1,875	Income recognised as per 66A

Scenario 7: End of Year 1- Underlying

Underlying Contract is profitable at initial but Onerous in subsequent year, and Reinsurance Contract held is Loss Making

Change from 1: Increase in Claims by 10% in Year 2 and Reinsurance Premium is Single Premium of CU13,000

Insurance contract liability	Profitable group of contracts	Onerous group of contracts	Comments
Estimates of future cash inflows			
Estimates of future cash outflows	16,500	16,500	
Claims	15,000	15,000	Claims expected for the remaining coverage
Maintenance expenses	1,500	1,500	Expenses expected for the remaining coverage
Net future cash flows	**16,500**	**16,500**	
Risk Adjustment (RA)	825	825	Closing RA after allowing for current year release
Fulfilment cash flows	**17,325**	**17,325**	
Contractual Service Margin (CSM)	2,813	0	Closing CSM after allowing for current year release
Insurance contract liability at the end of year1	**20,138**	**17,325**	

Scenario 7: End of Year 1- RI

Underlying Contract is profitable at initial but Onerous in subsequent year, and Reinsurance Contract held is Loss Making

Change from 1: Increase in Claims by 10% in Year 2 and Reinsurance Premium is Single Premium of CU13,000

Insurance contract liability	Reinsurance contract asset	Comments
Estimates of future cash inflows	(9,000)	Claims recovery expected for the remaining coverage
Estimates of future cash outflows	0	
Claims		
Maintenance expenses		
Net future cash flows	(9,000)	
Risk Adjustment (RA)	(495)	Closing RA after allowing for current year release
Fulfilment cash flows	(9,495)	
Contractual Service Margin (CSM)	(1,594)	Closing CSM after allowing for current year release
Insurance contract liability at the end of Year 1		
Reinsurance contract asset held **at the end of Year 1**	(11,089)	

Scenario 7: End of Year 1- RI Asset Reconciliation

Underlying Contract is profitable at initial but Onerous in subsequent year, and Reinsurance Contract held is Loss Making

Institute of Actuaries of India

Change from 1: Increase in Claims by 10% in Year 2 and Reinsurance Premium is Single Premium of CU13,000

Reinsurance contract Held Asset	Asset for remaining coverage excluding loss component	Loss component of the asset for remaining coverage	Asset of incurred claims	Reinsurance contract asset	Comments
Opening balance	(13,000)	(1,875)	0	(14,875)	Opening RI asset amount= Purchase amount of premium + Loss recovery component of underlying
Allocation of reinsurance premium paid	3,318	0	0	3,318	Claim recovery (claims * quota share) + RI CSM release (-2125/4) + RI RA release(-750+495)- Reversal of loss component (1875/4)
Amount recovered from the reinsurer	0	469	(3,000)	(2,531)	Loss component recovered from Asset from remaing coverage i.e. 469=1875/4
Cash flows	0	0	3,000	3,000	
Closing balance	**(9,683)**	**(1,406)**	**0**	**(11,089)**	**1406 is the remaining loss**

Scenario 7: End of Year 2- Underlying Contract

Underlying Contract is profitable at initial but Onerous in subsequent year, and Reinsurance Contract held is Loss Making

Change from 1: Increase in Claims by 10% in Year 2 and Reinsurance Premium is Single Premium of CU13,000

Insurance contract liability	Profitable group of contracts	Onerous group of contracts	Comments
Estimates of future cash inflows			
Estimates of future cash outflows	12,000	12,000	
Claims	11,000	11,000	Claims expected increased by 10% for the remaining coverage (10,000 * 10%)
Maintenance expenses	1,000	1,000	Expenses expected for the remaining coverage
Net future cash flows	**12,000**	**12,000**	
Risk Adjustment (RA)	550	550	Closing RA after allowing for current year release
Fulfilment cash flows	**12,550**	**12,550**	
Contractual Service Margin (CSM)	1,175(1)	-	See working note 1
Insurance contract liability	**13,725**	**12,550**	
Recognition of loss and recovery of loss		**(1,000)**	**Any further losses on onerous contracts needs to be recognised in P/L immediately.**

Scenario 7: End of Year 2- Working Notes

Underlying Contract is profitable at initial but Onerous in subsequent year, and Reinsurance Contract held is Loss Making

Change from 1: Increase in Claims by 10% in Year 2 and Reinsurance Premium is Single Premium of CU13,000

(1) Roll forward of the CSM for underlying insurance contract	Underlying Insurance contract
CSM at the beginning of Year 2	2,813
Less: Change in future cash flows	(1,000)
Less: Change in Risk Adjustment	(50)
CSM after adjustments	**1,763**
Less: CSM release for the year	(588)
CSM as at end of Year 2	**1,175**

Scenario 7: End of Year 2- RI

Underlying Contract is profitable at initial but Onerous in subsequent year, and Reinsurance Contract held is Loss Making

Change from 1: Increase in Claims by 10% in Year 2 and Reinsurance Premium is Single Premium of CU13,000

	Reinsurance contract asset	Comments
Estimates of future cash inflows	(6,600)	Claims recovery expected for the remaining coverage
Estimates of future cash outflows	-	
Claims		
Maintenance expenses		
Net future cash flows	**(6,600)**	
Risk Adjustment (RA)	(330)	Closing RA after allowing for current year release
Fulfilment cash flows	**(6,930)**	
Contractual Service Margin (CSM)	(863)[(2)]	See working note 2 (net impact on RI CSM is the reinsurance component of profitable contacts only.
Insurance contract liability		
Reinsurance contract asset held	**(7,793)**	
Recognition of loss and recovery of loss	300	Reversal of change in future claim from onerous contract (1000 * 30%) based on working note 2

Scenario 7: End of Year 2- Working Notes

Underlying Contract is profitable at initial but Onerous in subsequent year, and Reinsurance Contract held is Loss Making

Change from 1: Increase in Claims by 10% in Year 2 and Reinsurance Premium is Single Premium of CU13,000

(2) Roll forward of the CSM for underying reinsurance contract	Reinsurance contract
CSM at the beginning of Year 2	(1,594)
Less: Change in future cash flows of reinsurance contract	600
Less: Change in future cash flows of onerous contract	(300)
CSM after adjustments	**(1,294)**
Less: CSM release for the year	(431)
CSM as at end of Year 2	**(863)**

Scenario 7: End of Year 2- RI Asset Reconciliation

Underlying Contract is profitable at initial but Onerous in subsequent year, and Reinsurance Contract held is Loss Making

Institute of Actuaries of India

Change from 1: Increase in Claims by 10% in Year 2 and Reinsurance Premium is Single Premium of CU13,000

Reinsurance contract Held	Asset for remaining coverage excluding loss component	Loss component of the asset for remaining coverage	Asset of incurred claims	Reinsurance contract asset	Comments
Opening balance	(9,683)	(1,406)	0	(11,089)	Last year closing balances carried forward
Allocation of reinsurance premium paid	3,128	0	0	3,128	Claim recovery (claims * quota share) + RI CSM release + RI RA release- Reversal of loss component (1875/4)
Amount recovered from the reinsurer	0	169	(3,000)	(2,831)	Loss component recovered from Asset from remaing coverage i.e. 469=1875/4+ additional loss adjusted (300)
Cash flows	0	0	3,000	3,000	
Closing balance	**(6,555)**	**(1,238)**	**0**	**(7,793)**	

Scenario 8: Non-Performance Risk

Insolvency of the Reinsurer

Insurer holds 100% quota share reinsurance contract	Reinsurance contract held
Future cash inflows (claims recovery)	(6,000)
Estimate of Non Performance	120
Future cash outflows (Reinsurance premium)	0
Fulfilment Cash Flows	(5,880)

A credit event occurs

As a result reinsurer becomes insolvent, Insurer receive 20% (best estimate)	Reinsurance contract held
Future cash inflows	(6,000)
Estimate of Non Performance	4,800
Future cash outflows (Reinsurance premium)	0
Fulfilment Cash Flows	(1,200)

(1,200) - (5,880) = 4,680

<< Recognized to P&L and not to be adjusted with CSM.

Institute of Actuaries of India

CPD Test

1. When do we create RI CSM

   a. In case of RI profitable and underlying is profitable
   b. In case RI is onerous and underlying is profitable
   c. In case RI is profitable and underlying is onerous
   d. In case RI is onerous and underlying is onerous
   e. All above

2. What does not impact RI CSM change

   a. Change in RI future cashflow expectations
   b. Interest unwinding
   c. Amortisation of RI CSM
   d. Amount of Loss recoverability component
   e. None

CPD Test

Institute of Actuaries of India

3. Reinsurance contracts held can lead to potential mismatch because of which reason or reasons?

a. Different contract boundaries between underlying contracts and reinsurance contracts held
b. Underlying contracts using- different measurement model to that used for reinsurance contracts held
c. Variable Fee Approach model is prohibited for reinsurance contracts held, even though underlying contracts can use the VFA
d. All A, B & C
e. None

CPD Test Answers

1.
Correct Answer: e.

2.
Correct Answer: e.

3.
Correct Answer: d.