

Current state of principle-based reserving for non-variable annuities (VM-22)

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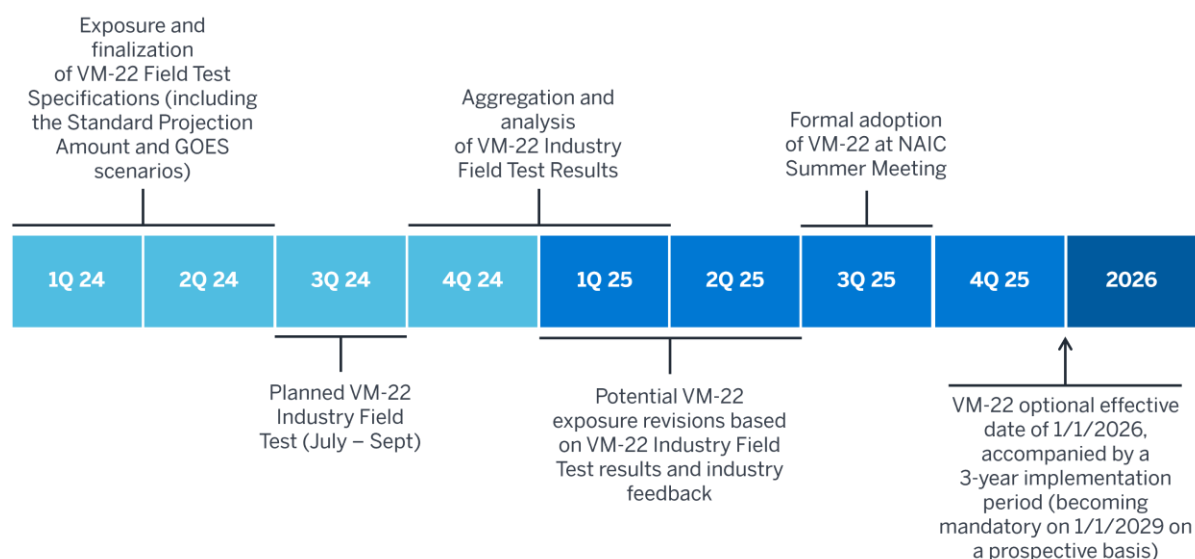
Background

The National Association of Insurance Commissioners (NAIC) adopted a principle-based reserving (PBR) statutory framework for U.S. life insurance products under VM-20 with an effective date of January 1, 2017, to be mandatory for new business sold on January 1, 2020, and later. A more comprehensive principle-based reserving and capital framework under VM-21 became effective for all variable annuity (VA) and registered indexed annuity (RILA) contracts that were in force as of (or sold after) January 1, 2020. These changes effectively meant that NAIC and state insurance regulators were moving away from the previous prescriptive and rules-based regime to an approach that would better reflect the risks inherent in life insurance and annuity products.

For certain non-VA products, a principle-based approach for determining the NAIC's Risk-Based Capital (RBC) C-3 component¹ does exist.² However, the statutory reserving methods for non-VA products are still prescriptive and rules-based, with no recognition of management actions and policyholder behavior. Accordingly, similar to the emergence of VM-20 and VM-21, the Annuity Reserves and Capital Subcommittee (ARCS) of the American Academy of Actuaries (AAA) and the NAIC VM-22 Subgroup have:

- Proposed and presented to the NAIC's Life and Annuity Task Force (LATF) an initial draft PBR framework for statutory reserving (VM-22),³ leveraging elements of the already approved VM-20 and VM-21 regulations.
- Exposed industry field testing specifications⁴ for a public comment period and an invitation for company participation in the industry field testing through April 15.

FIGURE 1: VM-22 SCHEDULE



1 For interest rate risk and market risk.

2 C-3 Phase 1, described in the NAIC's annual RBC instructions.

3 NAIC. VM-22 PBR: Requirements for Principle-Based Reserves for Non-Variable Annuities. Retrieved May 8, 2024, from <https://content.naic.org/sites/default/files/inline-files/VM-22%20Subgroup%20Draft%20July%202023%20Clean%20v2%20%281%29.docx> (Microsoft Word download).

4 AAA (March 6, 2024). Annuity Reserves and Capital Subcommittee Reserves & Capital Field Testing: Description & Specifications. Retrieved May 8, 2024, from <https://content.naic.org/sites/default/files/inline-files/20240306%20VM22%20Field%20Test%20Specs.pdf>.

As shown in Figure 1, assuming the VM-22 industry field test proceeds as scheduled during the summer of 2024, the NAIC VM-22 Subgroup anticipates providing updated or near-final VM-22 requirements by the third quarter of 2025 for approval by the Life Actuarial (A) Task Force, and with the regulation to be adopted by the NAIC as of January 1, 2026.

Specifically, the NAIC VM-22 Subgroup proposals apply to new business issued starting January 1, 2026. However, insurers would be allowed a three-year transition period with a mandatory application of VM-22 for all business issued after January 1, 2029.

It is important to recognize that the proposed VM-22 framework for statutory reserving is draft and subject to change, and this caveat similarly applies to the content provided in this report.

Scope

In the proposed VM-22 framework, all non-VA contracts are classified into reserving categories,⁵ specifically accumulation annuities, payout annuities, and longevity reinsurance. Examples from each reserving category are shown in Figure 2, although this by no means is meant to be an exhaustive list. It is possible that existing (and potentially future) product designs will also correspond to one of these categories.

FIGURE 2: RESERVING CATEGORIES

In-Scope Products

ACCUMULATION ANNUITIES

- Deferred Annuities (SPDA & FPDA, collectively FDA)
- Multi-Year Guarantee Annuities (MYGA)
- Fixed Indexed Annuities (FIA)
- Market-Value Adjustments (MVA)
- Guarantees/Benefits/Riders on Fixed Annuity Contracts

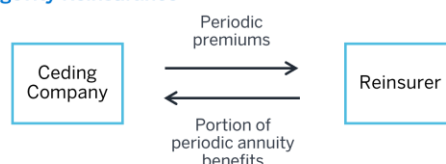
PAYOUT ANNUITIES

- Single Premium Immediate Annuities (SPIA)
- Term Certain Payout Annuity
- Structured Settlement Contracts (SSC)
- Deferred Income Annuities (DIA)
- Pension Risk Transfer Annuities (PRT)

Out-of-Scope Products

- Guaranteed Investment Contracts (GICs) and Synthetic GICs
- Stable Value Wraps
- Funding Agreements
- Single Premium Life Insurance
- RILA (currently subject to VM-21)

Longevity Reinsurance



- Agreement/reinsurance arrangement covering contracts where the reinsurer assumes longevity risk associated with periodic annuity benefit payments
- Ceding company retains the assets supporting the annuity payments

Key elements of the proposed framework⁶

We have provided below a summary of the key elements of the proposed VM-22 framework.

AGGREGATE RESERVE

The aggregate VM-22 reserve shall equal the sum of the following components:

- The stochastic reserve (SR).
- The additional standard projection amount (ASPA), which is based on the standard projection amount (SPA). At the time of the publication of this report, it is still unclear whether the SPA will be a binding part of the VM-22 statutory reserve calculation or simply a disclosure item.

⁵ NAIC, VM-22 PBR, op cit., Section 3F.

⁶ Ibid., Section 3.

- The deterministic reserve (DR), for contracts using the deterministic certification option (DCO).
- The pre-PBR statutory reserves for contracts that pass the Stochastic Exclusion Test (SET) and for which the company has elected not to calculate the SR.

Similar to VM-21, the SR and SPA calculations are to be performed on two bases, once using the company's reinvestment assumption, and again using the prescribed reinvestment guardrail. In each case, the final result will be the higher of the two calculations.

STOCHASTIC RESERVE

Using an asset and liability projection, accumulated deficiencies are projected over a set of real-world stochastic scenarios using a company's prudent estimate assumptions.⁷ For a given economic scenario, the scenario reserve is the starting asset amount plus the greatest present value of these accumulated deficiencies, floored at the aggregate cash surrender value for the group of contracts being modeled.⁸

The SR is the conditional tail expectation 70 (CTE 70) of the scenario reserves.

Unlike VM-21 (where the SR is calculated across all contracts in scope), groups of non-VA contracts corresponding to different reserving categories may not be aggregated together when calculating the SR under VM-22. Instead, the final VM-22 SR is calculated as the arithmetical sum of the SR derived for each reserving category.

STANDARD PROJECTION AMOUNT

The SPA is calculated similarly to the SR; however, the company's prudent estimate assumptions are replaced with prescribed assumptions for mortality, policyholder behavior, and expenses, varying by the contract type. Like VM-22 more generally, these prescribed assumptions are yet to be finalized and may be revised pending the results of the VM-22 industry field testing.

DETERMINISTIC RESERVE

For a group of contracts that meet certain conditions, a company may elect to calculate and report a DR instead of the SR under a single deterministic scenario⁹ by using the DCO. Under the DCO, the company must certify that, for the contracts under consideration, the economic factors do not impact policyholder behavior and that the reinvestment strategy supporting the block does not involve hedges. Furthermore, the company must perform, disclose, and pass the Stochastic Exclusion Ratio Test (SERT) under the 16 economic PBR scenarios prescribed in VM-20,¹⁰ paired with the 100% mortality scenario.

The DR is then calculated using a specific PBR scenario (#12) prescribed in VM-20.

STOCHASTIC EXCLUSION TESTING¹¹

A company can also report reserves under current (pre-PBR) statutory requirements for a group of contracts if it can be demonstrated that these contracts pass the Stochastic Exclusion Test (SET). Passing the SET involves meeting the conditions of passing either the SERT (annually and within 12 months of the valuation date), and the Stochastic Exclusion Demonstration Test, or the SET Certification Method.¹²

STATUTORY CAPITAL

Currently, there are distinct capital frameworks that apply to annuities sold in the United States. For variable annuities, the reformed C-3 Phase II framework relies on the existing VM-21 reserve distribution¹³ to calculate C-3 capital requirements using a CTE 98 metric. Fixed-indexed annuities have C-3 capital requirements that use a

⁷ Best estimate assumptions plus a provision for adverse deviation.

⁸ Or for a group of payout annuity contracts, the actuarial present value of liability cash flows provided for in such contracts, over the economic scenario under consideration.

⁹ NAIC, VM-22 PBR, op cit., Section 7E (2).

¹⁰ Valuation Manual, VM-20, Appendix 1.E.

¹¹ NAIC, VM-22 PBR, op cit., Section 7C.

¹² Ibid., Section 7B.

¹³ If adopting the Macro Tax Adjustment method, which is the most commonly used approach used in the industry.

factor-based approach. For fixed deferred annuities, multiyear guarantee annuities, and all other (non-indexed) annuities, the C-3 Phase I framework applies. This framework has some distinct differences compared to C-3 Phase II, including (but not limited to) the economic scenarios (and underlying parameterization of these scenarios) and the discounting of accumulated deficiencies.

There is some industry sentiment for aligning these disparate frameworks. Such convergence may be complicated by the stipulation that, at least for the moment, VM-22 will only apply to new business (issued starting January 1, 2026, or at the date where a company chooses to elect VM-22, no later than January 1, 2029), leaving unclear the treatment of capital for business not in scope of VM-22 (and for which no VM-22 reserve is calculated).¹⁴

The VM-22 industry field testing specifications propose a capital framework that is like the reformed C-3 Phase II framework described above, but with varying CTE metrics to facilitate deeper analysis. We note that the results from the upcoming industry field testing will likely play an important role in defining the final capital requirements for non-VAs.

Industry field testing

The NAIC VM-22 Subgroup intends to conduct the VM-22 industry field testing during the third quarter of 2024. The objective of this industry field test is to measure the impact of the proposed VM-22 framework compared to the current statutory framework, on at least 10 years of in-force, using a valuation date of December 31, 2023. Companies may include all or only some of their non-VA portfolio in the testing, at their discretion.

Using models that can project reserves at future projection periods instead of relying on approximations or simplifying methods is encouraged but is not required under the industry field testing specifications. These specifications also refer to the proposed VM-22 framework for asset and liability assumptions. There is also additional guidance provided on the reinvestment guardrail, index-based hedging program error, and use of margins to be applied to a company's asset and liability best estimate assumptions.

Companies need to produce the SR, SPA, and SET results, as well as commissioners' annuity reserve method (CARVM) reserves and C-3 Phase I amounts. All these results should be reported at the following level of granularity (which is slightly different from the reserving categories described in the proposed VM-22 framework):

- Deferred annuities with living benefits.
- Deferred annuities without living benefits.
- Payout annuities, with an option to split pension risk transfer business separately if a company does not manage them with other single premium immediate annuities (SPIAs).
- Longevity reinsurance.

The VM-22 industry field testing specifications also outline additional guidance on supplemental testing for the SET, survey questions that are part of the field testing, projection metrics at future projection periods (with outer loop scenario requirements), and sensitivities.

¹⁴ Presumably subject to the existing factor-based approach.

Looking ahead

The NAIC hopes to resolve the remaining uncertainties in the proposed VM-22 framework to develop a more robust, comprehensive, and final VM-22 regulation.

The results of the industry field testing and the evolution of other exogenous factors, such as the Generator for Economic Scenarios (GOES) that will be replacing the existing AAA's interest rate generator, will be key factors in this process.



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