

Innovation Maturity Levels

Level	Description	Typical activities to be supported in this phase of maturity	Approx. Technology Readiness Level equivalent
1 Initial research	Understanding the problem and exploring possible solutions	Initial industry & market research, Problem investigation and analysis, gathering stakeholder requirements to create the value proposition, Early optioneering of solutions, technology concept/application formulation, risk/opportunity analysis and research	TRL 1-2
2 Concept and feasibility	Developing or testing a concept, designing the solution, and testing the feasibility of solutions	Innovation concept selection and early design, Testing/proving a concept, developing the initial prototype, Defining the approach to enable further detailed testing, and assessing the fundamental feasibility of solution(s) within controlled environments.	TRL 2-4
3 Development and verification	Developing the preferred solution, verifying the design through prototype demonstration in a real-world (or near real world) environment	On or off-site trials of the solution in a near-real or real-world environment, Design risk analysis, including Failure Modes Effects Analysis (FMEA) for future operation, approach to departures (how can we deploy the solution), Testing against operational requirements	TRL 3-6
4 Validation and optimisation	Scaling up the solution for roll-out or commercialisation	Identifying practical routes to market, development of training or education requirements, Large scale or late-stage testing (pilots), Fine-tuning to proven operational concepts, Benefits evaluation, review for approval and deployment, standards, or specification development for the innovation.	TRL 6-8
5 Deployment and post-launch	Implementing or rolling out the solution and assessing its impact	Roll-out and implementation, Standard/specification finalisation and publication, User training or education, Benefits testing and evaluation, Continuous improvement & lessons learnt for future development.	TRL 8-9