

ISO/IEC 26550:2015-12 (E)

Software and systems engineering - Reference model for product line engineering and management

Contents		Page
Foreword		v
Introduction		vi
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	From single-system engineering and management toward product line engineering and management	6
4.1	Challenges product companies face in the use of single-system engineering and management	6
4.2	Variability management	7
4.3	Key differentiators between single-system engineering and management and product line engineering and management	7
5	Reference model for product line engineering and management	9
5.1	General	9
5.2	Product line reference model	10
6	Two life cycles and two process groups for product line engineering and management ...	12
6.1	Domain engineering life cycle	12
6.1.1	Product line scoping	12
6.1.2	Domain requirements engineering	12
6.1.3	Domain design	13
6.1.4	Domain realization	14
6.1.5	Domain verification and validation	15
6.2	Application engineering life cycle	16
6.2.1	Application requirements engineering	16
6.2.2	Application design	16
6.2.3	Application realization	17
6.2.4	Application verification and validation	18
6.3	Organizational management process group	19
6.3.1	Organizational-level product line planning	19
6.3.2	Organizational product line-enabling management	21
6.3.3	Organizational product line management	21
6.4	Technical management process group	22
6.4.1	Process management	22
6.4.2	Variability management	23
6.4.3	Asset management	24
6.4.4	Support management	25
7	Relationships within and between domain engineering and application engineering	25
7.1	Interrelations between product line scoping and domain requirements engineering	25
7.2	Interrelations between domain requirements engineering and domain design	26
7.3	Interrelations between domain design and domain realization	26
7.4	Interrelations between domain requirements engineering and domain verification and validation	27
7.5	Interrelations between domain design and domain verification and validation	27

7.6	Interrelations between domain realization and domain verification and validation	28
7.7	Interrelations between product line scoping and application requirements engineering	28
7.8	Interrelations between domain requirements engineering and application requirements engineering	29
7.9	Interrelations between domain design and application design	29
7.10	Interrelations between domain realization and application realization	30
7.11	Interrelations between domain verification and validation and application verification and validation	30
7.12	Interrelations between application requirements engineering and application design	31
7.13	Interrelations between application design and application realization	31
7.14	Interrelations between application requirements engineering and application verification and validation	32
7.15	Interrelations between application design and application verification and validation	32
7.16	Interrelations between application realization and application verification and validation	33
Annex A (informative) Further information on products		34
Bibliography		35