

Team Defence Executive Meeting

17th July 2024

Meeting Begins at 11:00am!

Agenda

Duration	Lead(s)	Agenda Item
1100	All	Meeting Opens
1100 – 1105	Matt Tribble	Welcome and Introductions
1105 – 1130	Steve Lammiman – Defence Equipment & Support Ed Cole – Strategic Command Dave Hawken – Defence Digital	MOD Updates
1130 – 1150	Phil Williams	TD-Info Key Items: DI24 Recap September Support Townhall Industry Nominations for CDLS Commendations Industry Review of BMfS Independent Study by John Erkoyuncu - Cranfield
1150 – 1200	Eion Bailey	Natural Capital & Infrastructure
1200 – 1210	Tony Butler	Collaborative Working Environment (CWE)
1210 - 1215	Phil Williams	Secure by Design
1215 – 1225	Stu Olden	Additive Manufacturing
1225 - 1230	Matt Tribble	AOB
1230	Matt Tribble	Closing Comments

Team Defence Executive Meeting

Welcome and Introductions

Matt Tribble & Steve Lammiman

Team Defence Executive Meeting

MoD Key Items

Steve Lammiman – DE&S

Ed Cole – Strat Comm

Dave Hawken – Defence Digital

Team Defence Executive Meeting

TD-Info Key Items

Phil Williams

- Video..

Proposed Townhall Agenda – September 2024

Activity	Lead	Start	End
Arrival and Networking (In person)		0900	1000
Meeting Opens (Virtual)		0945	1000
Welcome & Intro's	Chairmen	1000	1010
MoD Update (Lt Gen Simon Hamilton to be invited)	Dave Hawken, Ed Cole, Steve Lammiman	1010	1025
TDI Update	Phil Williams	1025	1040
Industry Keynote	Andy Orrel Rolls Royce	1040	1110
Rear Admiral Paul Murphy BMfS	Paul Murphy	1110	1140
Availability Centre	Kelly Bower	1140	1200
Lunch		1200	1300
ILS Update	Lee Fitzsimmons	1300	1315
CLEP Update	Alan Goody	1315	1330
People & Skills	Dick Dixon	1330	1350
Vanguard	Jack Thompson	1350	1410
S Series Specifications	Phil Williams	1410	1425
KRAKEN or Lighthouse	TBC	1425	1445
AoB	Chairmen	1445	1455
Meeting Closes	Chairmen	1455	1500
Post Event Networking (In Person)		1500	1600

Team Defence Executive Meeting

Natural Capital & Infrastructure

Eion Bailey

Recent TD-Info events/activities resulted in various MOD and industry members showing interest in creating a Community of Practice to share best practices creating new knowledge to advance a domain of professional practice in this area

Team Defence has defined this activity as focusing on:

Natural capital, which is the world's stock of natural resources, which includes geology, soils, air, water, and all living organisms. Some natural capital assets provide people with free goods and services, often called ecosystem services ...

and **Infrastructure** - the basic physical and organisational structures and facilities (e.g. buildings, roads, power supplies) needed for the operation of a society or enterprise.

NC&I COP – Context, Interest and Scope



Defence requirements, strategies, delivery, networks and groups

UK GOVERNMENT

Greening Government Commitments

The 25 Year Environment Plan

The Agriculture Act 2020

The Environment Act 2021

The Green Book 2022

MOD Strategies

MOD Climate Change & Sustainability Strategic Approach, 2021

DSTL – Sustainability Strategic Direction, 2022

Army – Land Industrial Strategy, 2022

Defence Support – Sustainable Support Strategy, 2022

RAF – Defence Aviation Net Zero Strategy, 2023

Rural Estate Land Use Strategy

Operation Nightingale (Archaeology)

DIO

DIO Sustainability Strategy

DIO – Strategy for Defence Infrastructure, 2022

DASI – Defence Approach to Sustainable Infrastructure (wip)

Peatland Strategy

Defence Nature Recovery Strategy

Defence Woodland Masterplan

DIO Conservation Stewardship and Overseas Stewardship Funds

DIO Environmental Engagement Team

DEFENCE GREEN NETWORK

Platform for sharing knowledge, best practices, and innovative solutions.

Goal to make sustainability BAU within defence.

DEFENCE STANDARDS

JSP850 and BPS - DREAM / SEAT / Sustainability Appraisals

ADS / DSF

ADS Infrastructure Group

ADS working groups on - Sustainable procurement, Sustainability, sustainable aerospace, sustainable materials

DSF Climate Change and Sustainability

DSF Buildings and Construction

TDi

FUTURES: Sustainable defence support (HMT, Digital Twin, Robotics, AI, future energy)

Asset Management COP

DISIC workshops 2022

We have held 3 COP meetings this year. Jenny Allen from Mott MacDonald is the industry co-chair and we are in discussions with MOD DIO to participate as MOD co-chair.

Many interesting presentations including Army, MOD, Mott MacDonald, Severn Trent Services, Babcock, Fortinet and Exeter and Plymouth Universities. Subjects included, Circular Economy in Defence, Climate Resilience for BNG, Natural Capital Solutions and Sustainability on the MOD estate.

TD-Info is ensuring close liaison with ADS and DSF to eliminate duplication of effort

Although COP is in fledgling stage, much interest has been generated and a one day event/seminar is planned for October/November 2024

DIO has been engaged and is considering taking the MOD co-chair position. However resource constraints may restrict participation

NC&I COP – Thoughts and Potential WG Topics



- Working Group being established on developing Eco system and Natural Capital assessments on MOD establishments (Devonport as an example)
- Investigate how Mod/Industry/Public Sector can better utilise Ecological and Biodiversity Net Gain (BNG) assessments to fund opportunities on projects within shared sites
- Investigate the impact of the circular economy on re-use of assets, resilience and operations
- Investigate how Nature Based Solutions (NBS) benefits (e.g. carbon management (PAS2080), cleaner air, biodiversity, wellbeing etc.) can be quantified and embedded in business cases and outcome-based procurement
- Map the Natural Capital assessment/appraisal methodologies utilised across Defence
- Map the various groups, standards and initiatives involved
- Identify opportunities for MOD to access natural capital finance

- Develop Project Initiation Document (PID) and establish working group objectives - Eco system and Natural Capital assessments on MOD establishments
- Meeting with Andrea Nixon DIO on 27 July to discuss DIO engagement
- Next COP meeting is 19 September.
- One day seminar planned for October/November

Team Defence Executive Meeting

Collaborative Working Environment (CWE)

Tony Butler

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UK MOD – Secure Collaborative Working Environment - Scope

Collaboration Working Environments (CWE) vary for very complex inter governmental department, multi nation and multi-industrial base through industry to MOD industry to industry configurations.

The scope of the TDI market coherence is comprehensive. However, the initial focus will be on the simpler use cases and will be mindful of the need for larger more complex CWEs.

The initial market coherence will focus on companies whose main offering are collaborative working environments. It is possible that these offerings can be aggregated together or included as components of a more complex CWE.

It is also recognized that some defence OEMs provide CWEs to either as part of an overall contract with the UK MOD or as a service to a consortium that has a delivery contract into the UK MOD.

Key  In production  Roadmap  Available but not in production  Not available

Collaborative Working Environment (CWE)

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UK MOD – Secure Collaborative Working Environment - Service Catalogue

Collaboration services to assist UK MOD and the industrial base to work together in a secure and accredited environment

















Service - Collaboration	Notes	Technology	OS	Secret
Voice and Video	Room based system			
Instant messaging and chat	Access by group & individual			
Document Management	Controlled access by group and individual			
Community/Project Enclaves	Multiple projects or programmes can be segregated on single system			
In room visualisation	Real time collaborative information sharing			
Digital Whiteboard	Idea generation, education, collaboration			
Office Productivity Tools	Information and content modification, sharing and creation			
Secure File Transfer	Large files transferred securely between customer/supplier/partner locations			
Engineering applications	Product Lifecycle Management			
Development tools	Low Code/ No Code Application development tooling			
High Performance Compute	Achieved through scaling of existing hardware platform			

Key ■ In production ■ Roadmap ▨ Available but not in production ▨ Not available

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UK MOD – Secure Collaborative Working Environment - Service Catalogue

Service management services that ensure the availability of the CWE and its on-going security and information assurance.

Service - Management	Notes	Technology	OS	Secret
Service desk	Incident reporting and resolution, request management, Multi skilled 2 nd and 3 rd line support			
Security Information and Event Management (SIEM)	Hosted on infrastructure accredited to Official Sensitive and or UK Secret			
System Health Monitoring	Hosted on infrastructure accredited up to Official Sensitive and or UK Secret			
Anti-Virus				
Backup and Recovery	Onsite and offsite locations			
Enhanced resilience	Hot and Cold backup and restore options			
Patch Management	Updating of software and firmware to introduce new features/ resolve issues			
Vulnerability Scanning	Using published intelligence reports to scan services for vulnerabilities requiring resolution			

Key  In production  Roadmap  Available but not in production  Not available

Collaborative Working Environment (CWE)

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UK MOD – Secure Collaborative Working Environment - Service Catalogue

Connectivity services that allow the CWE to exchange data and information with other secure data environments..

Service – Connectivity	Notes	Technology	OS	Secret
UK MOD Gateway @ Secret	Allows browse across onto UK MOD Secret networks		Available but not in production	Not available
Cross domain gateway	Allows connectivity to other networks (industry partners) @ Secret		Available but not in production	Not available
Secure File Transfer	Large files between customer/supplier/partner locations		Available but not in production	Not available
UK MOD Email @ Secret	Allows two-way email with team on UK MOD Secret networks		Available but not in production	Not available

Service Access provides an overview of the type of access devices, form factors and environments that each supplier can either provide or integrate with.

Service - Access	Notes	Technology	OS	Secret
Fixed room video conference	Fixed Room video conferencing with dedicated VTC equipment		Available but not in production	Not available
Remote access points	From Facilities Security Cleared (FSC) locations		Available but not in production	Not available
High grade appliances	NCSC CAPS approved cryptographic keys - Suite A, B, C2, including PRIME		Available but not in production	Not available
Ruggedised Deployable Access	Includes crypto, VTC, Local Compute, Thin Client access devices		Available but not in production	Not available
International access	Access to UK hosted system from approved Non-UK locations		Available but not in production	Not available
non-FSC locations	Includes laptop and mobile NCSC CAPS Crypto		Available but not in production	Not available

Key ■ In production ■ Roadmap ▨ Available but not in production ▨ Not available

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UK MOD – Secure Collaborative Working Environment - Service Catalogue

Service that allow multiple projects to work independently of each other in a secure manner that prevents data loss and unauthorized sharing of data or information.

Service – Multi project	Notes	Technology	OS	Secret
Secure Data Enclaves	Community-specific project workloads		Available but not in production	Not available
Cross domain out from CWE	Import/ Export (ImpEx) data between CWE and external system of different security classification		Available but not in production	Not available
Internal CWE Email	Internal email within the CWE		Available but not in production	Not available
Data Loss Prevention	Safeguard against data being sent to unauthorised recipients		Available but not in production	Not available
Software Defined Networking	Micro-segmentation of user data traffic		Available but not in production	Not available

Encryption services that ensures that data and information is held and transmitted in a secure manner.









Service - Encryption	Notes	Technology	OS	Secret
Data encryption- in transit	HMG/NCSC approved Data encrypted in transit between secure locations		Available but not in production	Not available
Data encryption- at rest	Each CWE has its own hardware generated highly secure key for data at rest encryption		Available but not in production	Not available
Key and certificate management.	Each CWE has its own hardware generated key for data encryption and certificate management		Available but not in production	Not available
Quantum resistant data in transit encryption	Improved security assurance of data in transit through quantum resistant techniques.		Available but not in production	Not available

Key ■ In production ■ Roadmap ▨ Available but not in production ▨ Not available







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UK MOD – Secure Collaborative Working Environment - Service Catalogue

Access control services to ensure authenticated user can only access the data and information that they are authorized to.

Service – Access control	Notes	Technology	OS	Secret
User identification	Multi factor identification (MFA)			
Biometric identification	Improved user experience, whilst maintaining security			
Trust policy	'One way trust' between Organisations and Projects preventing data egress.			
Permission policy	Role based access controls – not 'individual'			

Robust security in depth isolation of services to provide additional physical resilience.











Service – Physical	Notes	Technology	OS	Secret
Separate data centers	Active standby or active load balanced			
Physical separation of servers	Physical separation of server hardware from other services			
Isolated storage	Storage physically isolated – dedicated storage to user communities			

Key  In production  Roadmap  Available but not in production  Not available

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UK MOD – Secure Collaborative Working Environment - Service Catalogue

Service Assurance is provided by third party organisation that either audit, accredit or assure the supplier’s services. Note that each instance of a set of services are independently accredited by the Authority and this table provides an indication of the company’s capabilities and experience to provide an accredited service.











Service – Assurance	Notes	Technology	OS	Secret
UK compliance	Secure by Design - NIST 800-37 model – Zero Trust architecture			
Assurance Frameworks	NIST Cyber Security Framework, ITIL aligned Service Management			
Organisation frameworks	ISO 9001, 20000, 27001			
Protective Monitoring	GPG13			
Environment hardening	Centre for Internet Security (CIS) benchmarks - NCSC policies			

Key  In production  Roadmap  Available but not in production  Not available

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UK MOD – Secure Collaborative Working Environment - Commercial

The CWE services can be contracted via a number of ways either UK Government frameworks, via DE&S etc. Industry can contract directly with the CWE supplier. This section should capture currently offered contractual route.

Contractual	Notes	Client	OS	Secret
Crown Commercial Services	List any past or present frameworks used and or offered.	MOD		
Framework	List frameworks supplier has been qualified for.	MOD		
DE&S	List DE&S contract types in use and or offered.	Industry		
Direct	Describe type of contracts in use and or offered.	Industry		
International	Describe type of contracts in use and or offered.	Non – UK MOD		

Key  In production  Roadmap  Available but not in production  Not available

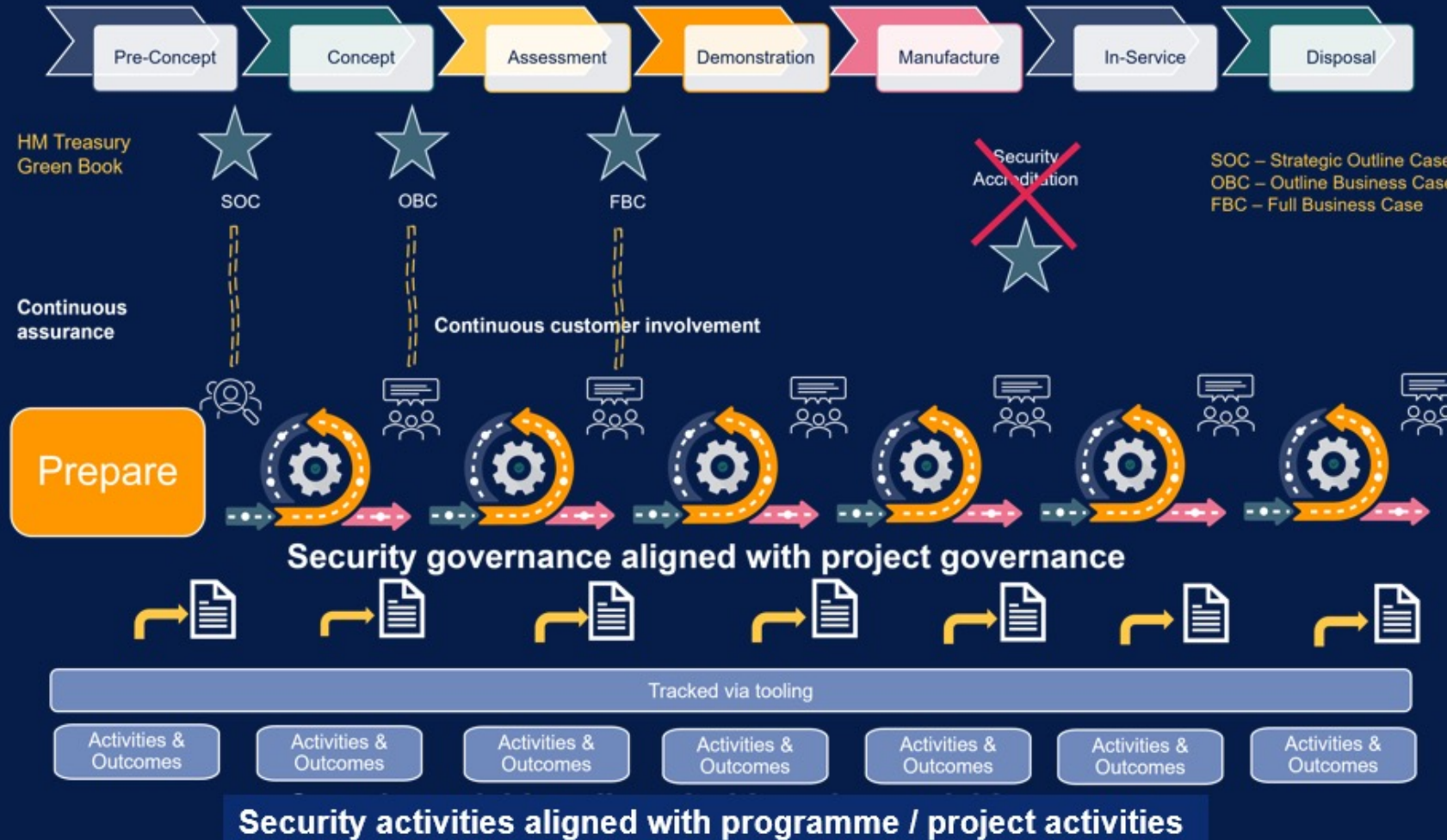
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Secure by Design

Phil Williams

Secure by Design Process

How does Secure by Design Operate?



Team Defence Executive Meeting

Additive Manufacturing

Stu Olden

Overview – TD-Info Activity



- Previous CDLS directive, fully supported by current incumbent
 - **Aim: Increasing platform availability & readiness**
- Team Defence Information supporting sponsor: MoD DefSp Innovation (WG Secretariat & Industry engagement)
 - TDInfo manage Kahootz AM WG sharepoint space (150+ members)
- Dir JtSp has taken on lead sponsor from Phil Tullit (EST)
- Delivery vehicle: **Project TAMPA (AdMaaS WG)**
 - Encouraging increase in AdM across Defence Supply chain
 - 4 Spirals (commenced Oct 21)
 - F2F briefings/updates and Virtual WGs
 - Next event: AdMaaS WG, 22nd October, Thales, Reading (100 spaces)
- All events advertised & managed via TDInfo, continual range of surveys (Defence Inventory, Capability & Pulse)
- TDInfo leading on developing 'AdM Component Certification Guidance' document, part of MoD AdM Adoption Strategy

AdMaaS Governance

AdM Exec Group

Co-Chairs

Charlotte Robinson – (MOD DefSp Innovation)
Jon Morley – (Industry - Babcock)
Sec – Edit Barbantan (MOD DefSp Innovation)

DIPR Representatives – Georgina Bowyer
MTC Representative – Ross Trepleton

Oversight, Direction, Coherence
Attended by Workstream leads/co-chairs

IPR Working Group
DSF Commercial

AdM Certification
Working Group

AdM Inventory Management
Working Group

AdM Digital Thread
Working Group

Integration Task Force

Co-Chairs

Nigel Stewart (BAeS) – (Ind)
Phil Tozer - (DE&S)
Sec – Hannah Weir (MOD)

Co-Chairs

Charlotte Meeks (Industry – QinetiQ)
Gp Capt Leonie Boyd (MOD Air Cmd)
Sec – Stu Olden (Industry – TD Info)

Co-Chairs

Len Pannett – (Industry – DiManEx)
VACANT – (MOD)
Sec – Stu Olden (Industry – TD Info)

Co-Chairs

Shelley Copplesstone – (Industry - Babcock)
Lt Cdr Timothy Westmaas – (MoD)
Sec – Edit Barbantan (MOD DefSp Innovation)

- Unlock IPR constraints for obsolete/obsolescent parts
- Unlock IPR for current parts

- LFE with Aerospace
 - Agree standards
 - Agree processes
 - Agree protocols

- Consider implications for Matl accounting
- Consider if needed to be flagged on Sp IS
- Check fit, form and function alignment with extant NSN

- Print file creation
- Print file standards
- Print file storage
- Print file transmission
- Print file exploitation



Additive Manufacturing (AM) as a Service Challenge AKA Project TAMPA



What:

- **Spiral 1:** Industry to fit metallic **non-safety critical AM parts** to in-service platforms that have long lead times or are obsolete.
- **Spiral 2:** Industry to **fit metallic AM parts** to in-service platforms, prioritising metallic parts used on UKR gifted platforms that have long lead times or are obsolete and those from the **Air domain or that are safety-critical**.
- Sharing issues, successes and learning across MOD and Industry.

Why:

- Availability of Defence inventory is compromised, often due to part obsolescence, long lead times or closure of production lines, leading to poor platform and equipment availability. Exploiting AM has the capability to boost supply chain resilience and contribute to a step change in platform and equipment availability and readiness.

How:

- Under a framework contract, release ‘challenges’ AKA ‘spirals’ of increasing complexity to multiple defence support suppliers to increase their confidence and expertise in using AM in collaboration with the MOD.
- **Spiral 1** with NP Aerospace, Thales, RBSL, Babcock & AMFG. All parts due to finish by Aug 24.
- **Spiral 2** with NP Aerospace, Thales, RBSL, Babcock. All parts due to finish by Jun 25.

Stage: On Contract for Spiral 1 and 2.

Contact: Deputy Project Manager Edit.Barbantán100@mod.gov.uk Project Manager Charlotte.robinson129@mod.gov.uk

Oct 21

Initiate project

Jan 22

Collaborative working groups established

Mar 23

Framework contract and Spiral 1 commissioned

Mar 24

Spiral 2 commissioned

Oct 24

Pre-Spiral 3 & 4 decision point

Completion

40%



**Charlotte
Robinson**



**Edit
Barbantán**

Next Steps

- Launch of Spiral 3 (Q3 2024)
- Approval of 'AM Component Certification Guidance Document' & open-source publication (Q4 2024)
- Continuing support of AdMaaS / Project TAMPA
 - Increasing industry engagement
 - Event marketing / support (Kelly & Jack)
 - Secretariat roles
 - Surveys / Lessons Learned
 - Drafting documentation

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AOB

Thank You