

## CSM: Identification of coverage units

The contractual service margin (CSM) represents the unearned profit from a group of insurance contracts at any given point in time. The CSM is set-up as a liability on the balance sheet and is recognized in the profit and loss account (P&L) as and when the service is provided.

In order to determine how much profit should be recognized in each period, the entity is required to identify the amount of coverage provided by each contract in the group (known as 'coverage units'). The entity then allocates the CSM equally to each coverage unit provided in the current period and expected to be provided in future periods.

As per paragraph B119 (a) of the standard, the number of coverage units in a group is determined by considering, for each contract, the quantity of the benefits provided under a contract and its expected coverage duration. However, the standard doesn't specify how to estimate the amount of benefit under various types of contract. This gives rise to several interpretative questions. Should the benefit be restricted to the sum at risk or should the overall benefits provided under a contract be considered? Alternatively, can other variables such as premiums or the number of contracts be used as proxy for benefit provided?

The above questions were discussed in various agenda papers published by the Technical resource group (TRG) formed by the International Accounting Standards Board (the Board). The agenda papers considered the service provided by contracts under the General Measurement Model (GMM) as well as the Variable Fee Approach (VFA). In the case of contracts falling under VFA, it is clear by contract design itself, that insurance as well as investment service is provided under these contracts and hence the Board concluded that the quantity of benefit should reflect both these services.

On the other hand, contracts measured under GMM, clearly provide insurance service but it is slightly tricky to establish whether investment service is being provided. The agenda papers suggested that, if a contract has an investment component, then it can be assumed that the contract provides investment return service along with insurance service.

To conclude, in the absence of an investment component, the coverage units will reflect the amount of insurance benefit whereas for contracts with an investment component, coverage units will reflect insurance as well as investment benefit.

Possible examples of coverage units based on product types are summarized in below table. It should be noted that these are not intended to be prescriptive or exhaustive. Ultimately, companies will need to form their own views on which coverage units best reflect the service provided for the business managed by them.

Product type	Measurement model	Coverage units
Term product with only death benefit	General model	Sum assured payable on death
Health product with cover provided on specified types of illness	General model	Maximum amount payable on detection of illness
Life cover with more than one benefit	General model	Sum of all insurance cover provided under contract

Product type	Measurement model	Coverage units
Deferred annuity	General model	Amount payable on death during deferment period and annuity amount payable post vesting date
Life contingent annuity product	General model	Annuity amount payable in each period
Life contingent annuity with return of premium on death	General model	Annuity amount payable in each period plus amount payable on death (i.e. return of premium)
Endowment products with guaranteed benefits	General model	Amount payable on death (i.e. Sum assured + Guaranteed additions)
Indirect participating products	General model	Guaranteed death benefit
With profits savings product	Variable fee approach	Amount payable on death (i.e. Sum assured + Bonuses + Guaranteed additions)
Unit linked savings product	Variable fee approach	Amount payable on death (i.e. Sum assured + fund value, Or higher of sum assured and fund value as defined in policy document)

Coverage units under each group of contracts must take into account the projected level of benefits payable in each future period. Further, if the level of benefits varies over time, then this will have to be captured by the coverage units as well.

**Example:** A 5 year endowment policy with a death benefit of 100,000. Annual premiums are payable in advance with an option to convert the policy into a paid-up status after paying a minimum of two year's premium.

The in-force portion of the policy will have coverage units (CU) of 100,000 whereas the policies which opted to convert into paid-up will have reduced cover of CU 40,000 (100,000 x 2/5).

Let's assume that we expect 30% of policies to exercise paid up option after paying two years premium. Under this scenario, the projected coverage units for this contract will be calculated as shown in table below:

Policy year	1	2	3	4	5
In-force coverage units (a)	100,000	100,000	100,000	100,000	100,000
Expected in-force policy (b)	1	1	0.7	0.7	0.7
Paid-up coverage units (c)	0	0	40,000	40,000	40,000
Expected paid-up policy (d)	0	0	0.3	0.3	0.3
Expected coverage units (e)= [(a) x (b)] + [(c) x (d)]	100,000	100,000	82,000	82,000	82,000

The above example ignores the possibility of deaths and surrenders in each year for simplicity. In reality, the policy can convert into paid-up policy even in year 4 and year 5, which has been ignored as well.

The above approach also offers flexibility to reflect actual experience in determination of coverage units. For example, if in the above scenario only 20% of contracts exercise option to convert into paid-up policy, the coverage units will be restated to CU 88,000 ( $100,000 \times 0.8 + 40,000 \times 0.2$ ). The timing of making changes for actual experience shall be discussed in subsequent articles.

### **Alternative approaches**

As mentioned earlier, coverage units have not been prescribed and entities have considered a number of different ways to set coverage units. However, as noted in TRG papers, some of these methods will not meet the objective of reflecting of the amount of service provided in each period.

For example, methods based on premium income can be considered as a reasonable proxy for amount of service only if the level of premium charged in each period moves in line with the level of benefit provided. On the other hand, approaches based on the actuarially expected cash outflows primarily reflect the likelihood of insured events which is not the objective of coverage units. The requirement is to use a driver which measures the level of benefit coverage provided to all contracts within a group. Similarly, methods based on number of contracts fails to reflect the different level of covers provided under different contracts within a group unless each contract provides the same level of benefit.

### **Conclusion**

The identification of coverage units is only the first step to determine the amount of CSM to be recognized in the P&L. In subsequent articles, the working party intends to discuss other areas such as timing of adjustments made to coverage units and using discounted versus undiscounted coverage units. If you have any questions or comments on this topic, please get in touch through the comments section.

On behalf of the IFRS 17 Working Party

Rebecca Sardar - Chair

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