

Team Defence Executive Team – Townhall

27th June 2023

10:45-14:45

Thornbury Leisure Centre

Agenda



Agenda Item	TDI Lead(s)	Lead		Duration
Meeting Opens		All	Standard	1045-1100
Welcome and Introductions, Townhall background & purpose		Chairman: Matt Tribble	Standard	1100 – 1105
MoD Update		Steve Lammiman (dialing-in),	Standard	1105 - 1115
TDI Update		Phil Williams	Standard	1115 – 1120
TAMPA		Stu Olden		1120 – 11:35
Strategic Asset Management & ILS to IPS Transition	Leyton Lark	Ryan Griffin	Townhall	1135 -11:55
Availability Centers	TBC	Kevin Marlow	Townhall	11:55 – 12:15
Support Advantage Charter Actions	Julian Dayment		Townhall	12:15 – 12:35
Supportability Modelling Strategy	Frank Murphy	Darron Jackson		12:35 - 1300
Lunch/networking				1300 – 1345
Vanguard	Jack Thompson/Philippa Arter	Louise Hakner	Townhall	13:45 –14:00
Secure by Design		Jason Impey /Karen Dooley	Townhall	1345 – 1400
DI23 & future events	Phil Williams		Standard	1425 - 1430
AoB	Chairmen		Standard	1430 – 1440
Closing Comments, initial feedback on townhall and DoNM	Chairmen		Standard	1440 - 1445



Welcome and Introductions

Matt Tribble

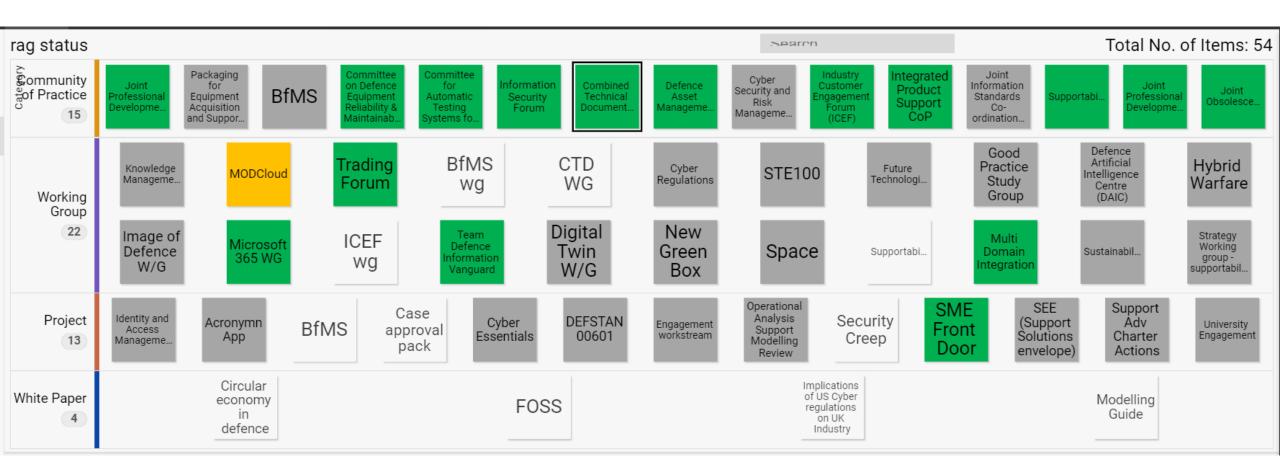


MOD Update
Steve Lammiman

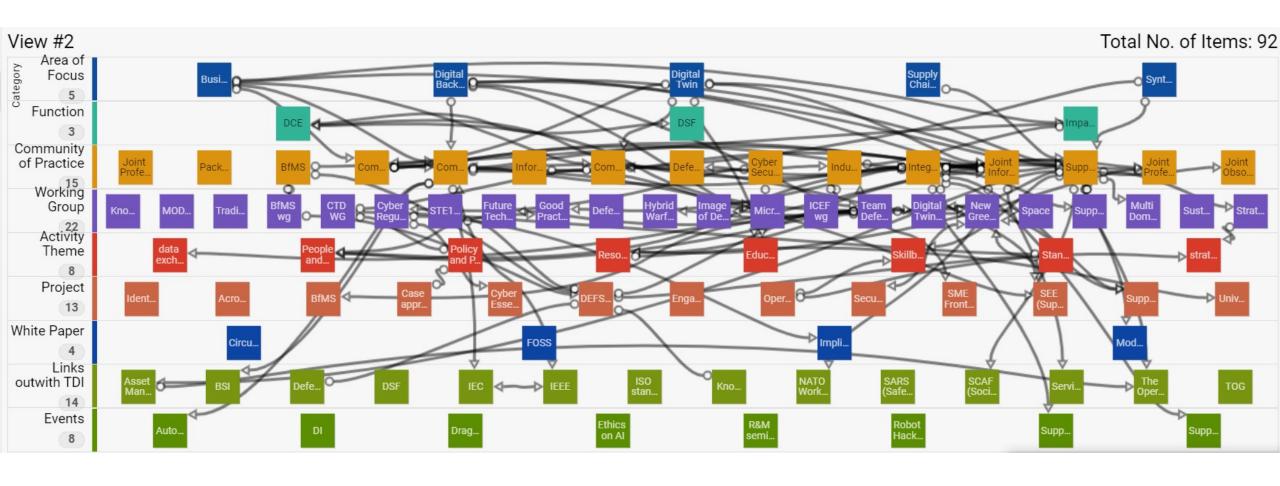


TDI UpdatePhil Williams











Day One - 5 July 2023 - Digitising Defence

09.00-09.05	Welcome and Introduction	Phil Williams, MD, TD-Info			
Tran	sformation and Acquisition - Panel Chair: Vicki Saward, Global Campaig	n Director, Cyber & Information Advantage, QinetiQ			
09.05-09.25	Delivering the Digital Transformation across Defence through the	Major General Richard Spencer, Defence Digital, Director			
	Service Executive approach	Delivery: Intelligence and Expeditionary Services, MOD			
09.25-10.05	Acquisition for the Digital Age – Commercial X for fast-paced	Dina Kakaras, Defence Digital, Commercial Head of Software			
	technology acquisition and Supplier engagement	MOD			
10.05-10.25	Industry response to Acquisition and Transformation	Jim Scott, Head of Strategic Engagement, Strategic Systems Lockheed Martin UK			
10.25 - 10.45	Panel Discussion	Chair: Vicki Saward, Global Campaign Director, Cyber & Information Advantage, QinetiQ			
10.45-11.10	Break – Please Visit the Exhibition				
	Panel Chair: Phil Richardson, Google Cloud Public Sector Defence Account				
11.10-11.15	Setting the Scene	Phil Richardson, Google Cloud Public Sector Defence Accoun			
11.15-11.45	The concept, principles and capabilities of an effective Enterprise	David Thompson, Account Executive, UKI Engineering,			
	'Data Fabric' and how this is brought to life practically through	Aerospace, Defence, Intelligence, Appian Corporation and D			
	building a Data Fabric within a Group wide Digital Transformation	Richard Drake, CTO Babcock Group -			
11.45-12.05	Attitudes, Behaviours and Culture (ABC) around Knowledge,	Dr Dominic Davies - Chief of S&T Knowledge Management			
	Information and Data (KID)	Systems, Dstl			
12.0512.20	Panel Discussion	Chair: Phil Richardson, Google Cloud Public Sector Defence			
12.20-13.00	Lunch - Please Vis	Account it the Exhibition			
	Strategic Intent Panel Chair: Andrew Musgrave, Account Director UK Stra	tegic Command and Space. Thales			
13.00-13.30	The strategic direction for Digital, refreshed Digital Strategy and	Charlie Forte, Chief Information Officer (CIO), MOD			
	focus on delivery				
13.30 -13.50	Refresh of the Digital Strategy for Defence - a more assertive	AVM David Arthurton, Defence Digital, Director for Strategy			
	Digital Functional approach providing clarity on the Digital Backbone and Foundry	and Military Digitisation, MOD			
13.50-14.10	Greater Data - Data curation, governance and exploitation of	Caroline Bellamy, Chief Data Officer, Digital Transformation,			
	data as a strategic asset	CIO Functions Defence Digital, MOD			
14.10 - 14.30	Secure by Design (SbD) as part of the Cyber Resilience Programme (CRP) to enable delivery of a secure Digital ecosystem	Christine Maxwell, Defence Digital, Director Cyber Defence and Resilience, MOD			
14.30 - 14.50	Industry Response to the Strategic Intent	Malcom Carrie, Chief Digital Officer, BAE Systems and DSF Lead			
14.50 - 15.10	Panel Discussion	Chair: Andrew Musgrave, Account Director UK Strategic Command and Space, Thales			
15.10-15.30	Break – Please vis	it the Exhibition			
	Developing Digital Skills – Defence's whole Panel Chair: - Dom Eade, CEO, Vi				
15.30-15.50	Panel Chair: - Dom Eade, CEO, Vi The crucial need to develop digital skills in the increasingly digitally				
15.50-15.50	enabled world of Defence	Claire Fry, Defence Digital Director, Functional Integration, MOD			
15.50-16.10	Skills diversity and non-linear pathways into digital careers	Della-Maria Marinova, Senior Cyber Security Consultant, Atkins			
16.10-16.40	Early career professional perspective	Vanguard			
16.40-16.55	Panel Discussion	Chair Dom Eade, CEO, Vima Group			
16.55-17.00	Wrap Up Day One – Phil Williams, MD, TDInfo - Please Visit the Exhibition				
17.00-20.00	Networking Extra – stand-up drinks and hot buffet				



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Delivery of the Defence Digital Strategy

Day Two -6 July 2023 - Operating Within a Complex, Dynamic and Competitive Environment

09.00-09.05	Welcome to Day Two	Phil Williams, MD, TD-Info				
09.05-9.25	Multi Domain Integration (MDI) - The MOD-Industry Working Group – UK Defence Collaboration	Chris Parker, Director, Government Strategy, Fortinet				
Digital as a Force Multiplier						
Panel Chair: Dave Madigan, Enterprise Architect in MOD IS for Boeing Defence UK						
09.25-10.05	How Digital is being adopted by the Front Line Commands and	Arif Mustafa, CDIO RAF Digital, MOD				
	how this is changing the nature of military operations					
		Brigadier Stefan Crossfield Head Information Exploitation,				
		British Army, MOD				
10.05 - 10.30		Sopra				
10.30-10.45	Panel Debate	Chair: Dave Madigan, Enterprise Architect in MOD IS for				
		Boeing Defence UK				
10.45-11.25	Break - Please Visit	the Exhibition				
	Exploiting Digital Technologies for Campaig	gn Advantage				
	Panel Chair Stuart Dunlop - UK&I Client Executive at Dassault Sy	stèmes for Aerospace & Defence,				
11.25-11.45	 Bringing together the themes of DI23 	David Tagg-Oram, Defence Digital, Head of the Digital				
	 Accelerating the adoption of technology 	Foundry, MOD				
	 Agility in the delivery of software 					
11.45-12.05	Defence Artificial Intelligence Centre (DAIC) at the	Cdre Rachel Singleton, or nominee Defence Digital, Head				
11.43-12.03	forefront of the Digital Transformation	Defence Artificial Intelligence Centre (DAIC), MOD				
	 MOD & Industry working together in new and innovative ways as envisioned in the Defence & 	beteffe Patricia Intelligence Centre (Drie), 1100				
	Security Industrial Strategy					
12.05 - 12.25	Industry Response	Gareth Hetheridge – Leonardo CIO and DSF Lead				
12.25 -12.40	Panel Debate	Chair. Stuart Dunlop - UK&I Client Executive at Dassault				
		Systèmes for Aerospace & Defence				
12.40 -12.45	Closing Remarks and a look ahead to DI24	Phil Williams, MD, TD-Info				
12.45- 13.30	Lunch - Please Visit the Exhibition					



Team Defence Information Townhall

Project Tampa Stu Olden





Project TAMPA 'Chief of Defence Logistics and Support (CDLS) Additive Manufacturing as a service Challenge'





Key MoD Personnel

- UK Strategic Command Defence Support Innovation (Sponsor)
 - Charlotte Robinson Team Leader
 - Joanna Prototapas Project Officer
- DE&S Future Capability Group (Delivery Agent/ Contracting Authority)
 - lain McDowell Project Manager
 - Richard Hamber High Value Manufacturing Centre of Expertise (HVM CoE) Team Leader
 - Alex Champion HVM CoE AdM Technical Lead
 - Alicia Day Commercial Officer





Making the case

Economic argument

"the cost to manufacture a part using AdM is nearly always greater than using a conventional method, or source. But, the cost challenge associated with obsolescence of equipment is significant..."

"...AdM production is also expected to have significant influence on lead time, potentially reducing it to a mere fraction compared to new procurement, substantially improving the operational availability"

 $Vehicle\ downtime = \frac{Initial\ Supply\ Cost}{Days\ in\ service} + \frac{Annual\ repairs\ and\ consumables\ cost}{365\ x\ the\ number\ of\ vehicles\ in\ the\ active\ fleet}$

Daily downtime costs:

- CR2 £1,410 .97.
- T2 £1,203.49.

Case Study 1 – Hose Clamp – Titan

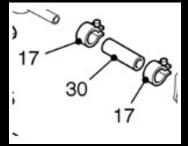
NSN: 4730-99-280-7371

Item Desc: Clamp, hose, fuel leak off

AESP: 2350-F-100_711

SS3 Price: £1.309

On COSL for 197 days



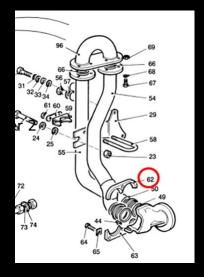
Case Study 2 – Flange – CR2

NSN: 2520-99-826-7373 Item Desc: Flange

AESP: 2350-P-102-711

SS3 Price: £30.29

On COSL for 199 days







Making the case

Potential Benefits

Operational benefits

- Improved platform/ equipment availability
- Reduced lead times

Reduced operating costs

- Less stock
- Fewer warehouses

Positive impact on sustainability

- Fewer warehouses
- Less transportation
- Reduced weight of parts
- Less power/ material used in manufacture





TAMPA BACKGROUND



Key Activities

- Support Industry in addressing constraints relating to design, print file production, certification and Intellectual Property Rights (IPR)
 - AdMaaS Collaborative Working Groups
- Incentivisation necessary to reflect intent agile commercial framework via FCG
 - Spiral development via TAMPA





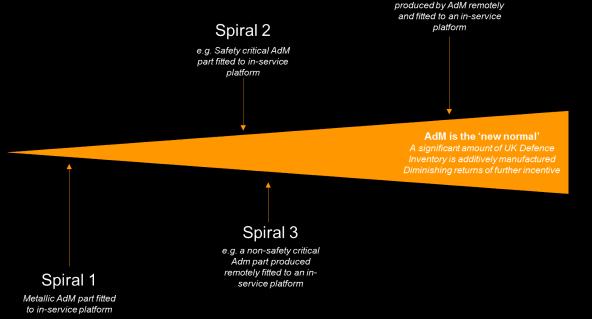
TAMPA BACKGROUND



 Incentivise Industry through competition

In all spirals the bidder chooses part:

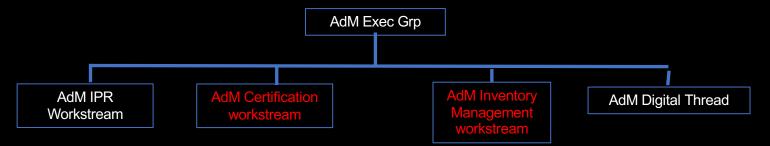
- IPR
- Extant Support Contract
- Familiarity with customer
- Familiarity with supply issues



Delivers:

- Repeatable processes
- Learning From Experience
- Broad exposure/ acceleration
- Facts to undermine opinions
- Access to print files
- Evidence to underpin strategies

 Work collaboratively with Industry to resolve constraints to adoption (AdMaaS WGs)



Spiral 4

e.g. a safety critical part



SPIRAL 1 SUBMISSIONS

Ser	FIRM	NSN	Short Desc	Obsolescent	Lead Time (LT)	LT Anticipated	Share print file	Notes
1	AMFG	1240-99-1353420	Periscope Clamp - T2	Obsolete	4 weeks	1 week	Y	4 months to fitment.
2	AMFG	1015-99-4747348	Wheel Hub Assy Lt Gun	Obsolete	NK	1 week	Υ	No current route to supply. 6 months to fitment
3	AMFG	1015-99-9634850	Gear Selector Lt Gun	Obsolete	NK	1 week	Y	No current route to supply. 7 months to fitment.
4	Babcock	2540-99-9585252	Eyeshaft MH35 Lt Gun	Obsolete	NK	3 months reducing to 3 weeks	У	On COSL 2 demands outstanding
5	Babcock	NK	Buffer cylinder T23 4.5" gun	Obsolete	NK	6 months reducing to 3 weeks	У	Not codified. Pt No 11-454-06- 006-0602-001-001
6	Babcock	1095-99-8030790	Hinge Arm Astute/ DN	No	41 weeks	27 weeks	У	AUSUK implications seeking quicker build processes.
7	NP Aerospace	2590-99-244-9438	Step Brkt Assy LH Cougar	No	7 weeks	2 weeks	Y	
8	NP Aerospace	2540-99-979-2464	Catch Rear Door Assy LH Cougar	No	8 weeks	2 weeks	Υ	
9	RBSL	5340-99-225-5675	Bracket Stop Warrior	No	<9 months	2 months reducing to 2 weeks	Y	
10	RBSL	5340-99-297-8005	Convoy Flag Mntg Bckt Panther	No	6 months	2 months reducing to 2 weeks	Υ	
11	Thales	NK	Sonar 2193 Array Housing Assy - Moored Mine	No	9 months	3 months	Y	Pt No 56633200-AA-003



DELIVERABLES



Identified in Invitation To Tender

- Interim and final reports covering key topics such as:
 - Detail of the task NATO Stock Number (NSN), platform, IPR situation, safety criticality, support contract used
 - Details of the stakeholders MOD DE&S Delivery Team and Front-Line Command (FLC)
 - Issues and risks managed, mitigated and impacted; aka lessons learned
 - Interaction/ feedback from the collaborative AdMaaS WGs
 - Benefits / disbenefits of the change in part manufacturing method i.e. post fitment performance, lead time reduction etc – were the estimated benefit(s) identified at bid achieved?
 - Process used and recommendations for increased scaling
 - Plan for the enduring production of this part via additive and scaling method for similar inventory types OR reasons as to why not (e.g. details of insurmountable key blockers)
- Required Format: WORD documents

The point of this is learning through doing and capturing and sharing that learning. And don't be afraid to share challenges and failures, all is good learning. We're here to unblock the issues with you.



HVM COE AdM Defence Inventory Task

Stu Olden & Joe Marinaccio (Team Defence Information)

Background & Objective



Task Mandate:

• FCG Tasker Additive Manufacturing, Version 1.0, dated 5th April 2023

Background:

- Conducted on behalf of HVM COE, Future Capability Group (FCG) 13 week task, reporting in Aug.
- A need to understand a change in volume of parts that are Additively Manufactured over those that are traditionally
 manufactured, and have these flagged in MOD corporate information Systems (IS) so that the change can be tracked
 and assumed benefits quantified.
- Currently there is no method of identifying how many parts in the Defence inventory are additively manufactured.
- Project TAMPA has identified that there are already additively manufactured parts being provided into the Defence inventory.

Objective:

- This task seeks to capture the extent of the existing number of additively manufactured parts so that they can be flagged in MOD corporate IS (CSIS) so that the change can be monitored and benefits identified in terms of improvements to platform availability.
- Team Defence Information (TDInfo) are supporting the High Value Manufacturing Centre of Expertise (HVM CoE), part of the FCG, by engaging with industry to understand the extent of additive manufactured parts that are, or are planned to be, fitted to in service platforms across all three domains.

Deliverables as set by FCG



Deliverables:

The outputs of this task are as follows:

- A report (this document) that identifies by NSN, Part Number and description the additively manufactured items of inventory:
 - Already being provided into the Defence inventory.
 - Planned to be added into the Defence inventory (that sit outside of TAMPA)

Communication:

- The outcomes will be presented at the subsequent Supply Chain SWG.
- The report will be available for download from the TDInfo website.

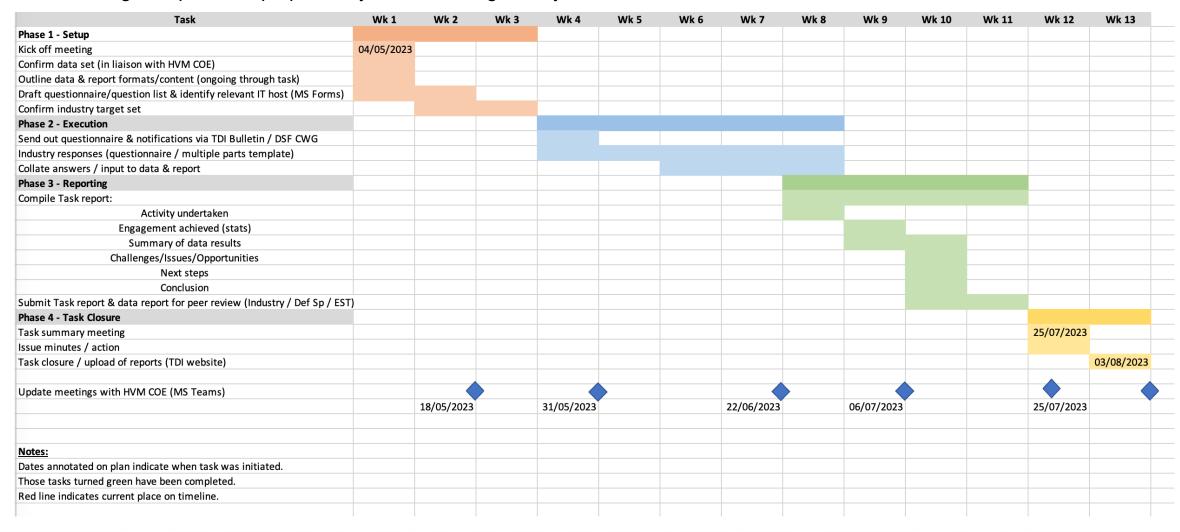
Task Activities:

- Mobilise establish team, set up work environment, agree tasks.
- Conduct discovery across Defence Industry.
- Collate the inputs cross sectors
- Write the report populate strawman as task progresses.
- Peer review by contributors (DSF CWG, AdM RO)
- Communicate and distribute

Task Plan



The following task plan was proposed by TDInfo and agreed by FCG:



Engagement activity



- The following questionnaire was distributed on the 26th May:

 https://forms.office.com/Pages/ResponsePage.aspx?id=OJo6abh5akqTU8MhAr8pl O7c454be9NvdJOhwthbBhUM0hM

 N1NSQzNYMFdKVVpKN0INWVNaNzhGVv4u
- A range of relevant personnel from the following industry organisations were approached to complete the questionnaire:
 - Babcock, BAE Systems, RBSL, Rolls Royce, Leonardo, Thales, AMFG, NP Aerospace, Boeing, MBDA, QinetiQ, TWI, AWE, SPEE3D, Arke, Atkins, Laser Additive, AMS, Dimanex, Stratasys, Wayland Additive, MTC, Metron, Synbiosis, Additive Flow, Additive X, Siemens, Kaizen, Authentise, Soprasteria & Defend3D.
 - Additional signposting was conducted to the questionnaire via a TDInfo bulletin and the DSF CWG, as well as posts on LinkedIn.
 - Reminder email notices were sent out weekly, with an article published in the June TDInfo newsletter.



Strategic Asset Management and transition from ILS to IPS

Ryan Griffin



Executive Summary

A Support Advantage Charter Action...

Support Advantage Action

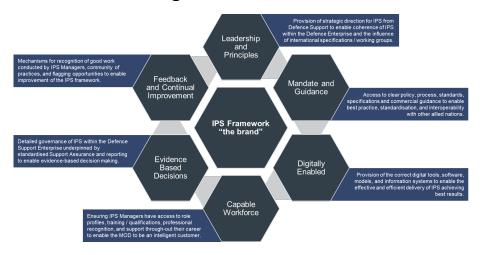
(4.2.2.1) All acquisition phase complex equipment projects to perform support engineering in accordance with Defence Standard 00-600, the <u>ASD S-Series Integrated Product Support specifications</u>, the Support Solutions Envelope and use the Supportability Case.

And a defined problem statement...

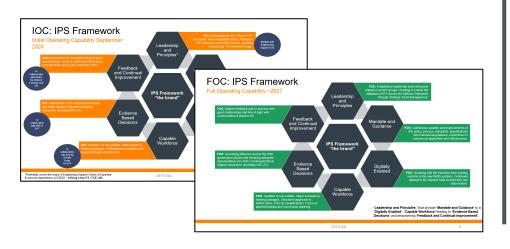
Integrated Logistics Support (ILS) Application Issues

- Poor reputation due to the word "logistics"
- not attracting the right SQEP
- Poor capture within requirements
- Poor commercial application
- Not prioritised for funding during acquisition
- · Poor support data capture and use.

Delivering an IPS Framework...



With IOC 2024 and FOC 2027...



Ensuring that IPS Stakeholders are aware of that...

- **Evolution not Revolution**
- The day job doesn't change
- But you are free to do ILS (if justified)

And providing benefit to....

IPS Managers via support from the IPS Framework

End Service Users from IPS Outcomes

FLC and EO's from IPS Application Benefits

Who Am I?

Ryan Griffin, part of **Engineering Support Team** IPS Transition Project Manager

- UK MOD representative on ASD SX000i steering committee, IPS Council Defence Interest Group and TDI working groups
- Previously a ILSM for a CAT A ECM project
- Delivered the SSE Betterment Project
- Previously consulted in ILS and in ESCIT
- Consultant of Asset Management within Defence
- MSc in Through-Life System Sustainment
- Completed courses in Consultancy and MSP
- Incorporated Engineer, plus a member of IET and IAM











Who Are We?

We are the **Engineering Support Team**, a 1* area of **Defence Support** which is a **Defence Function**.

The Engineering Support Team (EST) are responsible for Engineering Support and Strategic Asset Management. We are the **owners of the ILS policy** (including many others within the DLF).

The Support Function encompasses people, processes and systems within MOD engaged in Defence Support activities that maintain military capability at pre-planned availability, readiness and sustainability, end-to-end from the point of production to the point of consumption, that fall within Logistics Support, Engineering Support and Equipment Support

Defence Functions are activities that need to be carried in a **coherent way across all the organisations in Defence**, enabling MOD business to be done smoothly and efficiently.



What is IPS?

Output: Optimised availability at a optimised whole life cost.

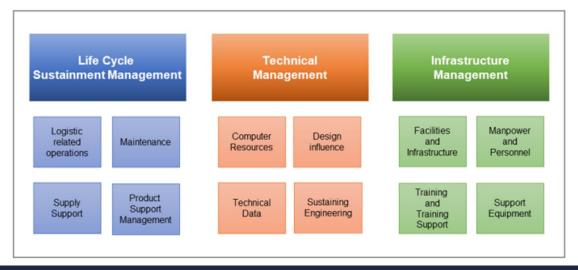
Standard: Underpinned by adoption of the ASD S-Series specifications.

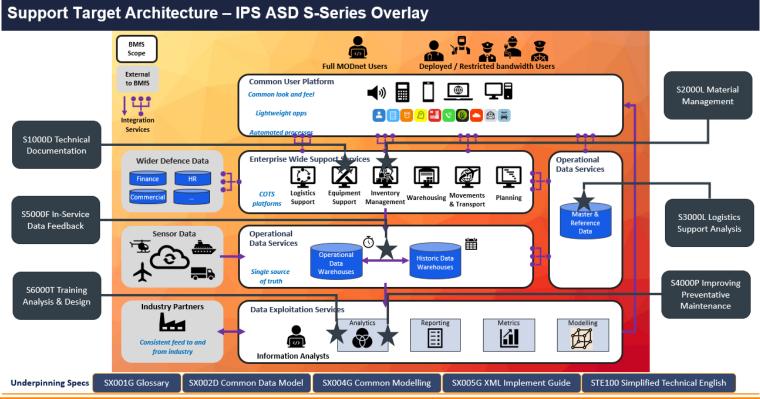
Elements: The elements have been restructured and grouped to ensure greater integration. It still covers all that ILS as per DefStan 00-600 covers.

Data: Has a underpinning data model that will be integrated into the Support Target Architecture and Business Modernisation for Support (BMfS).

Asset Management: IPS will be responsible for the planning of many significant areas of Asset Management as per ISO 55000. Including lifecycle delivery, and asset information areas of the 6 box model.

"If you cannot get to the fight and stay in it, then there is no fight"





Problem Statement

Concerns identified within the current approach

Integrated Logistics Support (ILS) Application Issues

- Poor reputation due to the word "logistics" and moving boxes. Its been seen as a "loggies" issue and optional extra to procurement of equipment. It is predominately systems engineering but is not housed in engineering.
- Problems defining the discipline in DE&S functions in particular, not attracting the right SQEP and no succession planning (e.g. no access to apprenticeships) leading to lack of SQEP ILS Managers across the industry.
- Poor capture within requirements (URD, SRD) which ILS ultimately seeks to improve the experience of the end users.
- Poor commercial application (SOW / SOR, ITT / ITN and contract setting).
- Not prioritised for funding during acquisition due to perceived cost. Whilst it costs more
 upfront, it saves considerably more through-life.
- Poor support data capture and use.

Support Advantage Action

(4.2.2.1) All acquisition phase complex equipment projects to perform support engineering in accordance with Defence Standard 00-600, the <u>ASD S-Series</u> <u>Integrated Product Support specifications</u>, the Support Solutions Envelope and use the Supportability Case.



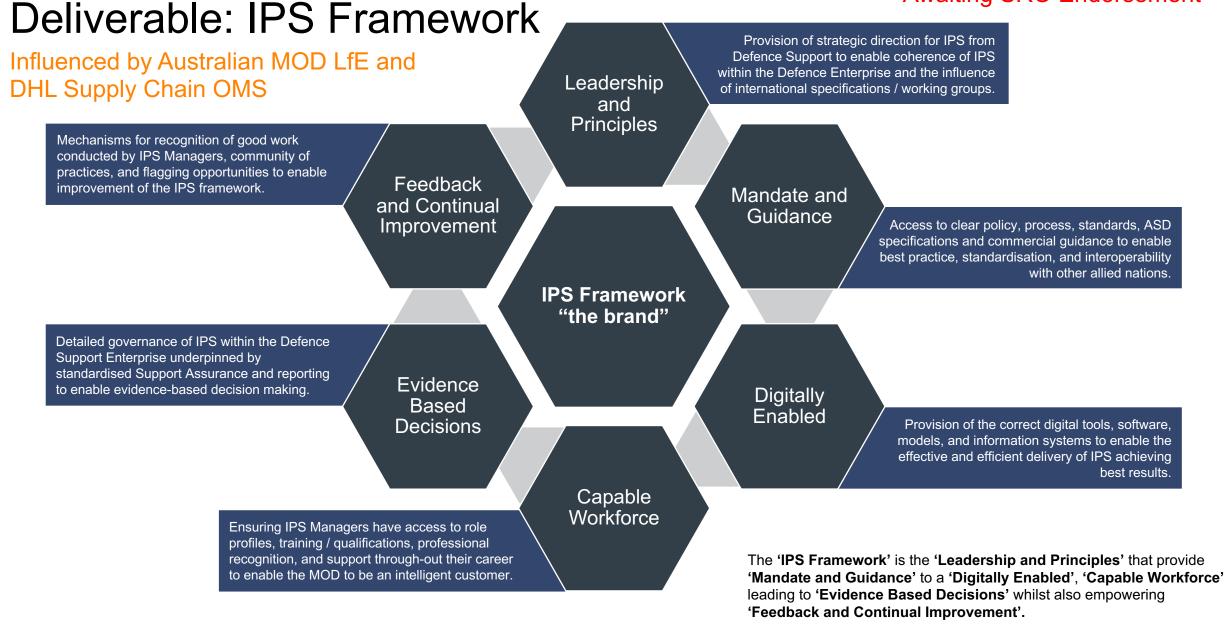
IPS PROJECT REQUIREMENTS

- Needs a defined deliverable
- A need to tackle issues with ILS that will not be resolved solely by a policy / specification change
- Unclear boundaries (is it just policy & standards or is it more)
- How to sustain IPS after delivery
- Complex with a mixture of change and Business as Usual (BAU)





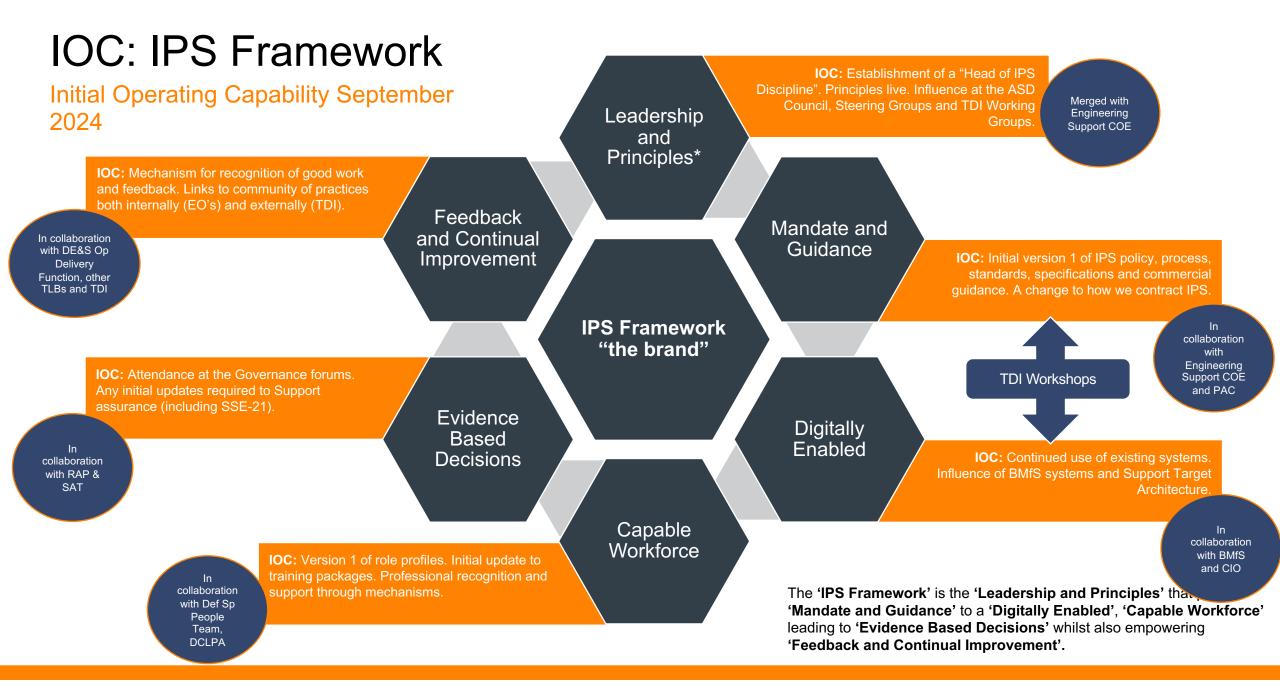
Awaiting SRO Endorsement

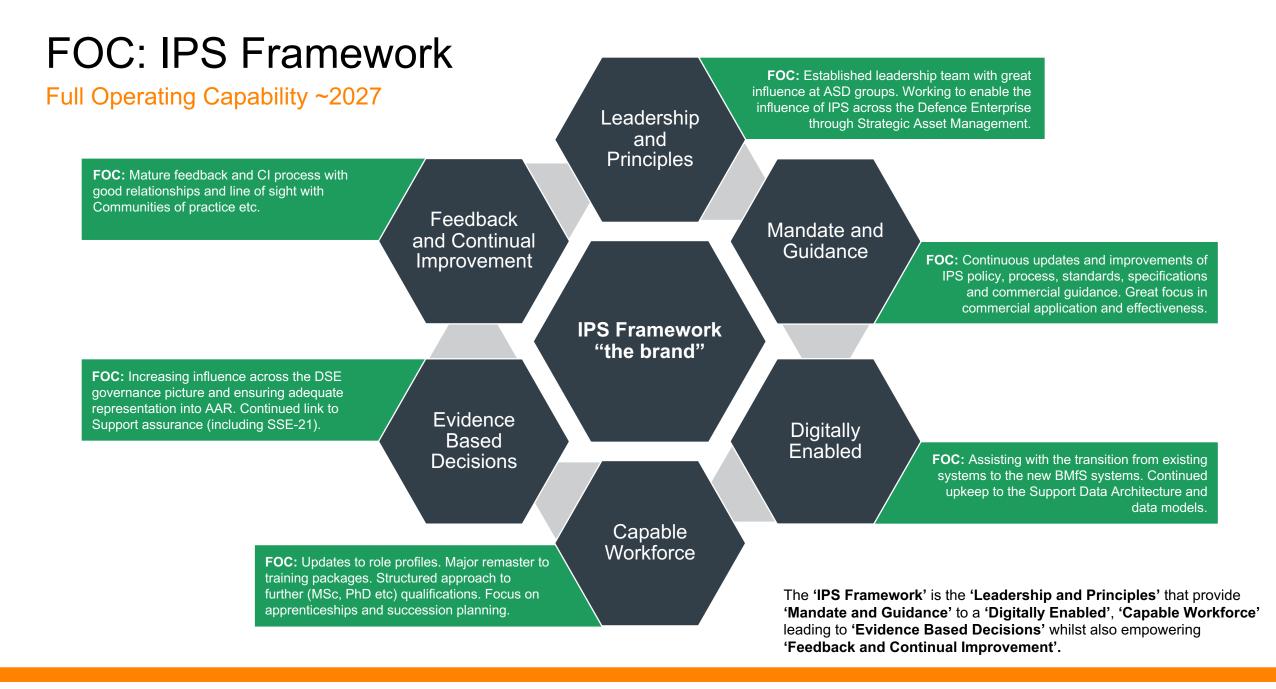




"The Integrated Product Support (IPS) Framework is a set of interrelated pillars that are required for the sustainment of IPS, which is fundamental to supporting capabilities. It shall be championed by the Defence Support Organisation and is integral to the achievement of sound Strategic Asset Management."

IPS Transition Project (2023)





End Outcome

Benefits of IPS and the Framework

Remember:

- Evolution not Revolution
- The day job doesn't change
- But you are free to do ILS (if justified)

Benefit of the IPS Framework



Clear, centralised direction for IPS across Defence Support Enterprise



IPS influence and interoperability across the MOD & internationally.



Customer focus empowering a capable & supported workforce



Digital enablement through data models and architecture

Benefit of IPS to FLC / EO



Reduced Whole Life Cost



Optimised Availability



Better decision making throughlife



Access to asset information live



Develop once, use many



Data integration - interoperability



Highlights areas of change and maintains configuration



Contributes to delivering Support Advantage & Asset Management

Benefit of IPS to End Service User



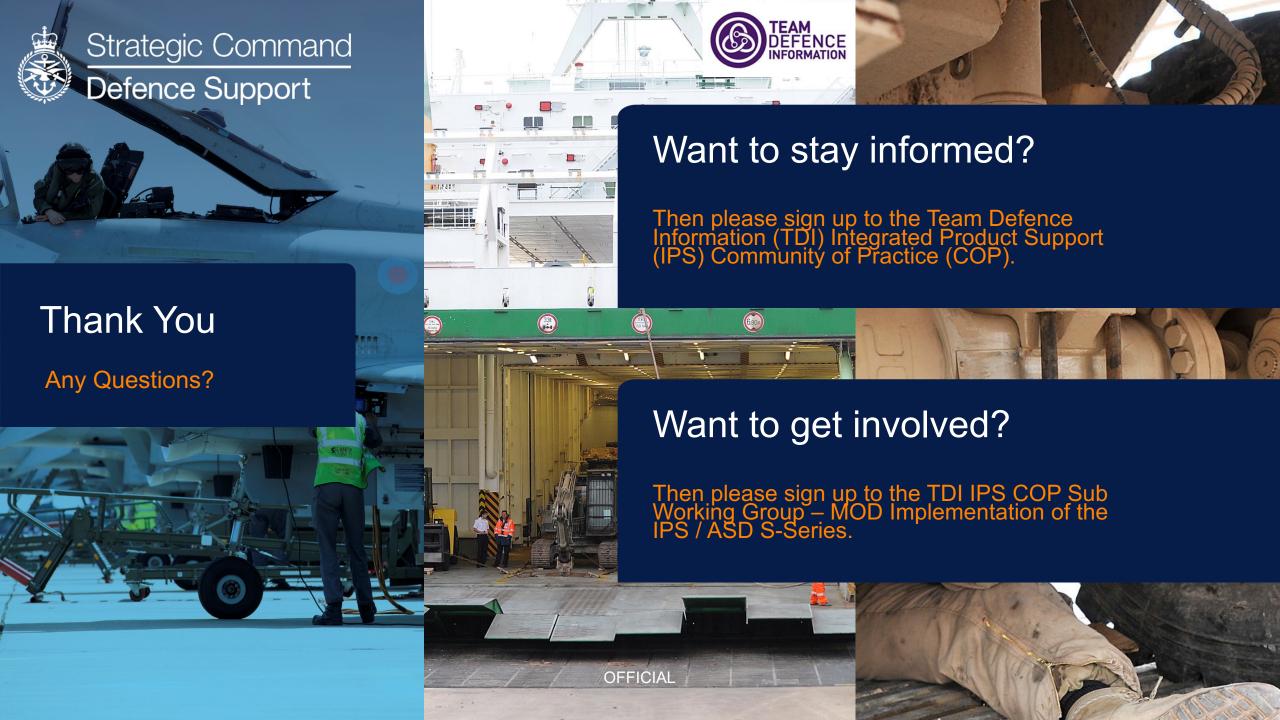
Equipment and
Capabilities that can
be trusted



Easier and safer to operate and maintain



Optimised training on equipment



Annex 1 EST Pitch



EST Strategy



Challenges

- · Limited reliability & availability of equipment impacting operational command & confidence
- Reduced combat effectiveness
- Poor through life decision making
- Confused authorities and delegations
- Fragmented & overlapping policies
- Disjointed Data and stove piped decision making



The Vision

EST will deliver more reliable, more available equipment with increased support agility to achieve greater Operational Advantage for UK forces.



Means

Process & Decisions

- Federated delivery model
- Leveraging & cohering existing change activity
- Streamlining of process, policy and plans

Resource

- Cat-B funding allocation to 2030
- Funded delegation to execute TLB activity
- · Asset Management SQEP to spt. delivery

Technical Delivery

- Enterprise level improvement focus
- Highly aligned to BMFS
- Agile construct by design
- Proven 'inspire & sponsor' support innovation | Revised TLM training approach

People

- Common lexicon & approach
- · One Defence culture
- Support policy COE embeds



Ways [using the industry standard Institute of Asset Management model]

Enhanced equipment Strategy & Planning

Develop & Empower Org & People

Generate Asset Information

Enable & Drive Better Decision Making

Adopt a Whole Life Cycle Approach

Establish & Exploit a Balanced Risk based Approach

Streamlined policies and clearer lines of authority will support clearer and more coherent equipment strategies & plans that take a holistic whole life approach

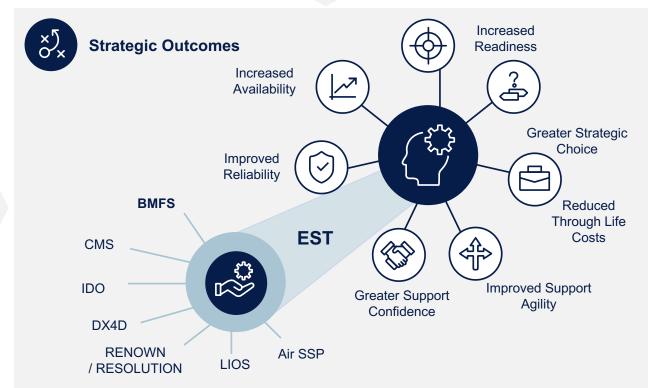
Delivery of common AM language, training, skills and standards across the enterprise aligned to enhanced decision making structures & processes

Working in lockstep with BMfS, coherent best in class asset information systems will provide more timely, accurate and reliable sources of asset information to enhance the basis of decision making.

Improved transparency and quality of information coupled to clearer processes for decision making on a whole system basis will drive more optimal and informed decision-making activity

A revised approach to the requirement setting, measurement and understanding of equipment support on a whole life basis will lead to continual optimisation of through life equipment management for operational advantage

Greater through life information and understanding will provide Front Line Commands & commanders with greater clarity, agility and confidence of options on which to make risk informed decisions to meet FE@R demand



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Availability Centres
Kevin Marlow



Defence Availability Control Centre update to TDI

Lean Startup

Too many startups begin with an idea for a product that they think people want. They then spend months, sometimes years, perfecting that product without ever showing the product, even in a very rudimentary form, to the prospective customer. When they fail to reach broad uptake from customers, it is often because they never spoke to prospective customers and determined whether or not the product was interesting. When customers ultimately communicate, through their indifference, that they don't care about the idea, the startup fails.



The Control Centres are Lean Startups.

Today's DACC is 'a cardboard mock-up' and much of the work to-date has been about engaging people and testing the concept.

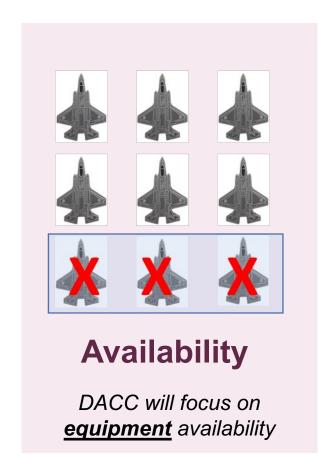
The DACC is not staffed, it's not operating, it's only recently entered the build stage and it's still pivoting and persevering.

There is one milestone – a December MVP Dashboard. Everything in-between is a pivot or persevere decision based on reactions.

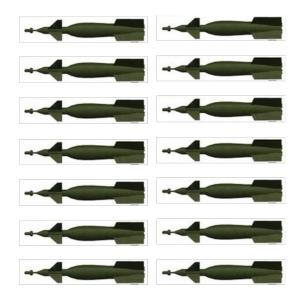
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Readiness =

DACC MVP focus







(1)

Capability



Sustainability







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Use Cases

Insight and 'Tiger' teams will support DTs/FLCs and Industry in tackling availability challenges



DACC teams supported by senior leadership to deliver impact and unblock issues. Senior enough to be an established figurehead that can drive pan-Defence enterprise engagement

Tech Team

Iterate dashboard based on user inputs

Insight Team

Monitor availability and support root causes analysis of availability issues and identification of opportunities

Tiger Team

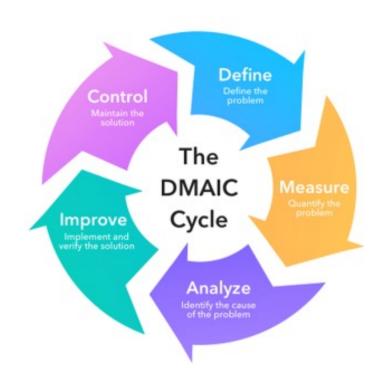
Support insight team in identifying where the biggest pan-Defence opportunities are. Work with FLCs, DTs and industry to drive availability

FLCs / DTs / Industry

Owners of the increasing availability task, supported by the insight and Tiger teams

Authorities

Access to decision makers who can endorse recommendations and enable <u>change</u>



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Use Cases

Informing and Supporting Availability Working Groups

Extant Availability Working Groups utilize the DACC Dashboard (amongst others) in their reviews. They access the dashboard either remotely or by holding their meetings in the DACC itself.

Members of the core DACC team sit in on those Availability Working Groups to identify opportunities for the DACC to help and, if appropriate, to make connections between initiatives across AWGs. Depending on the location of the AWG and clarity of its agenda, the DACC team invite Defence Analytics teams to sit in.

Fundamentally, the relevance of analysis is driven by context, so the DACC team's role will be to try and understand the problems AWGs are facing and to match them up with capabilities that could help.

Sharing and developing best practices

Teams owning or developing Analytical tools and relevant Management Information will utilize the DACC to become more familiar with each other's products, to understand how they may benefit each other, and to evolve best practices.

This will start in the fallow period by teams using the facility for their on-site work and then, as the DACC usage increases, by dedicated events.

Teams will be encouraged (by their own leaders) to recognize the weaknesses in their solutions and the strengths in others, and to consider integrated solutions as an alternative to one-fits-all. The DACC team will work to remove colour from the discussion i.e. the "not built here".

Proactive, full-time analytics

Analytics elements of Delivery Teams from across Defence will be based in the DACC, monitoring all performance related to Platform Availability and generating interventions.

This Use Case is acknowledged but not currently recommended as:

- There is low confidence that this capability (wihtin DTs) is widespread.
- Where such individuals do exist, moving them out of the Delivery Team would be detrimental (loss of context and operational focus) and resisted ("you didn't collaborate, you took away").
- At the current level of maturity, there is a high risk that a centralised team's insights would be misled by poor data quality and a lack of context, damaging credibility.
- A centralised team perceived as generating and handing out actions would not promote engagement and goes against the SLG's empowerment message.
- DTs working together without boundaries should be our culture. We wouldn't want to promote silos by making it BAU to have a negotiator between teams.

Enabling Defence Availability Reviews

The DACC hosts visits and by Defence senior leadership. It projects Platform Availability 'headline numbers' as a backdrop and cause for discussion.

The DACC hosts an "SLG Availability Working Group" which either targets concerns over availability in a particular group of Platforms or takes the helicopter view and looks at the pan-Defence numbers, questioning what it sees in this previously hidden picture.

Teams and their analysts, from across Defence, support the AWG and can provide direct answers or take direct actions to investigate areas of interest. Ideally, senior leadership declare their interest in advance so that teams can present what they are doing rather than simply taking questions.

In this Use Case the DACC is temporarily at least an Amber Zone.

A point of escalation

When teams are unable to implement improvement, the DACC could be a point of escalation. Examples may include prohibitive policy, financial rules or the lack of a clear authority. These would potentially be problems shared by multiple DTs but unaddressed because the barriers are too high for any individual team, the impact hasn't been appreciated because it is dispersed, or it's been accepted as 'how it is'.

Examples may also include changes requiring individuals from multiple teams. The DACC could use its profile and influence to create a tiger team to address a specific issue. The DACC's ability to do this will have a dependancy on SLT support.

The DACC would attempt to facilitate change and guide a DT to a solution, establishing where possible a way for DTs to do this themselves in future. Where the circumstances don't allow this, the DACC would lead the improvement.

Training and showcasing of capabilities

The facility is used by Defence Analytics and MI Teams to showcase their capabilities to potential users. In addition to raising the visibility and utilization of these capabilities, this will help Defence fully define its catalogue and the gaps or overlaps within it.

To become an enterprise making data-driven decisions we need greater adoption of tools that provide insights and a 'lite' analysis capability. A current barrier to adoption is the ability to provide effective training.

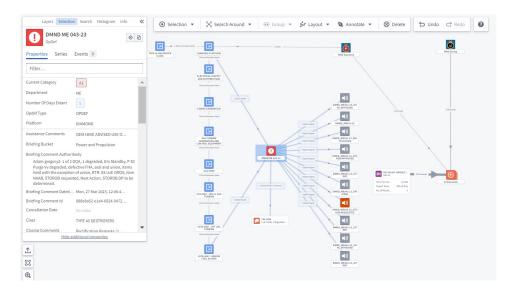
The same teams will use the facility to provide stand-up training around large touchscreens. This form of training is more immersive and interactive, helping the community adapt to digital ways of working, to become "data curious", and to be confident to voice their own insights.

Maple 1A may be repurposed to satisfy this use case once the Collaboration Centres move.

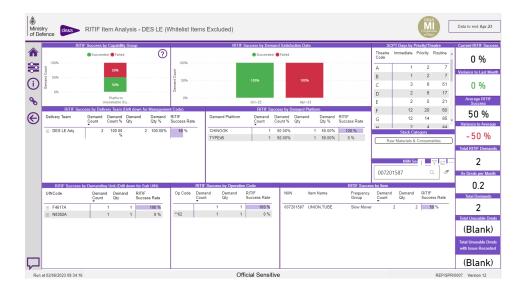
Insight Examples - *Encourage*

Source: The Kraken Ships team have developed the tools to scrape data out of OpDef reports.

Insight: From Kraken 'blast radius' analysis, 5 days of T45 Availability were lost to a tube union on a gas turbine. The item is a £12 component managed by the DE&S Land Domain. It had to be robbed from another vessel.



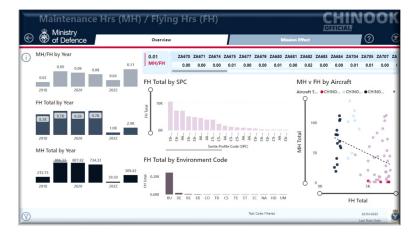
Insight: The same item (and over 4000 others) appears in the Support Performance Power BI suite when the SCM asks it "What do I manage that's caused a Navy OpDef?".



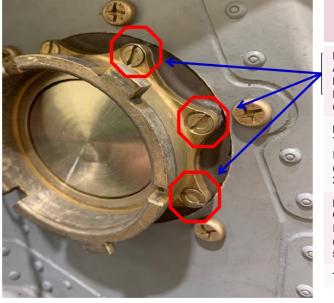
DACC Role: This is an example of work where the DACC might support helping our people catch up with technology and collaborate across organisational boundaries. How do we improve adoption of existing products and use them articulate the importance of an item and the consequence of not managing its stock? How do we then expand on the capability and effectiveness?

Insight Examples - *Encourage*

Source: 1710 NAS have developed MI which enables their users to gain insights from GOLDesp Engineering data, providing greater understanding of maintenance activities and creating healthy challenge of existing practice.



Insights: Using this MI, users have challenged the periodicity of maintenance activities and the consequence to Platform Availability. Amongst the examples below are 1055 checks of screw torque that are in addition to the visual creep checks performed after every flight. Potentially valid (consequence), but worth challenging.



	Refuel/Defuel Adaptors Loose Screw Examination (WCR0060)	1055	1	1383	0.05%
	Bowman Trans Inspection (WC/PMP/43 22001)	6322	7	11,396	0.11%
	MTU Battery Compartment Inspection (WC/PMP/43 5100X)	3136	1	3775	0.04%
	Totals	10513	9	16,554	0.2% Average

THESE 3 TASKS ALONE = 1.5 AET'S ANNUAL WORKING HOURS

DACC Role: This is an example of work the DACC would identify, support and, only if necessary, steer towards a common solution. With a better understanding of its impacts, the DACC might help promote the product and offer itself as an escalation route for investment, data access or user action. It's role is to help the team help itself.

Insight Examples - Escalate

Source:

- Obsolescence Management is critical for maintaining Platform Availability, preventing spiralling costs and loss of equipment capabilities.
- It is inevitable but its timing and impact is often uncertain.
- It's impacted Platforms before they'd even entered service 45% of QEC systems had obsolescence issues prior to sea trials.
- Whilst Obsolescence Management may be a strategy, that doesn't mean its funded, resourced or practiced.

Insight: Obsolescence of Software for the Local Situational Awareness Cameras. (LSA)

- Multiple Post Design Service (PDS) tasks completed at cost of over £400K to find a resolution to the Windows XP operating system becoming obsolete.
- This is an issue that could affect the capability of the platform within 2 years if LSAs cannot be repaired and system maintained.
- A resolution to the current obsoletion has yet to be implemented or funded (worse case is £60K per vehicle (new system), circa 400 platforms in fleet)
- Current OSD is 2030, however a FCR was submitted to DT to extend the OSD from 2030 until 2040, therefore
 future costs to upgrade / renew the LSA system due to a proposed life extension could increase Whole Through
 Life Support costs by over £30M for just this one issue.
- The MOD are exposed to continual obsolescence of software / hardware compatibility due to the speed of technology refreshes that the MOD are subjected to against protracted life cycles of products.



DACC Role: This may be an example of where the DACC can help a team express a systemic issue in language a DSPB audience can understand and action. It's role is to help the team channel issues and recommendations to a level necessary to break a cycle and initiate change.

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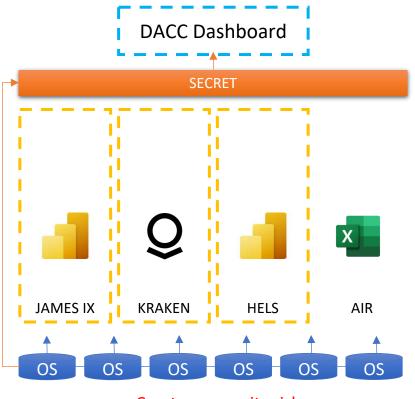
MVP (Dashboard) Architecture

Original Premise

Established tools, already capable of producing Platform numbers (and drill-able insights) are bypassed.

The data they consume is pulled into a single dataset and their algorithms copied in a stand-alone dashboard.

Segregated OS solutions are aggregated, creating a Secret dataset that then has to be segregated back to OS through account management.

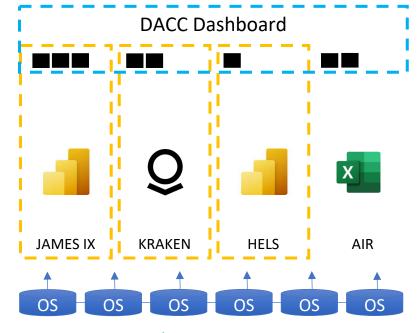


- *Creates* a security risk
- Creates a schedule risk
- Creates a coherence risk

Recommendation

The DACC Dashboard (headline numbers, trend and improvement tracking) is integrated into existing solutions.

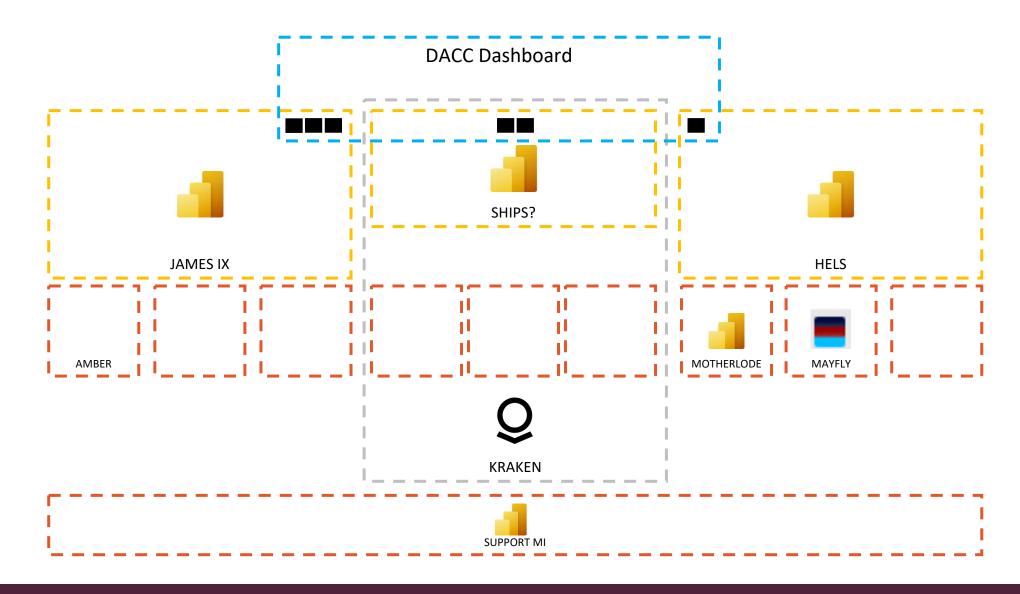
Each team simply builds a page into their solution. They have the data, they have the drill-able detail, in principal its 'just' different visuals.



- Achieves requirement
- Removes original risks
- Maintains engagement
- Greater ownership x-Domain
- Disaggregates control

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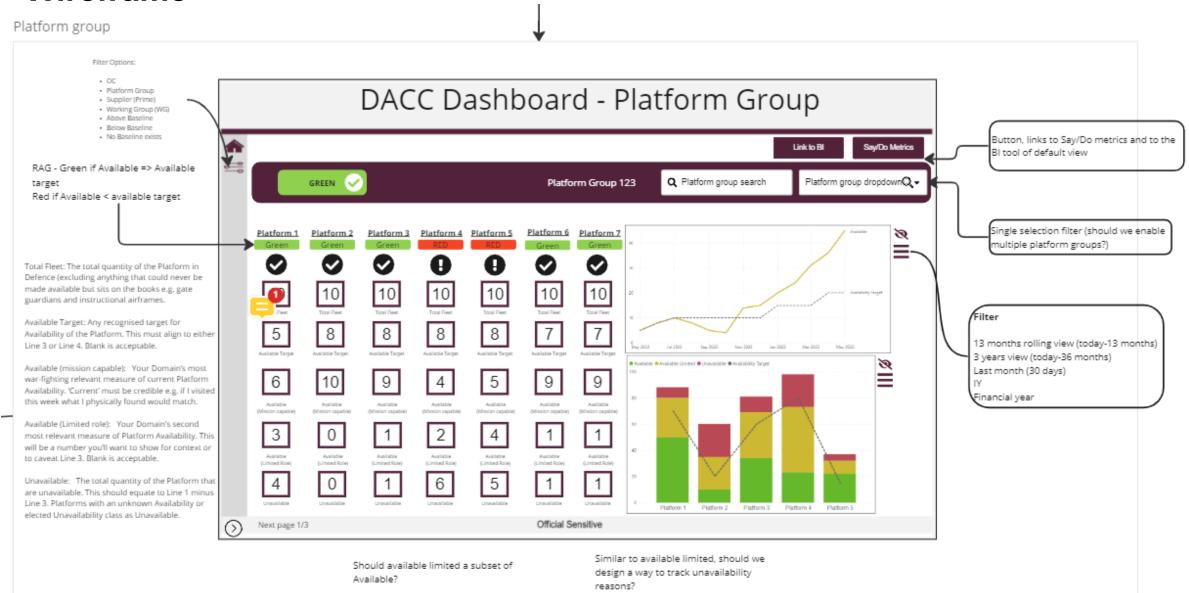
MVP Quilt?





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Wireframe

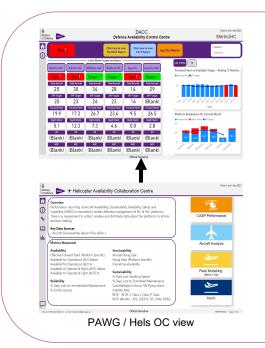


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MVP Dashboard Construct – Helicopters

DACC MI

Availability MI



Helicopter Availability Collaboration Centre

A Power BI suite built, principally, on ASR+ data that will iterate towards source data with low latency.

The suite is utilised by the Hels community, reporting Platform Availability against CASP agreements and providing basic insights.

Contents include:

- · Availability, Reliability, Serviceability and Sustainability metrics.
- Flying hours, aircraft condition, aircraft utilisation.
- · Depth maintenance plans.
- Supply chain performance (from corporate tool).

The DACC view will be built into this Hels recognised product.

Unavailability MI



Motherlode

A Power BI suite built, principally, on GoldESP data.

The suite is utilised by the Hels community and used in analysis of Engineering / maintenance data. The suite has provided insights on causes of unavailability and opportunities to reduce maintenance downtime.

....plus Unavailability insights from Industry and SPMI's supply chain dashboards.

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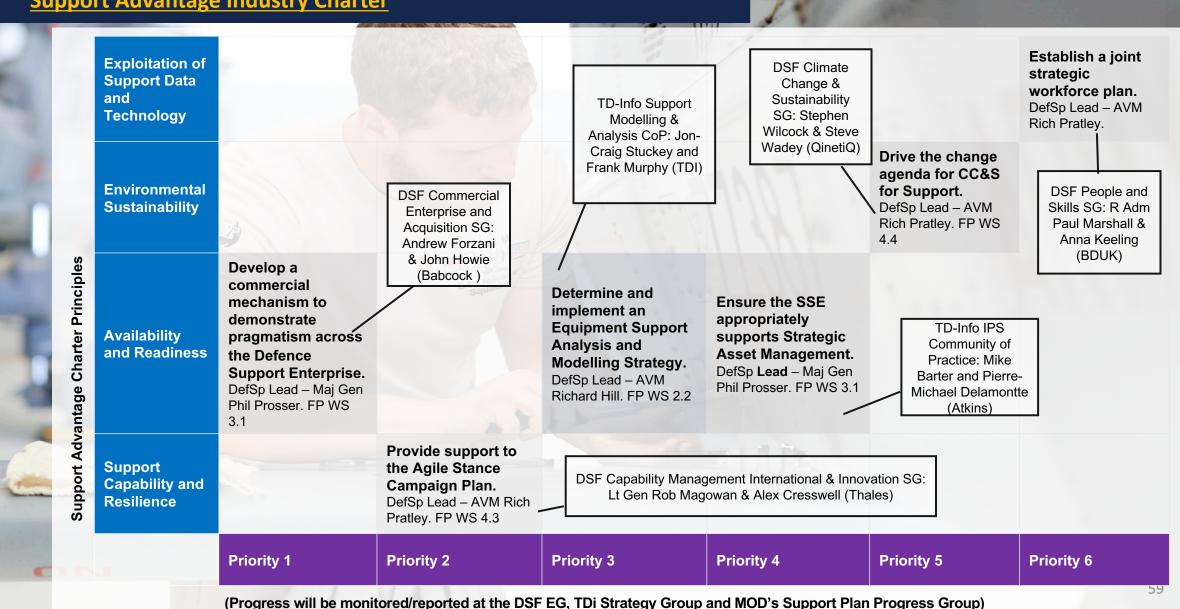


Defence Support Advantage Charter Activity

Julian Dayment

CDLS Priority Actions

Support Advantage Industry Charter



Action progress

Hosted on SharpCloud



Develop

- New commercial mechanism
- An Eqpt Support Analysis & Modelling Strategy
- Support to the ASCP
- Introduction of improved SSE
- Joint Strategic
 Workforce Plan

Implement

Sustainable Support Strategy

Completed



Supportability Modelling and Analysis Frank Murphy/Darron Jackson



Lunch 1305 – 1345

Agenda



Agenda Item	TDI Lead(s)	Lead		Duration
Meeting Opens		All	Standard	1045-1100
Welcome and Introductions, Townhall background & purpose		Chairman: Matt Tribble	Standard	1100 – 1105
MoD Update		Steve Lammiman (dialing-in),	Standard	1105 - 1115
TDI Update		Phil Williams	Standard	1115 – 1120
TAMPA		Stu Olden		1120 – 11:35
Strategic Asset Management & ILS to IPS Transition	Leyton Lark	Ryan Griffin	Townhall	1135 -11:55
Availability Centers	TBC	Kevin Marlow	Townhall	11:55 – 12:15
Support Advantage Charter Actions	Julian Dayment		Townhall	12:15 – 12:35
Supportability Modelling Strategy	Frank Murphy	Darron Jackson		12:35 - 1300
Lunch/networking				1300 – 1345
Vanguard	Jack Thompson/Philippa Arter	Louise Hakner	Townhall	13:45 –14:00
Secure by Design		Jason Impey /Karen Dooley	Townhall	1345 – 1400
DI23 & future events	Phil Williams		Standard	1425 - 1430
AoB	Chairmen		Standard	1430 – 1440
Closing Comments, initial feedback on townhall and DoNM	Chairmen		Standard	1440 - 1445



Vanguard
Philippa Arter

TDI• VANGUARD

SupportNet23





Vanguard were present at SupporNet23 to enable a fresh perspective, collate feedback and create a comfortable, neutral space for all opinions to be heard.

Throughout the day we encouraged audience members to use the Event App to answer questions on the theme of SupportNet23 'Delivering Greater Resilience'.

Our Industry Chair, Louise Hakner, also gave the one of the opening talks around audience engagement and had the pleasure of introducing Lt Gen Rich Wardlaw to the stage.

In the evening Vanguard supported the 'SIC – Support Innovation Challenge'. Vanguard also participate on the collating and down selecting of applicants.



Current Task Overview



Work Stream	Theme	Sponsor	Task	Output
Sustainability	Digital Climate Change and Sustainability (CC&S)	Zoe Wardle (MOD)	 Assess and understand the culture require to deliver CC&S change within the Digital Function; Horizon-scanning of emerging and disruptive technologies which could support digital CC&S agenda Evaluate and understand circular economy best practice, barriers, enablers across Defence 	- Conduct research and produce a paper and/or presentation to report to MOD sponsor.
Sustainability	Def Sp Futures & Sustainability	Sarah Liggins (MOD)	- Conduct a market assessment of technologies/solutions that would allow a deployed force to be self sufficient for its nutritional needs.	- Market research and production of paper for Def Support Futures & Sustainability R&E 24 plan. Facilitate a workshop with Defence stakeholders to arrange a trial.
Future Technologies/ Image of Defence	Industrial Strategy – Requirement for MilTech/DefTech	Brigadier Mike Morton (MOD – Head of Digital Strategy) / Jeremy Poulter (Palantir)	- There are numerous recognised sectors that end with the term 'tech' e.g. FinTech, AgriTech, MedTech. Explore why there is no equivalent for Defence related products and services.	 Consider Pros and Cons of creating such a community and make a recommendation. Opposing arguments to be presented.
Ethics in Al	Risk Management and Assurance Products	Leila Kleineidam (MOD)	- Research into existing assurance products related to AI Ethics and risk management that Defence can readily adopt.	Research paper and/or presentation to MOD stakeholders / Potential for Co-Drafting products

Further Actions

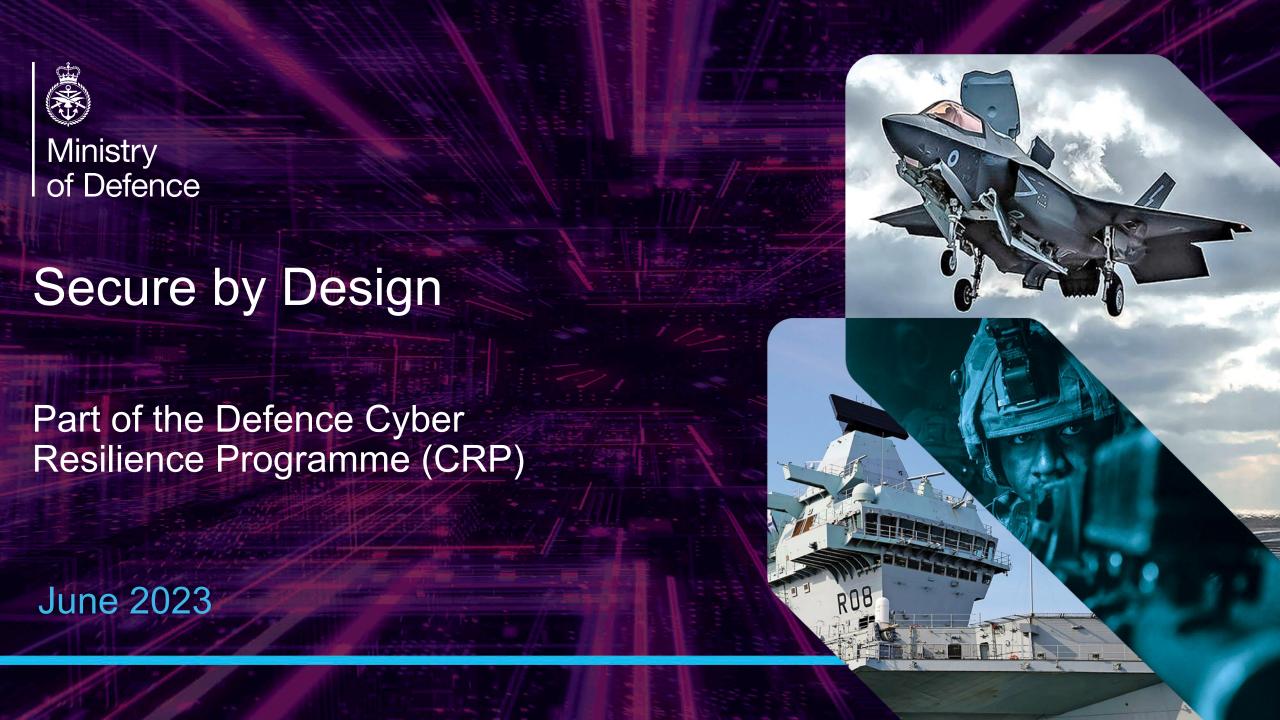


Vanguard are still on the look of for a MoD chair after Rebecca Stewart's departure.

Any further involvement from MoD and/or Industry and possible work streams / task is very welcome.



Secure by Design



SECURE BY DESIGN

Enabling and empowering Defence to implement better cyber security

Secure by Design

Leaflet 5C within JSP 440 has been produced.

So that...

Clarity, Consistency and complete adoption is achieved

Secure by Design PROCESS

Our new process has been designed and implemented

So that...

Who, When, What is needed to be done is clear, efficient and effective

Secure by Design **TECHNOLOGY**

Digital tools have been developed and launched

So that...

It's user friendly and collects, analyses and stewards data for the benefit of all

Secure by Design GUIDANCE

Guidance to help everyone along the way

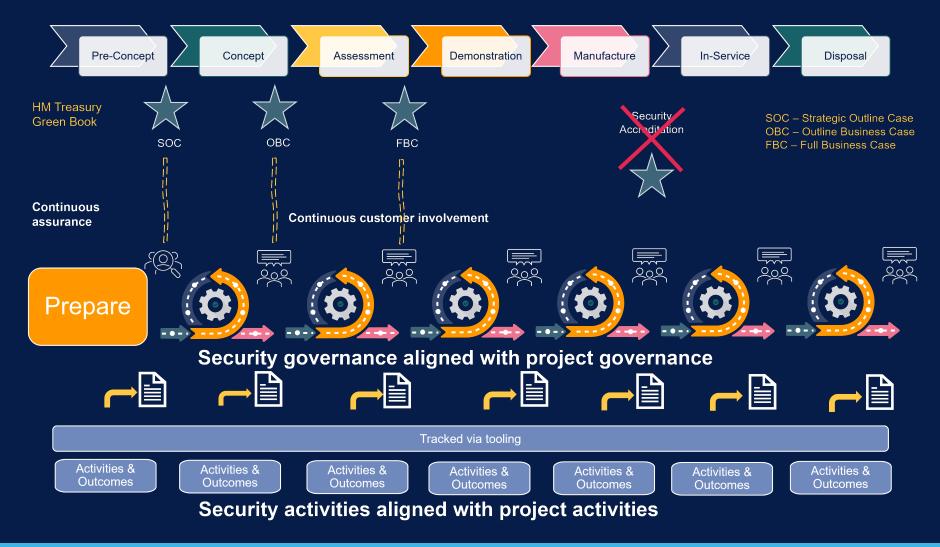
So that...

You always have the support you need to implement Secure by Design

[Every new project will adopt this approach from July 2023; legacy capabilities will go secure by design at key milestones]



How does Secure by Design Operate?





Governance and Reliant parties need to see the evidence of continual 1st Line risk management is undertaken and integrated into the project.

When does Secure by Design Launch?

- Secure by Design launches on 28th July 2023
- New (Concept Phase) projects to transition before 31st December 2023
- Other projects can transition but not mandated
- Systems not yet in service to transition by 31st July 2024
- From 31st July 24 projects / systems to transition when existing accreditation expires



Key Messages to remember

- Secure by Design launches on 28th July 2023
- Security starts at the outset of the project
- Projects are accountable and responsible for delivering a secure capability
- Continually asses, manage and report cyber security risk
- Visit the Secure by Design portal and be proactive





Strategy Developments
Phil Williams



Conferences 2023 and update



Battlefield Energy and Électrification Options Workshop





Background: The modern soldier is increasingly more digitised and equipped with drones, sensors, electronic countermeasures, robotics and comms, with no indication that this trend will decrease. As the Expeditionary Robotics Centre of Expertise (ERCoE) continues to develop solutions they are starting to consider how these systems will be powered. Facing increase energy cost and limited access to precious metals powering the future battlefield is areal challenge.

Challenge: Hybridisation, electrification and battery storage all offer some advantages, but they are not without trade-off for weight, recharge times and operating duration. Maintaining operational advantage over our adversaries, force elements need to be light, agile and able to operate for prolonged periods of time without resupply; Carrying half your body weight in batteries is not an option.

Opportunity: Driven by climate change and enabled by advances in technology other sectors are undertaking energy transitions and Defence must capitalising on this wider sector investment.

Purpose: In the context of the Defence Operational Energy Strategy this event will look at dual purpose energy solution from across sectors identifying options with potential to address the energy challenges of the land domain.





04/July/2023 @ 9:30 am -3:30 pm



UTAC Millbrook Proving Ground

Agenda:

With speakers invited from Industry, Army, Future Capability Group, Defence Support Energy & Futures and Innovation the agenda is still under development and will be confirmed in the next few weeks.

Register:

This is a free, physical, in person event only with no option to dial in. Tickets will be allocated on a first come first served basis and, if over subscribed, may be limited to one person per company.

Please scan the QR code below to register



Towards Self Sufficiency –





A Sustainable Defence Support Working Group

Context

Sustainability in a deployed military environment has the potential to deliver great benefits for capability, reducing logistics burden and vulnerabilities whilst enabling deployed operations to last longer and prove more resilient.

Once deployed, force elements will be self-sufficient, Forces will be able to operate for prolonged periods without the need for resupply. Realisation of this concept is dependent on a 'closed loop' system of systems solution.

Activities

Defence Support will share their concept and experimentation plans, Army HQ will provide a view of their deployable infrastructure programme and KBR as a provider of current deployable fuel and water systems will highlight areas for innovation.

Outcomes

The workshop will identify potential solutions for experimentation and demonstration in 2024 contributing to the evidence base informing SDSR 25 investment decisions.

Who should attend?

Providers of deployable base infrastructure, utilities and innovators in material, food, waste water, energy and circular economics. We also need enablers to support data capture, connectivity, processing, and performance management.





27/Jun/2023 @ 10:00 am -3:30 pm



Online & at KBR Leatherhead, KT22 7NL

REGISTER INTEREST

The event is hybrid and free to attend. There will be limited in person attendance with wider online participation. In person tickets will be allocated on a first come first served basis and limited to one person per company.

Scan the QR code below to register



Battlefield Energy and Electrification Options Workshop

- an FCG Open Innovation Laboratories Event



Background: The modern soldier is increasingly more digitised and equipped with drones, sensors, electronic countermeasures, robotics and comms, with no indication that this trend will decrease. As the Expeditionary Robotics Centre of Expertise (ERCoE) continues to develop solutions they are starting to consider how these systems will be powered. Facing increase energy cost and limited access to precious metals powering the future battlefield is areal challenge.

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Conferences



- Support Chain Seminar Adrian Baguley Jan 2023
- Operational Energy March 2023
- SupportNet Lt Gen Richard Wardlaw May 2023
- DI23 Charlie Forte July 2023
- {Fuels, Sustainability... TBD}



AOB



Closing Comments, initial feedback on townhall and DoNM