

ISO 19440:2020-05 (E)

Enterprise modelling and architecture - Constructs for enterprise modelling

Contents		Page
Foreword		vi
Introduction		viii
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Abbreviated terms	11
	4.1 General	11
	4.2 Construct-specific	11
5	Representations, relationships, roles and common concepts	12
	5.1 Modelling language constructs, purpose and applicability	12
	5.2 Dimensions of enterprise models	13
	5.2.1 Dimension of genericity	13
	5.2.2 Dimension of enterprise model phase	13
	5.2.3 Dimension of enterprise model views	13
	5.3 Construct representation	13
	5.4 Common structure for modelling language constructs	14
	5.5 Template for modelling language constructs	14
	5.6 Referential integrity	15
	5.7 Representation of attributes	17
	5.8 Notation used to describe template contents	17
	5.9 Support for modelling phases	18
	5.10 Representation of relationships	19
	5.11 Specializations	19
	5.12 Complementary concepts	20
6	Conceptual structure	20
	6.1 The four-component model	20
	6.2 Meta-model component	21
	6.3 Core component	22
	6.4 Derivations component	24
	6.5 Views component	25
7	Core constructs	26
	7.1 Domain	26
	7.1.1 Purpose	26
	7.1.2 Description	26
	7.1.3 Usage	26
	7.1.4 Construct template for Domain	26
	7.2 Business Process	28
	7.2.1 Purpose	28
	7.2.2 Description	28
	7.2.3 Usage	29
	7.2.4 Construct template for Business Process	29
	7.2.5 Behavioural rules	30
	7.3 Enterprise Activity	31
	7.3.1 Purpose	31
	7.3.2 Description	31
	7.3.3 Usage	31
	7.3.4 Construct template for Enterprise Activity	32
	7.4 Service	34

7.4.1	Purpose.....	34
7.4.2	Description.....	34
7.4.3	Usage.....	34
7.4.4	Construct template for Service.....	35
7.5	Event.....	37
7.5.1	Purpose.....	37
7.5.2	Description.....	37
7.5.3	Usage.....	37
7.5.4	Construct template for Event.....	37
7.6	Enterprise Object.....	38
7.6.1	Purpose.....	38
7.6.2	Description.....	38
7.6.3	Usage.....	38
7.6.4	Construct template for Enterprise Object.....	39
7.7	Enterprise Object View (Object View).....	40
7.7.1	Purpose.....	40
7.7.2	Description.....	40
7.7.3	Usage.....	40
7.7.4	Construct template for Object View.....	40
7.8	Organizational Unit.....	41
7.8.1	Purpose.....	41
7.8.2	Description.....	41
7.8.3	Usage.....	41
7.8.4	Construct template for Organizational Unit.....	42
7.9	Decision Centre.....	43
7.9.1	Purpose.....	43
7.9.2	Description.....	43
7.9.3	Usage.....	43
7.9.4	Construct template for Decision Centre.....	43
7.10	Role.....	45
7.10.1	Purpose.....	45
7.10.2	Description.....	45
7.10.3	Usage.....	45
7.10.4	Construct template for Role.....	45
7.11	Product.....	46
7.11.1	Purpose.....	46
7.11.2	Description.....	46
7.11.3	Usage.....	46
7.11.4	Construct template for Product.....	47
7.12	Order.....	48
7.12.1	Purpose.....	48
7.12.2	Description.....	48
7.12.3	Usage.....	48
7.12.4	Construct template for Order.....	49
7.13	Resource.....	50
7.13.1	Purpose.....	50
7.13.2	Description.....	50
7.13.3	Usage.....	51
7.13.4	Construct template for Resource.....	51
7.14	Capability.....	53
7.14.1	Purpose.....	53
7.14.2	Description.....	53
7.14.3	Usage.....	53
7.14.4	Construct template for Capability.....	53
7.15	Performance Indicator.....	54
7.15.1	Purpose.....	54
7.15.2	Description.....	54
7.15.3	Usage.....	55
7.15.4	Construct template for Performance Indicator.....	55
7.16	Template attributes for core constructs.....	56
8	Derived constructs.....	57
8.1	Overview.....	57

8.2	Derivations for a manufacturing-oriented enterprise	58
8.2.1	Purpose	58
8.2.2	Use of core constructs	58
8.2.3	Manufacturing derivations and core constructs	59
8.3	Derivations for a service-oriented enterprise	61
8.3.1	Purpose	61
8.3.2	Service system suppliers	61
8.3.3	Use of core constructs	61
8.3.4	Service derivations and core constructs	62
8.4	Derived constructs	63
8.4.1	Organizational Role	63
8.4.2	Operational Role	64
8.4.3	Person Profile	65
8.4.4	Stakeholder	67
8.4.5	User	68
8.4.6	Co-provider	69
8.4.7	Functionality	69
Annex A (normative) Behavioural rules — Detailed description and syntax		71
Annex B (informative) Model views		85
Bibliography		110