	A B C		D	E	F G	
1						Model Feature
	Feature Group	Feature GroupFeature NameFeature Definition		Feature Attribute	Attribute Definition	Model 1
2	Identifies t	 he main subject (or focus of the model			
5	Model	Madel Madeled Support of Tocus of the model			Name of system of interest	
	Identity	of Interest	model describes.	Interest	or class of systems of	
4	and Focus				interest	
	Modeled Identifies the type of external D		Domain	Name(s) of modeled		
		Environmental	environmental domain(s) that this	Type(s)	domains (manufacturing,	
5		Domain	model includes.		distribution, use, etc.)	
6	Describes t	the scope of cont	ent of the model			
	Model	Modeled	The capability of the model to	Stakeholder	Classes of covered	
	Scope of	Stakeholder	describe fitness or value of the	Туре	stakeholders (may be	
	Content	Value	System of Interest, by identifying its		multiple)	
-			stakeholders and modeling the			
/	-	Modeled System	The capability of the model to			
		Fyternal (Black	represent the objective external			
		Box) Rehavior	("hlack hox") technical behavior of			
		Boxy Benavior	the system, through significant			
			interactions with its environment.			
			based on modeled input-output			
			exchanges through external			
			interfaces, quantified by technical			
			performance measures, and varying			
8			behavioral modes.			
		Explanatory	The capability of the model to			
		Decomposition	represent the decomposition of its			
			external technical behavior, as			
			explanatory internal ("white box")			
			internal interactions of decomposed			
			roles, further quantified by internal			
			and varying internal behavioral			
9			modes			
	-	Physical	The capability of the model to			
		Architecture	represent the physical architecture			
			of the system of interest. This			
			includes identification of its major			
			physical components and their			
10			architectural relationships.			
		Parametric	The capability of the model to			
		Couplings	represent quantitative (parametric)			
		Fitness	couplings between stakeholder-			
			valued measures of effectiveness			
			and objective external black box			
			behavior performance measures.			
11						

s Pattern Configuration Planning Form							
	Model 2						

	А	B C		D	E	F G
1	Feature					Model Features
2	Group	Feature Name	Feature Definition	Attribute	Attribute Definition	Model 1
12		Parametric Couplings Decomposition	The capability of the model to represent quantitative (parametric) couplings between objective external black box behavior variables and objective internal white box behavior variables.			
13		Parametric Couplings Characterizatio n	The capability of the model to represent quantitative (parametric) couplings between objective behavior variables and physical identity (material of construction, part or model number).			
14		Managed Model Datasets	The capability of the model to include managed datasets for use as inputs, parametric characterizations, or outputs	Dataset Type	The type(s) of data sets (may be multiple)	
15		Trusted Configurable Pattern	The capability of the model to serve as a configurable pattern, representing different modeled system configurations across a common domain, spreading the cost	Configuratio n ID	A specific system of interest configuration within the family that the pattern framework can represent.	
16			of establishing trusted model frameworks across a community of applications and configurations.	Pattern ID	The identifier of the trusted configurable pattern.	
17		Failure Modes and Effects	The capability of the model to include identification and analysis of system failure modes, their impact effects, causes, and liklihoods of occurrence.			
18	Describes t	he credibility of	the model			
19	Model Credibility	Model Envelope	The capability of the model to meet its Model Credibility requirements over a stated range (envelope) of dynamical inputs, outputs, and parameter values.	Model Application Envelope	The range over which the model is intended for use.	
20		Validated Conceptual Model Credibility	The validated capability of the conceptual portion of the model to represent the System of Interest, with acceptable Credibility.	Quantitative Accuracy Reference	The specification reference describing the quantitative accuracy of the conceptual model compared to the system of interest.	

	Н
s Pattern C	onfiguration Planning Form
	Model 2

	A B C		D	E	F G	
1	Feature	Feature Name	Feature Definition	Feature	Attribute Definition	Model Feature
2	Group			Attribute		Model 1
				Function	The specification reference	
				Structure	describing the structural	
				Accuracy	(presence or absence of	
				Reference	behaviors) accuracy of the	
					conceptual model	
					interest	
21					interest.	
				Uncertainty	The specification reference	
				Quantificatio	describing the degree of	
				n (UQ)	uncertainty of the	
				Reference	Credibility of the	
					conceptual model to the	
22				Madal	system of interest.	
				Model	I he reference	
				Reference	validation of the	
				Reference	conceptual model's	
					Credibility to the system of	
23					interest.	
		Verified	The verified capability of the	Quantitative	The specification reference	
		Executable	executable portion of the model to	Accuracy	describing the quantitative	
		Model	represent the System of Interest,	Reference	accuracy of the executable	
24		Credibility	with acceptable Credibility.		model to the conceptual	
24				Structural	Model. The specification reference	
				Accuracy	describing the structural	
				Reference	(presence or absence of	
					elements) accuracy of the	
					executable model to the	
					conceptual model.	
25				TT		
				Uncertainty	The specification reference	
				Quantificatio	describing the degree of	
26						
				Speed	The specification reference	
					describing the execution	
					run time (speed) for the	
27					executable model.	
	1			Quantization	The specification reference	
					describing the	
					quantization error of the	
28					executabl e model.	

	Н							
es Pattern Configuration Planning Form								
	Model 2							

	А	В	С	D	E	F G
						Model Features
	Eastura			Footuro		
	reature	Feature Name	Feature Definition	Feature	Attribute Definition	
	Group			Attribute		Model 1
	2					
				Stability	The specification reference	
				5	describing the level of	
					stability of the accuracy	
					and uncertainty of the	
					executable model error	
2	9				characteristics	
	-			Model	The reference	
				Validation	documenting the	
				Poforonco	vorification of the	
				Kelelellelle	oversuitable model's	
					Cradibility to the	
	0				credibility to the	
3					conceptual model.	
1	1 Identifies th	le type of repres	multiplication used by the model			
	Model	Conceptual	The capability of the conceptual	Conceptual	The type of conceptual	
	Representa	Model	portion of the model to represent	Model	modeling language or	
	tion	Representation	the system of interest, using a	Representati	metamodel used.	
3	2		specific type of representation.	on Type		
				Conceptual	The degree of	
				Model	interoperability of the	
				Interoperabi	conceptual model, for	
				lity	exchange with other	
З	3				environments	
		Executable	The capability of the executable	Executable	The type of executable	
		Model	portion of the model to represent	Model	modeling language or	
		Representation	the system of interest, using a	Representati	metamodel used.	
Э	4		specific type of representation	on Type		
				Executable	The degree of	
				Model	interoperability of the	
				Interoperabi	executable model, for	
				lity	exchange with other	
Ξ	5				environments	
Э	6 Describes t	he intended use,	, utility, and value of the model	-		
	Model	Model Intended	The intended purpose(s) or use(s) of	Life Cycle	The intended life cycle	
	Utility	Use	the model.	Process	management process to be	
				Supported	supported by the model,	
					from the ISO15288	
					process list. More than one	
Э	7				value may be listed.	
		Perceived	The relative level of value ascribed	User Group	The identify of using group	
Э	8	Model Value	to the model, by those who use it for	Segment	segment (multiple)	
		and Use	its stated purpose.	Level of	The relative level of annual	
				Annual Use	use by the segment	
3	9					
				Value Level	The value class associated	
					with the model by that	
4	0				segment	

	Н
res Pattern Co	onfiguration Planning Form
	Model 2

	А	В	С	D	E	G	Н
1						Model Features Pattern Co	onfiguration Planning Form
_	Feature Group	Feature Name	Feature Definition	Feature Attribute	Attribute Definition	Model 1	Model 2
2							
		Third Darty	The degree to which the model is	Acconting	The identity (may be		
		Accontance	acconted as authoritative, by third	Accepting	multiple) of regulators		
		Acceptance	accepted as authoritative, by third	Authority	agencies sustements,		
			party regulators, customers, supply		agencies, customers,		
11			chains, and other entities, for its		supply chains, accepting		
41		Model Ease of	stated purpose.	Donacius	the model		
		Model Ease of	The perceived ease with which the	Perceivea	High, Medium Low		
40		Use	model can be used, as experienced	Model			
42	Deeerstikeers	-lated d - 1 1:6:	by its intended users	Complexity			
43	Describes r	elated model life	e cycle management capabilities	014			
	Model Life	Model	The capability of the model to	CM	The type(s) of CM		
	Cycle	Versioning and	provide for version and	Capability	capabilities included (may		
	Manageme	Configuration	configuration management.	Туре	be multiple)		
	nt	Management					
44							
		Executable	The capability of the model to be	IT	The type(s) of IT		
		Model	compatibly supported by specified	Environmen	environments or		
		Environmental	information technology	tal	standards supported		
		Compatibility	environment(s), indicating	Component			
			compatibility, portability, and				
45			interoperability.				
		Model Design	The capability of the model to be	Design Life	The planned retirement		
		Life and	sustained over an indicated design		date		
46		Retirement	life, and retired on a planned basis.				
		Model	The relative ease with which the	Maintenance	The type of maintenance		
		Maintainability	model can be maintained over its	Method	methodology used to		
			intended life cycle and use, based on		maintain the model's		
			capable maintainers, availability of		capability and availability		
			effective model documentation, and		for the intended purposes		
			degree of complexity of the model		over the intended life		
47					cycle.		
		Model	The capability of the model to	Deployment	The type of method used		
		Deployability	support deployment into service on	Method	to deploy (possibly in		
			behalf of intended users, in its		repeating cycles) the		
			original or subsequent updated		model into its intended use		
48			versions		environment.		
		Model Cost	The financial cost of the model.	Developmen	The cost to develop the		
			including development, operating,	t Cost	model, including its		
			and maintenance cost	~	validation and verification		
					to its first availability for		
					service date		
49							
				Operational	The cost to execute and		
				Cost	otherwise operate the		
				3000	model in standardized		
50					execution load units		
50				Maintenance	The cost to maintain the		
51				Cost	model		
1				0031	mouci		

	А	В	C	D	E F	G	Н
1						Model Features Pattern Co	onfiguration Planning Form
2	Feature Group	Feature Name	Feature Definition	Feature Attribute	Attribute Definition	Model 1	Model 2
52				Deployment Cost	The cost to deploy, and redeploy updates, per cycle		
53				Retirement Cost	The cost to retire the model from service, in a planned fashion		
54				Life Cycle Financial Risk	Risk to the overall life cycle cost of the model		
55		Model Availability	The degree and timing of availability of the model for its intended use, including date of its first availability	First Availability Date	Date when version will first be available		
56			and the degree of ongoing availability thereafter.	First Availability Risk	Risk to the scheduled date of first availability		
57				Life Cycle Availability Risk	Risk to ongoing availability after introduction		
50		VVUQ Pattern Learning	The ability to accumulate new discoveries about model-based methods into the VVUQ Pattern, as it is applied over model life cycles.	VVUQ Pattern Exception	A summary of the exception noted to the current VVUQ Pattern (may be multiple		
58			the existing VVUQ Pattern, and candidates for inclusion into future versions of that pattern.	Impacted VVUQ Feature	The impacted existing, modified, or additional feature of the VVUQ Pattern.		
60				VVUQ Pattern Version	The version of the VVUQ Pattern in current use before change.		
61				Project	Identifies the project in which the exception was noted		
62				Person	Identifies the person describing the exception		