DEFENCE DIGITAL ENGINEERING ROADMAP

Australian Government — Defence

STRATEGIC INITIATIVES TO IMPLEMENT DIGITAL ENGINEERING SUPPORTING TRANSFORMATION TO THE INTEGRATED FORCE

HORIZON 1 — 2025
Defence initiates a culture enabling Digital Engineering and starts to develop the workforce needed to drive Digital Engineering adoption

HORIZON 2 — 2026
Defence applies consistent approaches to Digital Engineering enabled by tools and processes where needed

HORIZON 3 — 2027-28
Acquisition and Sustainment programs incrementally transform to model centric ways of working, reducing risk and accelerating capability delivery

These end states will support **broad Digital Engineering (DE) adoption across Defence**

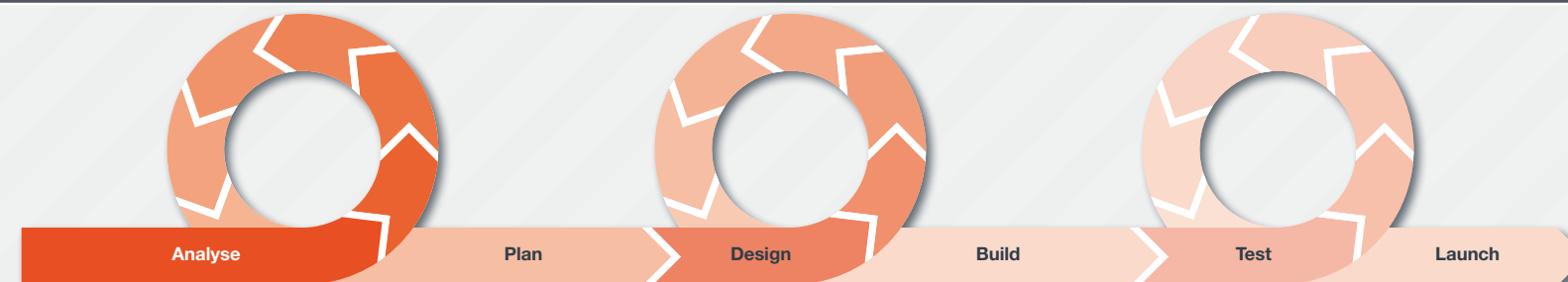|	HORIZON 1 — 2025	HORIZON 2 — 2026	HORIZON 3 — 2027-28	End State
Culture and Workforce	• DE Workforce Competency Framework developed • DE Knowledge Hub created for sharing best practices • DE Awareness Training developed • Industry Advisory Forums established	• Defence-wide DE focused skills uplift established through formal and on-the-job training, mentorships and rotations • Digital Transformation challenges, focus groups, annual conferences with local and international partners established	• Targeted DE workforce development initiatives established • DE literacy programs and training established as an integral component of standard workforce development initiatives	Defence culture and workforce is empowered to deliver digital engineering
Models	• DE Framework developed • Guidance for Digital Model Management, Verification & Validation and procurement developed • Common DE terminology established	• Digital Model Guidebook released • Digital Tool Portfolio established and continuously optimised	• Model Based Sustainment and Supply Chain management demonstrated • Australia collaborates with allies and partners, leveraging DE methods as standard practice	Development, integration, and use of digital models informs decision making and design
Data	• DE Data and Data sharing guiding principles developed • Industry Collaboration Forums on Model & Data management initiated	• DE Data integration Framework developed with Defence Data Custodians • Targeted guidance released for sharing DE data between allies and partners	• DE Data and models developed for Capability Acquisition and Sustainment to consume • Mature Digital Model database fully established	Trusted, enduring, and authoritative data is a fundamental input to digital engineering
Innovation	• DE Pathfinder Program for ingestion of models established in partnership with DSTG, DDG, Industry and Global Partners • Continuous Capability Development and Delivery enabled by modelling • DE models trialled via Joint Force Model pilot program	• Continued technology forecasting to assess military utility of DE innovations • Pathways created to support Group and Services and industry DE innovation efforts • Supercomputing, Artificial Intelligence and Machine Learning evaluated for DE use cases	• DE accelerates Australian sovereign capability development • Fully embedded digital capability acquisition process	Technological innovation is enabled by digital engineering
Environment	• Initial assessment of DE Enterprise tool in Cloud Environment Minimum Viable Capability (MVC) • Cybersecurity risk mitigation plan developed for DE Platforms	• Enterprise DE environment development plan established • Environment pilots initiated	• Collaboration across DE environments of various security classifications established • DE ecosystem fully established to continuously and rapidly evolve technology advancement	Defence's digital environment effectively enables collaboration and performance of digital engineering

Analyse — Plan — Design — Build — Test — Launch

AGILE DELIVERY