

Digital Product Passport Research Paper

Version Control

Version Number	Description	Date	Comments
0.1	Initial content creation for discussion	28 April 26	
0.2	Initial review Digital Engineering Centre – Cristian Poputa	18 May 2026	Review of initial draft sent, to match the 'Born Digital' vision of the NAD-G
0.3	Peer review Digital Engineering – Programme & Commercial Management – Ben Wood	20 May 26	Review to specify commercial and Programme factors.
0.4	General review following TD-Info Call – Richard Burrows	10 Jun 26	Review of specific notes during the TD Info call
0.5	Peer review and recommendation – Dan England	11 Jun 26	Recommendations on final version
0.6	Final review	15 Jun 26	Final review before agreement of task
1.0	For release	17 June 26	With changes agreed 15 June 26

Task Overview

This research task aims to define the vision and requirements for implementing Digital Product Passports (DPP) across the Defence enterprise. While DPPs are emerging as a capability for traceability and circularity traceability and circularity, this initiative seeks to balance their benefits against potential cost, time, quality and digital innovation drivers in the Aerospace, Energy, Space, and Defence sectors.

From a Defence viewpoint this is in response to the Strategic Defence Review¹ and Defence Industrial Strategy², which emphasise accelerated delivery, digitally native capabilities, and the transformation of acquisition and industry engagement delivery models, of which accountability falls under the remit of the National Armaments Director Group (NAD-Group) within the MoD for acquisition programmes.

Governance

Key Roles and Personnel:

- MOD Task Sponsor:
 - o Digital Engineering Centre (DEC)
 - Simon Masley (Team Lead)
- Task Delivery Team:
 - o MoD Technical Leads/Digital Engineering Centre (DEC) - Richard Burrows
 - o Industry: Rolls Royce Plc. Neal Palmer
- TD Info Support: Steve Green

Background

DPPs are emerging globally to address traceability, provenance, counterfeit prevention, and circularity. While mandated in selected civilian sectors (Battery, Clothing etc.), Defence presents unique constraints:

- Sovereign design requirements
- Classified and export-controlled data
- Long in-service lives and legacy platforms
- Complex, multi-tier supply chains

¹ [Strategic Defence Review 2025](#)
² [Defence Industrial Strategy](#)

Context

Digital Product Passports originated to address country of origin, traceability, counterfeit goods, and ESG/circular supply needs. While already mandated for batteries and clothing, their application in Defence is expanding into a de facto method for sharing life cycle data across organizations.

UK Defence is seeking to improve data interoperability, strengthen supply chain resilience, support digital transformation and increase data value across the lifecycle of its capabilities. This has increased interest in approaches that can improve information continuity and provide greater visibility of product related information.

Task

The task team will complete research to evaluate sector strategies of current practices, quality standards/procurement, operational processes and high-level architectural approaches to DPP to create a framework for Defence adoption.

This includes clarifying:

- What data must be captured, at what fidelity, and when
- How interoperability and data quality assurance can be achieved
- Where DPPs provide clear defence value add versus through-life cost

Key Activities (16 Week Schedule):

- Scope & Bound: Define the Defence DPP vision and primary challenges.
- Literature Review: Conduct a cross-sector review of DPP practices.
- Framework Development: Establish best practices for a DPP strategy.
- Gap Analysis: Map findings against existing Defence Cyber security and Digital Twin initiatives.
- Final Documentation: Detail conclusions, recommendations, and next steps.

Timeline & Outputs

Duration: Indicative July 2026 – October 2026 – planned 16 weeks from call to action scheduled for 1 July 26 plus potential break for summer holidays

Primary Outputs:

- Concise technical paper defining:
 - Define Defence DPP use cases
 - Engineering constraints and expectations
 - Recommendations for future
- Supporting presentation for Defence and wider Industry Sectors

Distribution:

- TD Info Out Brief
- TD Info digital repository (public)
- Targeted MOD and Industry forums

Ways of Working:

- Collaborative: Content is created and peer-reviewed jointly by participants.
- Agile: Progress is managed through regular 'Teams' touchpoint engagements.
- Open Access: All outputs will be publicly available and released under a Creative Commons license.

- Primary Output: A short paper and presentation detailing the Defence challenge and recommended development frameworks.
- Distribution: Findings will be presented at a TD-Info Out Brief, made available on the TD-Info website, and distributed to selected MOD and Industry groups.

Task Team:

The team will be formed from volunteers across the defence enterprise in the following roles:

- Accountable: Leads (0.5- 1 day per week)
- Responsible: Authors (0.5-1 day per week producing content for sections of the report)
- Consulted: Users and developers of DPP who wish to share experience in form of papers and case studies
- Informed: Defence wide stakeholders who want to receive and exploit the output.

Notes:

1. This work is conducted without commitment or prejudice; it is not an indication of future funding or programme intent
2. Time commitments listed are indicative not prescriptive. Appropriate time commitments should be in line with delivery needs and any reasonable adjustments.
3. All outputs will be published under creative commons