

# ISO/IEC 26565:2026-05 (E)

## Software and systems engineering - Methods and tools for product line maturity framework

---

### Contents

Page

- Foreword..... v
- Introduction..... vi
- 1 Scope..... 1
- 2 Normative references..... 1
- 3 Terms and definitions..... 1
- 4 Abbreviated terms..... 2
- 5 Reference model for product line maturity framework..... 2
  - 5.1 Overview..... 2
  - 5.2 Constituents of reference model for product line maturity framework..... 3
- 6 Product line maturity framework management..... 7
  - 6.1 General..... 7
  - 6.2 Product line maturity framework planning..... 7
    - 6.2.1 Principal constituents..... 7
    - 6.2.2 Identify product line maturity framework adoption strategies..... 8
    - 6.2.3 Assign responsibility for product line maturity framework operationalization..... 9
    - 6.2.4 Define success measures for product line maturity framework operationalization..... 9
    - 6.2.5 Estimate resources required to operate product line maturity framework..... 10
    - 6.2.6 Document the product line maturity framework operationalization plan..... 10
  - 6.3 Product line maturity framework enabling..... 11
    - 6.3.1 Principal constituents..... 11
    - 6.3.2 Enable facilitators for product line maturity framework operationalization..... 11
    - 6.3.3 Enable measurement environment for quantifying product line maturity framework operationalization..... 12
  - 6.4 Product line maturity framework managing..... 12
    - 6.4.1 Principal constituents..... 12
    - 6.4.2 Review product line maturity framework operationalization status with success measures..... 13
    - 6.4.3 Control issues on product line maturity framework operationalization..... 13
    - 6.4.4 Perform corrective actions on product line maturity framework operationalization..... 13
- 7 Product line maturity framework operationalization..... 14
  - 7.1 General..... 14
  - 7.2 Preparation for product line maturity framework adoption..... 14
    - 7.2.1 Principal constituents..... 14
    - 7.2.2 Identify participants for product line maturity framework operationalization..... 15
    - 7.2.3 Mobilize resources for product line maturity framework operationalization..... 15
    - 7.2.4 Identify organization-specific requirements for product line maturity framework..... 15
    - 7.2.5 Adopt the best fit product line maturity framework for the organization..... 15
  - 7.3 Product line maturity framework construction..... 16
    - 7.3.1 Principal constituents..... 16
    - 7.3.2 Construct a product line maturity framework that best fits for the organization..... 16
    - 7.3.3 Define processes and measures of product line maturity framework..... 17
    - 7.3.4 Define roles and responsibilities for the processes and measures of product line maturity framework..... 17
    - 7.3.5 Determine a roadmap and improvement path for product line maturity framework..... 17

7.3.6	Document the constructed product line maturity framework.....	17
7.4	Product line maturity framework training.....	17
7.4.1	Principal constituents.....	17
7.4.2	Decide product line training modules of product line maturity framework.....	18
7.4.3	Synchronize PL training modules with PL organizational improvement needs.....	18
7.4.4	Provide training on product line maturity framework.....	19
7.4.5	Verify effectiveness of product line maturity framework training.....	19
7.5	Product line maturity framework operation.....	19
7.5.1	Principal constituents.....	19
7.5.2	Decide product line operational components for product line maturity framework.....	20
7.5.3	Synchronize operational components for organization-specific improvement requirements.....	21
7.5.4	Execute operational components for product line maturity framework.....	21
7.5.5	Measure effectiveness of product line maturity framework operation.....	21
7.5.6	Document the results of product line maturity framework operation.....	21
7.6	Product line maturity framework appraisal.....	22
7.6.1	Principal constituents.....	22
7.6.2	Decide PL appraisal components of product line maturity framework.....	23
7.6.3	Synchronize appraisal components for organizational improvement requirements.....	23
7.6.4	Execute product line maturity framework appraisal components.....	23
7.6.5	Verify effectiveness and efficiency of product line maturity framework appraisal.....	23
7.6.6	Document the application results of product line maturity framework.....	23
7.7	Product line maturity framework improvement.....	24
7.7.1	Principal constituents.....	24
7.7.2	Collate product line maturity framework adoption and operation results.....	24
7.7.3	Analyse product line maturity framework adoption and operation results with product line objectives.....	25
7.7.4	Improve product line maturity framework for resolving issues.....	25
7.7.5	Report product line maturity framework improvement results.....	25
<b>8</b>	<b>Product line maturity framework support.....</b>	<b>26</b>
8.1	General.....	26
8.2	Quality assurance for product line maturity framework.....	26
8.2.1	Principal constituents.....	26
8.2.2	Objectively evaluate product line maturity framework enabled for domain engineering.....	27
8.2.3	Objectively evaluate product line maturity framework enabled for application engineering.....	27
8.2.4	Communicate quality and non-compliance issues of product line maturity framework.....	27
8.3	Decision support for product line maturity framework.....	28
8.3.1	Principal constituents.....	28
8.3.2	Establish comprehensive references to product line maturity framework and its applications.....	28
8.3.3	Tailor decision procedure for product line maturity framework.....	28
8.3.4	Guide decision-making for product line maturity framework.....	29
8.3.5	Document the rationale for decisions made regarding product line maturity framework.....	29
8.4	Information and data management for product line maturity framework.....	29
8.4.1	Principal constituents.....	29
8.4.2	Collect data for addressing concerns related to product line maturity.....	30
8.4.3	Structure and process the captured data of product line maturity.....	30
	<b>Annex A (Informative) Exemplary product line maturity framework.....</b>	<b>31</b>
	<b>Bibliography.....</b>	<b>33</b>