## ISO/IEC 26550:2015-12 (E)

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

Normative references	Cont	Contents		
Normative references	Forewo	ord	v	
Normative references	Introdu	ıction	vi	
From single-system engineering and management toward product line engineering and management	1	Scope	1	
From single-system engineering and management toward product line engineering and management	2	Normative references	1	
management	3	Termsanddefinitions	2	
Challenges product companies face in the use of single-system engineering and management	4			
4.2 Variability management 4.3 Key differentiators between single-system engineering and management and product line engineering and management	4.1	Challenges product companies face in the use of single-system engineering and		
Key differentiators between single-system engineering and management and product line engineering and management	4.2	Variability management	7	
5.1 General	4.3	Key differentiators between single-system engineering and management and product		
Two life cycles and two process groups for product line engineering and management12 5.1 Domain engineering life cycle	5	Reference model for product line engineering and management	9	
Two life cycles and two process groups for product line engineering and management				
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 verification and validation       14         6.1.5       Domain verification and validation       15         6.2       Application requirements engineering       16         6.2.1       Application design       16         6.2.2       Application design       16         6.2.3       Application design       16         6.2.4       Application verification and validation       17         6.2.3       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         6.4.1       Process management process group       22         6.4.2       Variability management process group       22         6.4.3       Asset management       22         6.4.4       Support managem	5.2	Product line reference model	10	
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         6.2.2       Application verification and validation       17         6.2.3       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         6.4.1       Technical management process group       22         6.4.2       Variability management       22         6.4.3       Asset management       22         6.4.4       Support management       24         6.4.5       Variability management       25         7       Relationships within and between dom	6			
6.1.2       Domain requirements engineering       12         6.1.3       Domain design       13         6.1.4       Domain verification       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 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       Interr	-			
6.1.3Domain design136.1.4Domain realization146.1.5Domain verification and validation156.2Application engineering life cycle166.2.1Application requirements engineering166.2.2Application design166.2.3Application realization176.2.4Application verification and validation186.3Organizational management process group196.3.1Organizational-level product line planning196.3.2Organizational product line-enabling management216.3.3Organizational product line management216.4Technical management process group226.4.1Process management226.4.2Variability management236.4.3Asset management236.4.4Support management246.4.5Support management257Relationships within and between domain engineering and application engineering257.1Interrelations between product line scoping and domain requirements engineering257.2Interrelations between domain requirements engineering and domain verification and267.4Interrelations between domain requirements engineering and domain verification and267.4Interrelations between domain requirements engineering and domain verification and27				
6.1.4Domain realization146.1.5Domain verification and validation156.2Application engineering life cycle166.2.1Application requirements engineering166.2.2Application design166.2.3Application realization176.2.4Application verification and validation186.3Organizational management process group196.3.1Organizational-level product line planning196.3.2Organizational product line-enabling management216.3.3Organizational product line management216.4Technical management process group226.4.1Process management226.4.2Variability management236.4.3Asset management236.4.4Support management246.4.5Support management257Relationships within and between domain engineering and application engineering257.1Interrelations between domain requirements engineering and domain design267.2Interrelations between domain requirements engineering and domain verification and267.4Interrelations between domain requirements engineering and domain verification and267.4Interrelations between domain requirements engineering and domain verification and27				
6.1.5Domain verification and validation156.2Application engineering life cycle166.2.1Application requirements engineering166.2.2Application design166.2.3Application realization176.2.4Application verification and validation186.3Organizational management process group196.3.1Organizational-level product line planning196.3.2Organizational product line-enabling management216.3.3Organizational product line management216.4Technical management process group226.4.1Process management226.4.2Variability management236.4.3Asset management246.4.4Support management257Relationships within and between domain engineering and application engineering257.1Interrelations between product line scoping and domain requirements engineering257.2Interrelations between domain design and domain realization267.4Interrelations between domain requirements engineering and domain verification and267.4Interrelations between domain requirements engineering and domain verification and267.4Interrelations between domain requirements engineering and domain verification and27				
Application engineering life cycle	-			
Application requirements engineering				
Application design				
Application realization				
Application verification and validation				
6.3Organizational management process group196.3.1Organizational-level product line planning196.3.2Organizational product line-enabling management216.3.3Organizational product line management216.4Technical management process group226.4.1Process management226.4.2Variability management236.4.3Asset management246.4.4Support management257Relationships within and between domain engineering and application engineering257.1Interrelations between product line scoping and domain requirements engineering257.2Interrelations between domain requirements engineering and domain design267.3Interrelations between domain design and domain realization267.4Interrelations between domain requirements engineering and domain verification and validation26				
6.3.1Organizational-level product line planning196.3.2Organizational product line-enabling management216.3.3Organizational product line management216.4Technical management process group226.4.1Process management226.4.2Variability management236.4.3Asset management246.4.4Support management257Relationships within and between domain engineering and application engineering257.1Interrelations between product line scoping and domain requirements engineering257.2Interrelations between domain requirements engineering and domain design267.3Interrelations between domain design and domain realization267.4Interrelations between domain requirements engineering and domain verification and validation27				
Organizational product line-enabling management				
6.3.3Organizational product line management216.4Technical management process group226.4.1Process management226.4.2Variability management236.4.3Asset management246.4.4Support management257Relationships within and between domain engineering and application engineering257.1Interrelations between product line scoping and domain requirements engineering257.2Interrelations between domain requirements engineering and domain design267.3Interrelations between domain design and domain realization267.4Interrelations between domain requirements engineering and domain verification and validation27				
Technical management process group				
6.4.1 Process management				
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				
Asset management				
Relationships within and between domain engineering and application engineering25 Interrelations between product line scoping and domain requirements engineering25 Interrelations between domain requirements engineering and domain design26 Interrelations between domain design and domain realization				
7.1 Interrelations between product line scoping and domain requirements engineering25 7.2 Interrelations between domain requirements engineering and domain design	6.4.4			
7.1 Interrelations between product line scoping and domain requirements engineering25 7.2 Interrelations between domain requirements engineering and domain design	7	Relationships within and between domain engineering and application engineering	25	
7.2 Interrelations between domain requirements engineering and domain design	7.1			
7.3 Interrelations between domain design and domain realization	7.2			
7.4 Interrelations between domain requirements engineering and domain verification and validation27	7.3			
	7.4	Interrelations between domain requirements engineering and domain verification and		
	7.5	Interrelations between domain design and domain verification and validation		

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	
7.11	Interrelations between domain verification and validation and application verification	
	and validation	30
7.12	Interrelations between application requirements engineering and application design	
7.13 In	terrelations between application design and application realization	31
7.14	Interrelations between application requirements engineering and application verification	n
	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	
Annex	A (informative) Further information on products	34
Bibliog	ıraphy	35