Simulation and Design Requirements

Category	Type / Level	Purpose	Applicable	Not Applicable	Pending definition
Design	Scientific Simulation	Inputs and scientific/engineering equations			Pending
	3D Explanation	Three-dimensional visualization for explanation and understanding	Yes		
	2D Design	Simplified two-dimensional illustration (not applicable here)	Yes		
	Animated 3D	Motion-based 3D design for dynamic explanation			Pending
	CAD Modeling	Detailed computer-aided design models			Pending
	Conceptual Sketch	Initial representation of innovation concepts			Pending
	Functional Prototype (Virtual)	Non-industrial functional digital prototype			Pending
	System Architecture	Structural and functional breakdown of components			Pending
	Flowchart/Diagram	Logical and procedural visualization			Pending
Simulation	Scientific/Mathematical Simulation	Testing concepts with formulas and equations			Pending
	Virtual Simulation	Digital environment testing of models			Pending
	Physical Simulation (Scaled)	Scaled physical experiment or mock-up			Pending
	Real-Time Simulation	Immediate feedback and interaction with system behavior			Pending
	Monte Carlo Simulation	Statistical evaluation through repeated random sampling		No	
	Predictive Simulation	Forecasting outcomes under defined variables		No	
	Operational Simulation	Testing performance under operational conditions	Yes		
	Scenario-Based Simulation	Evaluation across different hypothetical scenarios	Yes		
	Hybrid Simulation	Combination of physical and virtual simulations		No	
	Agent-Based Simulation	Modeling behavior of independent agents within system		No	

Intended for:
1. Innovative Projects
2. Concept Validation
3. Innovation-Oriented Assessment

Note: This process is not intended for industrial design or prototyping, but rather to explain the innovation concept clearly to the Innovation Evaluation Committee.