



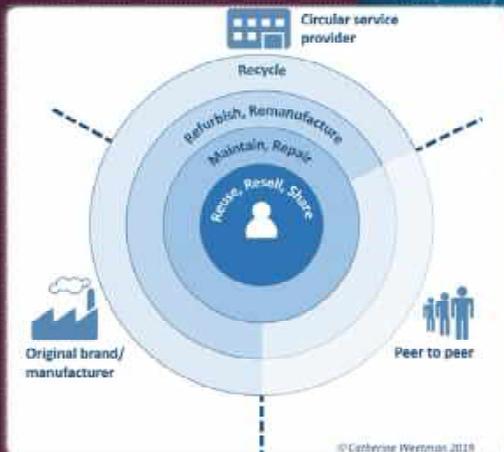
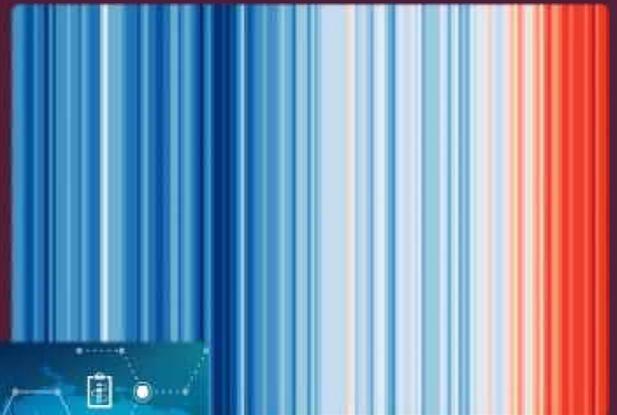
Strategic
Command



Defence Logistics LOGNET Conference

12-13 March 2020

Conference Programme



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Foreword by

Rear Admiral Andy Kyte

**Assistant Chief of the Defence Staff (Logistic Operations)
and Chief Naval Logistics Officer**

I am delighted to welcome you to LOGNET 20. This conference, now in its fourth iteration, remains the key event for Defence Logistics' engagement with our broad family of stakeholders. Those of you representing industry, academia and defence are all equally welcome. I am equally pleased that this year's event has attracted the largest attendance so far, testament to both the value and reputation of previous conferences and the hard work of the team that pull this together on my behalf. LOGNET seeks to utilise the skills, knowledge and experience of industry and academia, to contribute to the enablement of the Defence Support Vision. Our theme this year - 'Developing resilient, integrated and sustainable logistic support in a degraded and contested environment' – is designed to complement work that the ongoing Integrated Review and wider Defence conceptual activity.

The Conference is at an opportune moment with the establishment of the Chief of Defence Logistics & Support. Lieutenant General Richard Wardlaw will be delivering the keynote speech that sets out his vision, as part of a first day that is strategic in nature. Day 1 will explore the implications of Artificial Intelligence, Machine Learning and the Circular Economy on Defence activity. Day 2 will focus broadly on technology-based concept development, including updates from international colleagues. I commend the technology stands and demonstrations that are available for viewing throughout the conference. These will enhance your understanding of the fantastic opportunities that are now open to us. Finally, I would like to thank our industry partners and Team Defence Info for their work in providing their support for what I am sure will be a most successful two days."

12th March 2020

Yours aye, Andy Kyte

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Phil Williams, Managing Director, Team Defence Information

Welcome to LOGNET



As the MD of a membership organisation that operates in a distinctly **Team Defence** way – enabling Industry (suppliers and users) and the MOD to collaborate for the common good - it's both a privilege and a pleasure for us to be closely involved in supporting this LOGNET Event.

It's one that Industry has held in some anticipation; and the rewards are evident in the excellent 2-day LOGNET Event Programme: in the depth and breadth of the content from senior MOD and Industry speakers, including subject matter experts, the range and quality of the 40+ Exhibitors and the ability to network amongst 400+ delegates.

LOGNET's focus is on "Delivering Resilient, Integrated & Sustainable Logistic Support in a Degraded & Contested Environment" and the associated themes of Sustainability, Resilience, Interoperability, Digital Transformation and Innovation. The latter are enduring challenges that need to be addressed on a Team Defence basis to be true to the reality of delivery and to maximise benefit.

That these themes are well represented within TD-Info is to be expected, given that we have a mature MOD/Industry governance that jointly agrees priorities and projects, and that reports to the Defence Suppliers Forum (DSF). In the LOGNET space, there are currently three active sub-groups - Robot & Autonomous Systems, Additive Manufacture and Artificial Intelligence (AI); all are presenting at LOGNET.

For those that are less familiar with TD-Info and what we do, please read about us in the Exhibitor section of this Programme. In essence, as **Team Defence Information**, we work at doing what it says on the tin! Please visit us in the Exhibition space if you can or contact us following this Event to find out more about how you and your organisation can get value from membership.

You may also wish to join our annual joint MOD/Industry **Defence Information** Event, 1-2 April in the Steam Railway Museum, Swindon. The theme of **Information-led Transformation** will focus on the secure, interoperable information sharing capabilities needed to underpin transformation - and will develop further themes and content from LOGNET.

Standards are key for interoperability. In the world of International Logistics Standards, TD-Info plays an active role within forums, on behalf of members and MOD. Last year TD-Info hosted, with support from ADS, the annual International S1000D User Forum, involving 330 delegates. This year will be the first User Forum worldwide for IPS (**Integrated Product Support**), formally known as ILS (**Integrated Logistics Support**), bringing together ALL relevant S-Series specifications. The **Vienna User Forum** runs 2-5 November and is *the* event in 2020 to gain all first-hand information and experiences; 300+ delegates, 20+ exhibitors and 50 speakers. More details in our Website News section.

This content-rich LOGNET Event has been a significant undertaking to organise – our thanks to all who have contributed. The rewards come from your active participation and the follow-on actions. Please take full advantage of MOD briefings, Industry presentations, networking and the 40+ Exhibitors, both those in the car park as well inside the venue.

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LOGNET Conference - Day 1 (Thursday - 12 Mar 20)

Time	Activity	Aims and Objectives	Venue
0730	Registration opens	Delegates' registration confirmed on Eventbrite. Conference pass and Programme issued.	Hotel Lobby
0820	Administration Notices	Welcome address by Capt (RN) Damian Exworthy, Defence Logistics Concepts and Force Development. Use of MentiMeter to enable audience participation.	Commonwealth Suite
0830	Rear Admiral Andy Kyte. ACDS (Log Ops)	Rear Admiral Andy Kyte, ACDS (Log Ops) welcomes delegates and introduces the conference, outlining its scope, themes and objectives. RAdm Kyte will set the strategic operational context, utilising content delivered through his address at the Combat Support Week event, including associated IOpC diagnosis and emphasizing Support's role in servicing the front line. RAdm Kyte will invite full participation from delegates under traditional Chatham House rules.	Commonwealth Suite
0845	Lieutenant General Richard Wardlaw. CDLS	Lieutenant General Richard Wardlaw, Chief of Defence Logistics and Support (CDLS) will brief attendees on his role as the Functional Leader for Support: insights, ambition, vision, the Defence Support Operating Model (DSOM) construct and Defence Support's contribution to the 2020 Integrated Review (IR). CDLS will also refresh delegates' understanding of Def Sp Tx, including progress to date and preparations to achieve DSOM Transition State 2 on 1 April 2020, the Integrated Operating Concept, challenges. Lt Gen Wardlaw will cover the themes in his Diagnosis paper, including the underpinning need for sustainability, the possibilities of a shared economy, the implications and opportunities afforded by the Integrated Review and potential options for 'buying into' experimentation.	Commonwealth Suite
0930	AVM Richard Hill Dir Spt Tx	Air Vice Marshall Richard Hill, Director for Support Transformation (Dir Sp Tx) will brief on his strategy, priorities, pressures and opportunities, and will update delegates on the Defence Support Operating Model (DSOM), Business Modernisation for Support (BMfS) and the range of Discovery Projects that are being pursued.	Commonwealth Suite
1015	Break	Refreshments and networking in all public areas. Industry and Tech stands will be manned to allow hosted networking throughout the break.	Royal Suite Connaught Suite Private Room 38 Atrium Venue Car Park

Time	Activity	Aims and Objectives	Venue
1045	Maj Gen Simon Hutchings Dir Jt Sp	Major General Simon Hutchings, Director of Joint Support, outlines the construct and strategy for the management of the Strategic Base and its Joint Enabling capabilities.	Commonwealth Suite
1130	Brig Martin Moore Hd Def Log Strat	Brigadier Martin Moore, Head of Defence Logistic Strategy will brief delegates on an emergent strategy for Industrial Mobilisation, which will be developed in step with the Integrated Review 2020.	Commonwealth Suite
1215	Questions to Senior Leaders	Delegates will have the opportunity to pose questions to a panel of senior Defence Leaders	Commonwealth Suite
1230	Lunch	Hot and cold buffet with refreshments. Networking opportunity. A total of 40 Industry and Tech stands will be available in public areas, including outdoor displays in the venue car park. Delegates are encouraged to circulate freely throughout all rooms, and outdoor areas.	Royal Suite Connaught Suite Private Room 38 Atrium Venue Car Park
1330	Rear Admiral Andy Kyte ACDS (Log Ops)	Introduction to industrial and academic thought leaders.	Commonwealth Suite
1330	Dr Chris Kutarna Industry Speaker	Dr Chris Kutarna discusses the historical context of Artificial Intelligence (AI), its rapid appearance into our field of vision, and the hype around Machine Learning (ML). What is profiting from our ignorance about AI? Will the hysteria about ML and AI running amok be borne out in reality? What does this mean for Defence, and the how does it change the risks and opportunities inherent in the Defence Support Network?	Commonwealth Suite
1415	Mr Marcos Hart Wincanton	Mr Marcos Hart, Group Risk & Transformation Director of Wincanton, discusses accelerated innovation and digital transformation in the supply chain. Using relevant case studies, Marcos will talk about the deployment of telematics, virtual-reality training, live muscular-skeletal monitoring and intervention and share experiences with robotics. Finally, Marcos will describe Wincanton's 'OneVAST' initiative for agile warehousing and the benefits of total asset visibility. The Wincanton stand will support the themes of the conference and provide a series of practical demonstrations, whilst Wincanton will also have a hands-on exhibit in the car park.	Commonwealth Suite

Time	Activity	Aims and Objectives	Venue
1500	Break	Refreshments and networking in all public areas. Industry and Tech stands will be manned to allow hosted networking throughout the break.	Royal Suite Connaught Suite Private Room 38 Atrium Venue Car Park
1530	Catherine Weetman Industry Speaker	Catherine Weetman suggests Rethinking Defence for a Circular Economy, to avoid the risks and challenges from 'business as usual' – our take-make-waste, linear economy. Catherine outlines the components of a circular economy, explaining how it could apply to Defence Support and contribute towards a more sustainable model for Defence capability. Benefits to business and society are explored, including how circular approaches can help Defence achieve its global NetZero 50 (NZ50) objectives.	Commonwealth Suite
1615	Capt Damian Exworthy. Future Support Force Virtual Reality and Immersive Video demonstration	Capt (RN) Damian Exworthy, Def Logs Assistant Head Concepts and Force Development, introduces a visualization of how a Future Support Force might be enabled by emerging concepts and technologies. A 6-minute vision of the Future Support Operations Force will be displayed using Virtual Reality (VR) and Immersive Video (IV) displays.	Commonwealth Suite
1645	RAdm Andy Kyte ACDS (Log Ops)	RAdm Kyte brings Day 1 to a close by summarising CDLS's strategy and vision considering the content of the day, the potential effects of new technology on the future Defence Support Network and sets the scene for Day 2 with a challenge to the forum.	Commonwealth Suite
1715	Leidos and Oracle Evening Reception	An opportunity, hosted by Leidos and Oracle, to discuss informally the issues raised throughout Day 1 of the conference.	Atrium
1830	Day 1 Close		

LOGNET Conference - Day 1 Addendum - Joint Information Group (Vanguard) Sustainability Challenge

Time	Activity	Aims and Objectives	Venue
1830	Joint Information Group (Vanguard) Sustainability Challenge	<p>The Joint Information Group (Vanguard) challenge title is: "Sustaining the Future Force without Costing the Earth". How could circular support networks mitigate the challenges of scarcity, cost and environmental impact? JIG-V candidates will submit their ideas in advance of LOGNET 20, and up to 10 will be selected for elevator-pitches to a panel of experts and thought-leaders at LOGNET 20. Challenge response will be developed, and the outputs presented 4-6 months later. The £1000 prize is sponsored by Team Defence Information and Harmonic.</p> <p>LOGNET Delegates are welcome to participate as audience members</p>	Connaught Suite B

LOGNET Conference - Day 2 (Friday – 13 Mar 20)

Time	Activity	Aims and Objectives	Venue
0730	Registration opens	Delegates' registration confirmed on Eventbrite. Conference pass and Programme issued.	Hotel Lobby
0820	Administration Notices	Welcome address by Capt (RN) Damian Exworthy, Defence Logistics Concepts and Force Development. Use of MentiMeter to enable audience participation.	Commonwealth Suite
0830	Brig Martin Moore Hd Def Logs Strat	Brig Martin Moore welcomes delegates and introduces Day 2 of the LOGNET conference. After a short summary of Day 1, Brig Moore introduces keynote speakers from the International Defence Community.	Commonwealth Suite
0835	International Support perspective	<p>Mr Don Moloney, Australian DoD Innovation and Continuous Improvement will discuss how modern tools and processes - such as Additive Manufacturing, Robotic Process Automation, Innovation and Digital Supply Chain - are coming together to form a more resilient and sustainable AU Naval Force. (15 Minutes)</p> <p>Mrs Janice Wilson-Pinchin. The NATO Support and Procurement Agency represents an opportunity for UK Defence industry to win business within NATO nations. In 2018 UK Defence placed €80M of contracts with the NSPA, and UK defence industries were awarded contracts with a value of €178M; however, this is against an annual total of 'some €4Bn' of NSPA business, demonstrating the significant scale of further opportunities. The presentation will seek to enhance awareness of the NSPA; explain the role of the UK Liaison Officer and inform how UK industry can register with the NSPA in order to conduct business. It will also cover the efforts to increase the UK's share of this business which includes Defence Logistics, Hd Def Log Ops & Cap, and HMA Luxembourg supporting the NSPA with the annual UK Industry days in Capellen. (15 Minutes)</p> <p>Mr Andy Davis - Global Technology Advisor, US Army Combat Capabilities Development Command (CCDC), discusses the US Army's efforts to Operationalize Additive Manufacturing. (15 Minutes)</p>	Commonwealth Suite
0920	Gp Capt N Jones AH Def Logs Ops & Plans	Group Captain Neil Jones, Assistant Head Defence Logistic Operations and Plans, will provide an unclassified brief on today's operational environment and associated expectations for Industrial readiness, surge capacity and reduced lead times. Gp Capt Jones will describe recent operational lessons, and opportunities for concept and technology integration in the Defence Exercise Programme.	Commonwealth Suite

Time	Activity	Aims and Objectives	Venue
0940	Mr Damian Alexander Leidos	Damian Alexander is Vice President, MD Logistics Division and Programme Director of the Logistics Commodities and Services Transformation (LCST) programme and will explain how Leidos is delivering digital transformation for the MOD, bringing together a skilled and experienced team of private sector defence and logistic partners with the global expertise to deliver the transformation required. He will explain how the LCST Programme is implementing technological advancements for Defence operations, while generating savings for the UK government and taxpayers	Commonwealth Suite
1010	Break	Refreshments and networking in all public areas. Industry and Tech stands will be manned to allow hosted networking throughout the break.	Royal Suite Connaught Suite Private Room 38 Atrium Venue Car Park
1030	Gp Capt Craig Watson Artificial Intelligence and Machine Learning (AI & ML) Working Group.	The application of AI&ML technologies in the Defence Support (engineering & logistics) environment, as explored by the MoD/industry Working Group; the presentation will cover the development of usage hypotheses and use cases, a technology adoption roadmap, technology investigations/trials and constraints to successful adoption. The AI & ML working group has a stand in the display area.	Commonwealth Suite
1100	Cdr Conleth Burns Additive Manufacturing (AdM) Working Group.	Delegates will be briefed on advances across the Front-Line Commands where additive manufacturing techniques are being tested and implemented. The presentation will include an overview of current activity and future plans to broaden the experimentation base to seek greater understanding of how these techniques might be used, with industry partners, to support operations. The AdM working group has a stand in the display area.	Commonwealth Suite
1130	Lt Col Gary Pugh Robotics and Autonomous Systems (RAS) Working Group.	The Robotics and Autonomous Systems (RAS) Sub-Working Group Co-Chairs will brief delegates on the drive to understand how a RAS-enabled DSN of the future will be achieved through the augmentation or replacement of high- volume manual, repeatable and long-duration support functions by RAS capabilities across the Defence Support Enterprise. The RAS working group has a stand in the display area.	Commonwealth Suite

Time	Activity	Aims and Objectives	Venue
1200	Gary Meusz Naval Authority Group	Gary Meusz, from the Naval Authority Group, describes advances in Cold Spray additive manufacturing technologies, and its application in Defence environments. Gary describes a proposal to create a Cold Spray Centre for UK Defence and discusses the merits and risks of this technology. A Cold Spray demonstrator-unit will be available at the conference.	Commonwealth Suite
1230	Brig Martin Moore Hd Def Logs Strat	Brig Martin Moore brings the conference to close with a review of MentiMeter inputs, a reminder of the Chatham House rules principles, the availability of conference material, and arrangements for next year's conference.	Commonwealth Suite
1300	Lunch and Dispersal	Hot and cold buffet with refreshments. Networking opportunity. Industry and Tech stands will be manned.	Royal Suite Connaught Suite Private Room 38 Atrium Venue Car Park

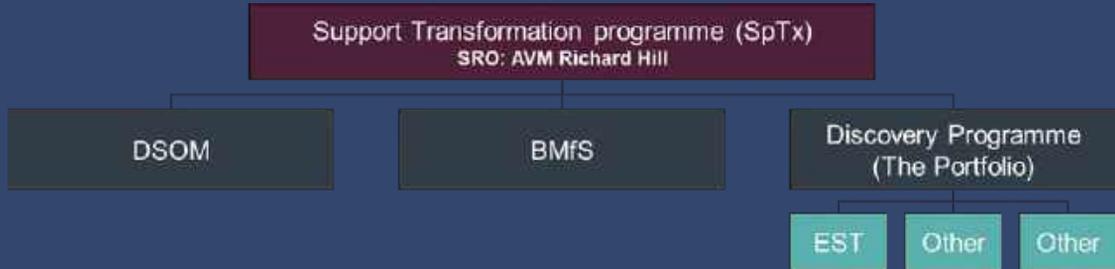
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ENGINEERING SUPPORT TRANSFORMATION



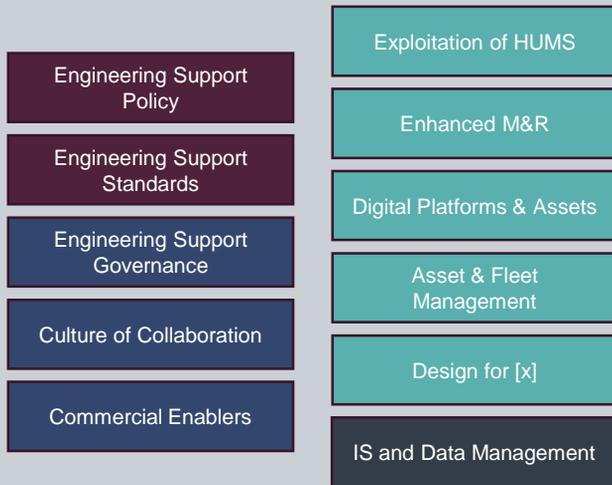
Engineering Support Transformation (EST) is a project within the Support Transformation (SpTx) Discovery portfolio as part of the Defence Support Transformation Programme being run under Strategic Command. The EST task is being carried out in parallel to the DSOM and BMfS pillars under SpTx.



A Discovery Phase was completed in March 2019. Following the development of the EST vision and Discovery phase, the project has now moved into an interim phase. The objective of the interim phase is to take the 11 EST themes forwards and develop the business case and supporting artefacts for implementation.

The immediate focus is to engage with stakeholders in Front Line Commands (FLC), Delivery Agents and industry to understand priorities and capability to support the delivery of each theme. In parallel, to develop and quantify potential benefits of Engineering Support using case studies of good practice in Defence and wider industry.

EST THEMES



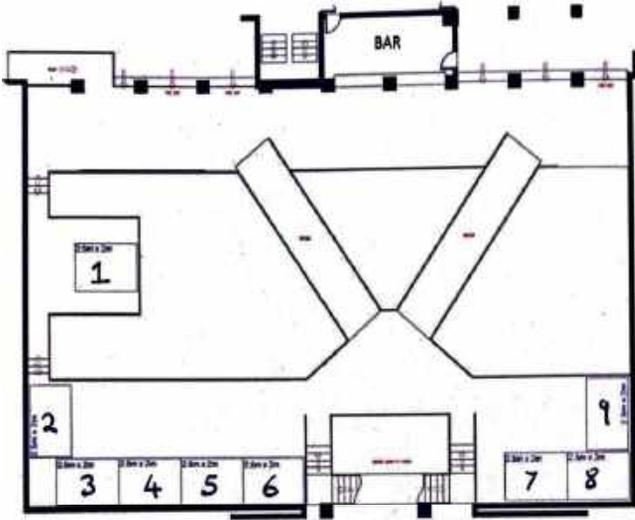
ENGAGING WITH EST AT LOGNET

The EST team will be present at LogNet based in Connaught Suite A in the breakout areas. EST team would request the opportunity to meet with representatives from Industry, FLC and Delivery agents to capture current good practice, capabilities and initiatives underway.

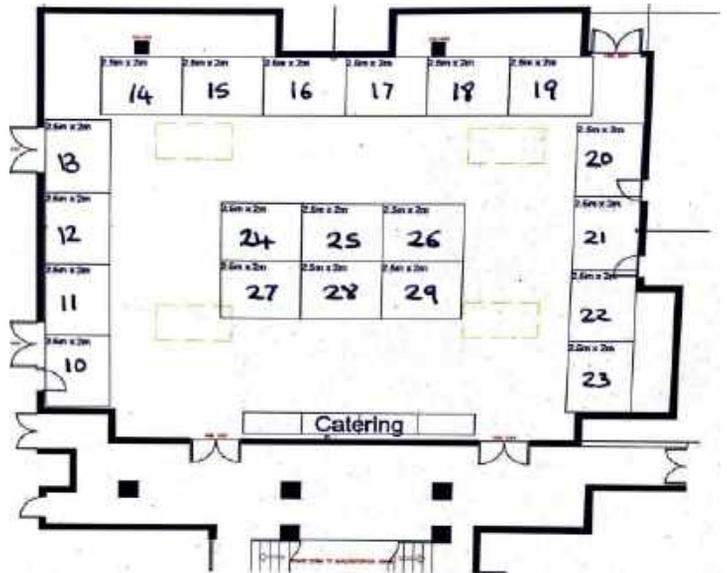
If you would like to schedule a session with the EST team please email your preferred times to tia.tang@kpmg.co.uk

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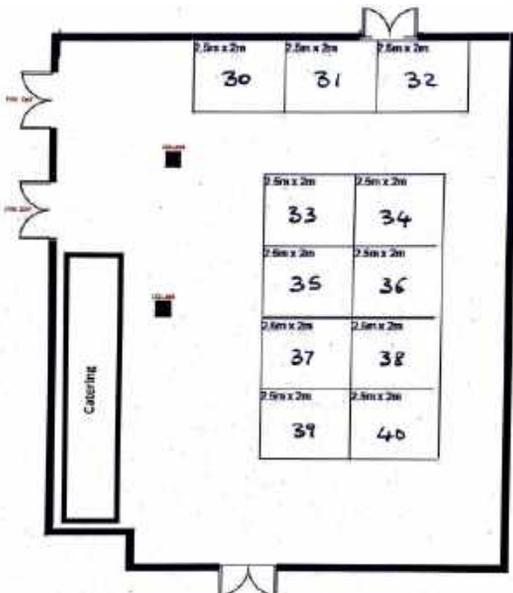
Display Stand Allocation



The Atrium



The Royal Suite



Private Room 38

Hands-on displays by **Wincanton** and **KBR** are located in the Conference Venue Car Park

Display Stand Allocation

Company	Stand No.
Added Scientific Limited	30
Akselos	15
Arke Ltd	22
Atkins	27
Babcock International	7
BAE Systems	6
Borwell Limited	13
Brookes	14
CREAT3D Ltd	23
Defence Logistics	8
Dstl	28
DXC	2
E&K AUTOMATION Ltd	31
EES Solutions KMD Ltd	32
ESCIT, MOD	33
evrilINSIGHT	34
Hadfield Services Limited	35
Kahootz	29
KBR	5 & Car Park
Knowledge Transfer Network	37
LanciaConsult	38
Leidos	44
Misceo Group	39
MOD - AI & ML Working Group	10
MOD - RAS Working Group	11
MOD - AdM Working Group	12
OpenTExt	40
Oracle	9
Pega	17
RINA	16
Risk Reasoning Ltd	36
Team Defence Information	1
TFD	41
Tech Data World	18
TNA Consulting	19
TVS Supply Chain Solutions	20
TWI	21
UK National Codification Bureau, DE&S	24
Ultimaker	25
Unallocated	42
Unallocated	43
VRAI	26
Wincanton	3 & Car Park
World Fuel Services Europe Limited	4

Hands-on displays by **Wincanton** and **KBR** are located in the Conference Venue Car Park



LOGNET 2020 Exhibitors

Contents

Added Scientific Limited	2
Akselos.....	2
Arke Ltd.....	3
ATKINS Geospatial	3
Babcock International.....	4
BAE Systems	4
borwell Limited.....	5
CREAT3D Ltd	5
Defence Logistics, UK Strategic Command.....	5
DIEM analytics Ltd	5
Dstl.....	6
DXC	6
Equipment Support Continuous Improvement Team (ESCIT).....	8
evriINSIGHT.....	8
Hadfield Services Limited	8
Risk Reasoning Ltd	8
Kahootz.....	9
KBR.....	9
Knowledge Transfer Network.....	9
LanciaConsult.....	10
Leidos.....	10
Misceo Group	11
OpenText	11
Oracle	11
Pega Systems	12
RINA	12
Team Defence Information	14
TECH Data	14

TNA Consulting	14
TVS Supply Chain Solutions	14
TWI.....	15
UK National Codification Bureau	15
Ultimaker	16
VRAI	16
Wincanton	17
World Fuel Services Europe Limited.....	17
MOD AI & ML Working Group.....	18

STAND SYNOPSIS – PROVIDED BY THE COMPANIES AS FOLLOWS:

Added Scientific Limited
<https://addedsscientific.com>



Added Scientific offer contract research and consultancy across a range of Additive Manufacturing (AM) technologies. We have a specialist knowledge of design for AM, developing materials for AM and the intricacies of AM processing which enables us to support companies in developing creative and innovative solutions to their problems. Formed as a spin-out of the University of Nottingham’s Centre for Additive Manufacturing in 2015, we have maintained close ties to the group but operate independently out of our own facility on Nottingham Science Park. We have recently been supporting the ‘MoD AM spares’ project funded via Dstl which has assessed the opportunities and challenges of implementing AM technologies in operational areas. We will have on show a selection of metal and plastic parts produced by different Additive Manufacturing processes which demonstrate the potential and limitations of AM. We will also showcase a Laser Sintered bracket for a Spitfire aircraft which has been manufactured to take the place of a missing legacy component, as well as samples of different materials to highlight the range of material properties achievable by AM. If you’d like to get in touch to discuss a possible project, call us (01156486820) or email sarah.everton@addedsscientific.com Business Development Manager

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Akselos
<https://akselos.com/>



Akselos is a new approach to structural analysis developed at the Massachusetts Institute of Technology and initially funded by a US Department of Defence programme to optimise maintenance and support. This new approach speeds up the evaluation of asset Structural Integrity by as much as 1,000 times compared to traditional techniques. This transforms the value of simulation extending beyond just design to the prediction of condition based performance and optimising operations and maintenance.

Digital Transformation – The speed of Akselos simulation means real loading and condition information from sensors installed on an asset may be used to evaluate a continual picture of Structural Integrity

Innovation – Akselos is a breakthrough technology based on a fundamentally new approach to the mathematics of Structural Simulation allowing the digitalisation of Structural Integrity assessment.

Sustainability – The enhanced accuracy and speed of Akselos assessments may be used to optimise operations and extend the life of critical assets

Resilience – The Akselos Predictive Structural Digital Twin supports Risk Based Inspection and Condition Based Maintenance. The rapid assessment of structural defects and repair scenarios can also add value in difficult operating environments

Chris Smith, Sales Director,
chris.smith@akselos.com

Arke Ltd

www.arkeltd.co.uk



Arke Ltd provides evidence based decision making and exploitation support. This has involved various studies looking at how Defence and the Private Sector could best leverage advances in innovations such as Additive Manufacturing, Health and Usage Monitoring Systems (HUMS), Robotics and Autonomous Systems. We aim to work with SMEs in these fields and relate their expertise to defence challenges.

As an example, Arke is currently supporting the Dstl Logistics Technology Investigation (LTI) programme, providing cross cutting Cost, Benefit, Achievability Analysis (CBAA). The LTI programme is considering the best way to exploit advances in Data Science and Analytics, Additive Manufacturing, Autonomy and Automation, Repair and Maintenance, Fossil Fuel Alternatives and Culture and Behaviour drivers. LTI has a primary focus on innovative longer term exploitation within the 10+ years environment, with a secondary focus on nearer term exploitation. Arke's role within LTI is to generate information supporting coherence and Balance of Investment (BoI) between the individual work strands through the articulation of benefits (financial and non-financial, such as Sustainability, Resilience, Interoperability) and specific challenges (e.g. technical, organisational, legal) all underpinned by defined dependencies. Jess Green, Director, jgreen@arkeltd.co.uk

ATKINS Geospatial

<https://www.atkinglobal.com/>

ATKINS

Member of the SNC-Lavalin Group

Atkins, a member of the SNC-Lavalin Group, is one of the world's most respected design, engineering and project management consultancies, and one of the largest providers of engineering and technical services to the UK defence market; we work in partnership with you to provide independent and objective advice and support across all project lifecycle stages. Our Geospatial, Geomatics and Software teams support these operations by providing innovative digital platforms prioritizing interoperability with third party systems, BIM certified information management ecosystems to facilitate collaboration, and complex data analytics. Our provision of digital strategy consultancy has resulted in clients including the MOD making key gains in asset management, automation, and optimization of their value proposition. We develop tailored platforms encompassing the full digital cycle from data capture via our in-house drone service to analysis, visualisation and informed decision making. Highlights include data gathering and analysis for frontline autonomous vehicle

supply routes, and our RAPID platform (Rapid Assessment and Planning for Infrastructure Design), which provides immersive design, review, and tweaking capabilities for rapidly required military camps or humanitarian operational sites. 3D data and VR game technology allow users to experience, in an immersive way, proposed site designs, making inefficiencies obvious and enabling smart choices at the earliest stages. Elspeth McIntyre, Geospatial Consultant, Elspeth.mcintyre@atkinsglobal.com

Babcock International
www.babcockinternational.com



Babcock is a leading provider of critical, complex engineering services which support national defence, save lives and protect communities. We focus on three highly regulated markets: defence, emergency services and civil nuclear delivering vital services and managing complex assets in the UK and internationally. We are a trusted partner who understands the key roles that our technology, our expertise, our infrastructure and our assets play in ensuring our customers can deliver. We share risk with them in delivering innovation, and we share the benefits. This can be anything from managing a fleet warships to the specialised equipment and vehicles used by our emergency services on the ground and in the air, nuclear power stations or the 32,000 protected mobility vehicles we manage for the British Army. Our customers are increasingly coming to us more often for technology solutions either at that initial design stage, to through-life operations and support and maintenance. The projects we are involved in, such as Type 31 or the Navy's 4.5 inch gun, by example, allows us to constantly gather data about performance of the system, or gain insights into predictive maintenance and optimise performance. We support and encourage a diverse workforce. We invest in our people and have a number of initiatives to promote activities which motivate and inspire young people to experience and understand the real world application of science, technology, engineering and maths (STEM) subjects. Rita Congera | PR Manager and Group Technology Communications, Babcock International Group, Rita.Congera@babcockinternational.com

BAE Systems



www.baesystems.com

Defence Support Data Sharing Project

We are a team of defence companies and small to medium enterprises working collaboratively with the MOD to find innovative ways to share and exploit data using open standards and artificial intelligence. We are responding to challenge set by a tri-lateral of Defence Chiefs from the UK, France and US reflecting a wish to increase the level of data sharing to support better interoperability and operational outcomes. We believe that the problem of Digital Transformation in Defence Logistics Information sharing and analytics is more than just a technology and standards issue. We believe that to fully realise the benefits that Defence are seeking, we need to take an innovative service orientated approach that looks to integrate architecture, technology, stakeholders and business models together across the Defence Industrial Enterprise. Working as a collaborative team, we are developing an innovative prototype for the problem of secure data sharing. We are building on a solution we developed in a DASA led Hackathon in 2018. Our solution is based on open systems and internationally recognised information standards that comply with Government Digital Service policy. Our

team comprises Strategic Command, BAE Systems, Diem Analytics, Massive Analytic, BMT, and Oracle. Paul Andrews, Support & Services Lead. Manufacturing and Support. Office of the Chief Technology Officer, BAE SYSTEMS, Email Paul.Andrews@baesystems.com

borwell Limited
<https://borwell.com/>

CREAT3D Ltd
<https://www.creat3d.solutions/>



CREAT3D is a value-add Additive Manufacturing Solutions Provider, working in consultation with clients to achieve business efficiencies by streamlining manufacturing, design and engineering processes through integrating Additive Manufacturing devices and services. Additive Manufacturing is saving time and lowering costs, whilst improved in-house capabilities reduces reliance on third party providers. CREAT3D offer an end-to-end solution: business consultation, independent buying advice, provision of 3D printers and related technology, tailored training, lifetime technical support, servicing and maintenance, repair & business continuity programmes. CREATD work with a variety of industries including Engineering, Aerospace, Defence, Automotive, Manufacturing, Product Design and Higher Education. Visit www.creat3d.solutions/customer-applications to learn more on how Additive Manufacturing is generating fast return on investment. **Contact:** Simon Chandler, Director, simon@creat3d.co.uk

Defence Logistics, UK Strategic Command People Team

Meeting the themes covered in LOGNET 20 will require a sustainable and adaptable workforce capability, which complements the wider UK Industry sector. The People Team work closely with Industry, particularly through CILT(UK)-who are joining us on the stand, to promote and develop the professional excellence of Defence Logisticians.

DIEM analytics Ltd
www.diemanalytics.co.uk

DIEManalytics

DIEM Analytics specialise in system-dynamics modelling and developing AI decision aides where either the data is sparse or where the decision to be made is critical and therefore understanding the background to the decision is vital. Current projects include: **SCALE: Customer - Dstl PCES Programme**
Developing the System Capability for Assessing the Logistics Enterprise (SCALE) System-Dynamics tool which will provide the MOD with the capability to: Identify points across the current Defence logistics enterprise (DLE) where investment in research and innovation (in policy, structure or 'laydown', as well as technology) may drive step changes in capability and/or cost; and Generate evidence of the potential impact on DLE capability

and/or cost of specific 'interventions' e.g. strategies, concepts or technologies **Digital Mannequin: Customer – Defence Logistics Open Data-Sharing Project** The Digital Mannequin concept identifies the key data parameters that drive the insight being sought. Like a tailor's mannequin, which only represents the key features of the torso which are required to stitch a jacket, a Digital Mannequin determines the key parameters and values that will make a difference to the insight that the requested needs and then can indicate whether the data they can access is sufficient to provide that answer. Sarah Vincent - Senior Consultant - skv@diemanalytics.co.uk

Dstl

[Dstl](#)



Dstl delivers the **Science & Technology** for UK Defence and Security. This is achieved by working collaboratively across the Science & Technology community, supporting global relationships. The Dstl Policy and Capability Enterprise Support (PCES) programme is aiming to deliver a **step change** in capability for **Logistics, Engineering, Through Life Support and Infrastructure**. In partnership with industry (led by Atkins) we are harnessing innovative research and data science techniques to capture and exploit wider industry innovations into defence. For instance, transforming digital technology, rapid prototyping and experimentation, and evidence-based decision making, to provide interoperable and viable solutions. This will provide a data led, networked, technology enabled, integrated, sustainable and resilient capability in preparing for and in support of current and future operations. Focus areas include but are not limited to: **Data Analytics; Distribution; Additive Manufacturing; Autonomy and Automation; Maintenance and Repair; and reducing the Carbon Footprint**. Alan Lawrence Programme Manager – Policy and Capability Enterprise Support (PCES) Defence and Security Analysis Division. Email: AJLAWRENCE@dstl.gov.uk

DXC

https://www.dxc.technology/aerospace_defense?ref=dhpbb_z



DXC Integration and Interoperability – DXC Technology is the world's leading independent, end-to-end IT Services and Solution company with ~6000 customers, 200+ partners and a presence in 70+ countries. Our partnerships allow us to quickly combine the best skills and technologies available to build the best integrated platform for MOD.

DXC Resilience – Discover how DXC is working with Aerospace and Defence customers to accelerate adoption of DevSecOps at scale to improve overall resilience at <https://bit.ly/3cafUC7> **DXC Digital Transformation** - DXC Aerospace and Defence customers across the globe are using digital technologies such as digital thread, digital twins and smart factories to transform the way they do business. Convergence of the physical and digital worlds can help suppliers shorten time in design and manufacture, as well as improve in service support. Find out how we can help the MOD gather, blend and use operational data across design, manufacture and service domains. **DXC Innovation** – Visit our stand to see how we're using VR and analytics to deliver on platform training and for further details on our Secure Innovation Centre. **DXC Sustainability** - DXC is proud to have partnered with Defra and other tech companies to develop a guide that helps businesses to create a greener and a more sustainable future. Read the paper at <https://bit.ly/32p1v0w>

Jane Wharton, Strategic Client Sales, jwharton7@dxc.com

E&K AUTOMATION Ltd

<https://ek-automation.com>



EK Automation, the market leader in the materials handling industry for Transport Robotics, Intralogistics and Simulation, specialises in the design, manufacturing and implementation of state-of-the-art Automated Guided Vehicle (AGV) Systems. Whether delivering stand-alone or fully integrated solutions, EK Automation has earned its reputation by providing quality products and services while responding rapidly to customers' need for innovative and reliable automated transport systems, across a diverse range of industries including the UK's armed services. During more than 50 years of continuous presence in the marketplace EK Automation has installed a wide-ranging portfolio of around 1,000 systems with approximately 10,000 vehicles. Automated Guided Vehicles reduce overhead costs, improve efficiency and improve accuracy (and therefore reduce waste) thanks to data transfer and transparency. A dependable, driverless AGV operation provides a resilience that manually operated systems are unable to match. EK AUTOMATION uses technology that is internationally available and supported and our software expertise ensures that we can tailor interfaces to many different host control systems. Our expertise is in supplying the right solution to meet your needs, be it a standard pick and place solution or a complex multi-functional and multi-disciplinary system. For more information visit please visit www.ek-automation.com and www.youtube.com/user/ekautomation Mike Burke, Head of Operations, mike.burke@ek-automation.com

EES Solutions KMD Ltd

www.ees-solutions.co.uk



EES is an Engineering Design Consultancy also providing specialist technical recruitment solutions. Our services encompass all areas of the design and delivery lifecycle from idea conception to a fully validated design ready for production. Our individually tailored services include working with our clients to scope out the vision for their system or product; requirements generation; system definition; detailed design; systems modelling; product development including validation and verification; and more recently data science. These activities are all underpinned with our in-house expertise in systems engineering encompassing Functional Safety, Robustness of engineering design and Cyber Security. We serve the Automotive, Defence, Public and Utilities sectors providing consultation in the areas of low carbon technology; vehicular autonomy and assisted driving systems; connected diagnostics and Software over the Air (SOTA); and reverse engineering. Our goal is to enable our clients to access these capabilities in a manner that suits their business needs. This could be assisting with recruiting specialist skills, providing on site technical support and training or delivering the technical solution as a fully managed work package. Damien Wilson, Director, damien.wilson@ees-solutions.co.uk

Equipment Support Continuous Improvement Team (ESCIT)

ESCIT) is a sustainable in-house consultancy within the DE&S which identifies, designs and implements equipment support solutions for the UK Armed Forces.

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evriINSIGHT
www.evriinsight.com

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Hadfield Services Limited
www.hadfieldservices.co.uk

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Risk Reasoning Ltd
<https://www.riskreasoning.co.uk/innovation-management.html>



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We provide and practice advanced **innovation management support**, using the latest management techniques to help you solve problems within the defence and security sectors with innovative technologies and techniques. We achieve this by helping you:

- Identify and scope problems needing solutions
- Locate suitable funding streams
- Find like-minded technologies companies who are prepared to collaborate
- Create consortia or partnerships to collaborate in providing an innovative solution
- Assess the threats and opportunities in achieving the innovation, to identify the actions to take to minimise the threats, maximise the opportunities, and show the net benefits
- Provide the innovation management expertise, tools and techniques to encourage, support and motivate everyone involved to collaborate, succeed and gain the anticipated benefits of innovation.

We practice what we preach, with our own innovations. For example, just ask us about **Eagleye** – a potential gamechanger for UK security using **real-time AI Threat Detection**. We also provide **comprehensive risk management services** and **RiskAid, our comprehensive collaborative risk management/decision support environment**, used worldwide in major projects. These enable everyone involved to easily understand the risks involved and manage them, always seeing the priorities and the total risk exposure, yet enabling them to quickly explore alternative courses of action to determine the optimum solutions.

Mark Swabey, Managing Director, Mark.swabey@riskreasoning.co.uk

Kahootz

www.kahootz.com



Kahootz allows the MOD and wider support chain to share, collaborate and access critical data anywhere in the world, through any internet connected device. Accredited by multiple organisations across Government and the private sector to handle data up to OFFICIAL SENSITIVE the system is already enabling organisations to extract more value from their data and greatly improve stakeholder engagement. The Kahootz Collaborative Working Environment system uses COTS technology and commercial encryption to drive down costs and allow workspaces to be up and running in minutes not weeks. Kahootz is used throughout the CADMID cycle from supporting pre-market engagement, bid management and supplier development; through to supporting engineering design and programme management. Finally, Kahootz is also enabling more effective through life support by giving better data visibility on platforms currently active. Mr. Luca Leone, Head of Defence Innovation, Kahootz, luca.leone@kahootz.com

KBR

<https://www.kbr.com/en>



KBR GOVERNMENT SOLUTIONS (GS) – INTERNATIONAL. GS EMEA (Europe, Middle East and Africa) has a long and proud history of working within government sectors to effectively transform the delivery of public services. Working within, defence, policing and security, nuclear, space and infrastructure sectors, our work goes to the heart of a government's desire to ensure greater performance, value and quality to the public. As world leaders in programme management our talented teams deliver wide-ranging capabilities including training, procurement, logistics, facilities management, risk analysis, compliance and more to large scale projects. We thrive on making the complex a reality and bringing a novel approach, examples of which include: the use of Sponsored Reserves to help operate and maintain a fleet of 92 heavy equipment transporters for the British Army; managing the receipt, dispensing, storage, blending, testing, treatment, handling and movement of the UK MoD's Joint Operational Fuels System; as well as designing and delivering the new Combat Water Supply System for UK deployed land forces which is a self-sufficient capability to produce and store safe drinking water for high tempo, expeditionary operations. We manage not just the technical delivery of projects, but proactively forge collaborative relationships to ensure operational success.

Knowledge Transfer Network

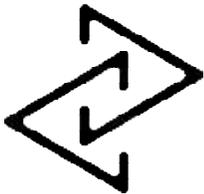
<https://ktn-uk.co.uk/>

Knowledge Transfer Network

The Knowledge Transfer Network (KTN) is the UK's innovation network, established to drive economic growth for the UK. We connect people to accelerate innovation, solve problems and find markets for new ideas. KTN is a partnership of people who, together, form an unrivalled network of deep technical knowledge, breadth of expertise, and a firm understanding of how innovation works across key sectors of the economy. From defence and space, to robotics and AI, and from immersive and cyber technologies to additive manufacturing and synthetic biology, Our expertise in connecting sectors and disciplines through the right collaborations and business approach unlocks tremendous potential value in people and companies. Working closely with the Innovate UK wider family, we help businesses access the right expertise in the research base, specialist facilities and other Research and Technology Organisations.

LanciaConsult

<https://www.lanciaconsult.com/>



LanciaConsult are a global technology and business advisory consultancy with offices in Bristol, Edinburgh, London, Hamburg, Hong Kong & Singapore. We deliver complex technology and business change, including strategy, operating model & process design as well as technology implementation and CIO advisory support. We believe we have a strong, unique offering that can help Defence deliver its digital transformation agenda and broader change management priorities. We are not led by a single formula; standards and frameworks are important but we do not believe there is a 'one size fits all' solution, rather we work with each of our clients to ensure that the change we help their team introduce is meaningful, relevant and sustainable. We have strong experience across a variety of sectors (including Defence, Intelligence and broader Government) and would welcome the opportunity to understand better how we can become part of the #WholeForce team. We commend our website www.lanciaconsult.com for further reading and information on our offering. Contact: Paula Morris, Managing Consultant, paula.morris@lanciaconsult.com

Leidos

<https://www.leidos.com/company/global/uk-europe>



Leidos is a global leader in the integration and application of information technology, engineering and science to solve our customers' most demanding problems. As the contractor responsible for running the world's longest supply chain to Antarctica and mission support for International Space Station cargo missions, we excel at fulfilling complex logistics requirements. Leidos operates the procurement, storage and distribution functions previously performed by the Ministry of Defence's Logistics Commodities and Services Operating Centre. Through the Logistics, Commodities and Supplies Transformation Programme, we are enhancing a core part of the Defence supply chain through digital transformation. This includes creating a single integration portal, ensuring data accuracy, process efficiency and resilience. Our Supply Chain Integration Portal (SCIP) takes the 'best of breed' information technology from online retail and combines it with the security expertise that Leidos has developed in 50 years of working with the military. A fundamental element of our philosophy

towards meeting Corporate Social Responsibility and ethical business commitments, is the approach we take towards safeguarding the environment and the measures we implement to incorporate sustainability within three of our core business activities, these being: facility operations, ethical and sustainable purchasing and sustainable design elements within products and services.

Angus Mathie, RODERICK.A.MATHIE@leidos.com

Misceo Group

<https://misceogroup.com/>



Misceo group are a technology startup, developing containerised automated warehousing platforms that are truly scalable and expedition ready. Modules are deployed singularly as spare parts/supplies "vending machines" in the field. Or those same modules can be rapidly connected to make up more extensive systems, enabling full-scale automated warehouse facilities anywhere, anytime. The concept leverages existing container logistics interoperability, yet fundamentally unlocks potential across the entire supply chain; from home to the front line and back again. For more information and to discuss particular use cases across the defence/NGO sector, please contact info@misceogroup.com.

Ric Nuttall, Founder, ric@misceogroup.com

OpenText

www.opentext.com



The Internet of Things (IoT) will be one of the key **digital transformation** and **innovation** technologies impacting and accelerating change and improvements across the MoD. IoT is being deployed to aid **sustainability** by understanding energy usage and space utilization within MoD real estate. This project enables estate owners to visualize and understand energy cost drivers for various types of buildings. On multiple RAF airfields and Army HQ's, sensors are being deployed to not only track the whereabouts of key assets but also monitor usage patterns. Such data can aid in asset location planning, maintenance scheduling as well as consideration of future procurement decisions. The OpenText IoT platform allows **interoperability** with systems, sensors, and networks. Insight into the usage of the spaces and assets will help to predict demand and aid in future planning and waste reduction. This project provides a foundation for expansion and digital transformation into other areas within MoD such as building systems integration, leveraging external data feeds and other future use cases fueled by innovation at MoD. OpenText is the leader in Enterprise Information Management (EIM). EIM enables organizations to grow the business, lower costs of operations, and reduce information governance and security-related risks.

<https://businessnetwork.opentext.com/industrial-iot/> Chris Williams, Account Manager,
cwilliams@opentext.com

Oracle

<http://www.oracle.com/uk>



The UK MoD faces both great challenges and opportunities to transform the Support and Logistics Information systems, to provide leading information capabilities to support the front line and operational commander. The Chief of Defence Support and Logistics (CDLS) team will require proven, reliable and innovative technologies to steadily achieve its vision and objectives. Oracle is a trusted and strategic provider of information technology, applications and innovation to the UK MoD. The combination of Oracle's experience, leading technical expertise and appreciation of the business demands within the MoD positions it well to serve its role in supporting the MoD. Working across industry, Oracle is able to support a broad ecosystem of expert companies to deliver a dynamic and innovative ecosystem for an enduring and agile capability. Oracle is the industry leader in providing modern, secure cloud based 'evergreen' business applications aligned to industry best practice with embedded 'digital' technologies. A key part of Oracle's contribution will be the good stewardship of supporting the transition from the existing capabilities. Oracle is mindful of the role of existing Logistics and Support Information systems capabilities and the need to continue to provide good information. Good information saves, time, money and lives. Jack Thompson, Account Manager, Jack.t.thompson@oracle.com

Pega Systems

www.pegacom/defense



Accelerating digital transformation of the support domain and wider defence application estate, Pega delivers improved and innovative new software development capability for defence. Pega's mantra is '**Build for change**' - turning the brownfield application estate of today into the greenfield of tomorrow, breaking down application silo's and enabling information advantage. Our approach is based on our market-leading low-code development platform, with integrated API integration, Pega Live Data – data management capability, intelligent robotic automation, and complex case and business process management capability. Proven in production at scale with defence, government and industry customers globally, the platform empowers soldier developers to rapidly deliver innovative, new application capability, wrap and renew legacy systems with a common user portal, or remove the need for COTS customisation through a process orchestration layer. Soldier developers are delivering these with a design-thinking led, agile development methodology, and are easily able to manage ongoing business change to keep the solution evergreen through the highly visual development interface. The platform offer cloud choice, fully supporting all MODCloud environments and technologies, and can deploy to any device. A strong ecosystem of industry partners is ready to support defence with Pega certified expertise. Michael Jensen, Key Account Director, michael.jensen@pegacom

RINA

<http://www.rinagroup.org/>



RINA have a lengthy history of working directly with defence ministries and prime contractors. With a long track record as a trusted partner, we provide clients with support through entire project lifecycles, providing independent and confidential advice. Digital Innovation is one of the keywords for the future of businesses. Everything generates data and applying it meaningfully presents a challenge. For this reason, we have combined the traditional offer of services and skills with the strategic application of digital technologies, such as Artificial Intelligence, Additive Manufacturing and Machine Learning. These have been applied across four macro-areas: performance monitoring, structural monitoring, predictive maintenance and geolocation. Recently, we have worked collaboratively with the MOD to produce a Virtual Reality experience exploring the scope of future logistics. Set in 2035, it shows how Artificial Intelligence, Machine Learning, Additive Manufacturing and Robotics shapes the future of military logistic solutions. We reacted quickly to changing requirements, with an agile approach to project management. Through creative workshops we supported vision realisation and consulted on script development and storyboarding to inform intelligent production strategies, resulting in an informative and engaging experience. Try the VR at our stand.

Russell Gray, russell.gray@rina.org

Team Defence Information

www.teamdefence.info



Collaborating and optimising the value from business information in the Supply Chain and Support Network across Team Defence. As a trusted, membership organisation, funded by Industry and with MOD as a partner, Team Defence Information (TD-Info) organises and supports forums and projects where Industry and MOD collaborate purposefully on a regular basis. Not-for-profit, our members set the agenda, share output for the ‘common good’ and gain mutual and multiplier benefit from their hands-on participation. Our focus is on business information - the ‘lifeblood’ of collaboration across both the Supply Chain and Support Network in the defence enterprise. At the operational level, our work helps maintain the information “fabric” between MOD and its Industrial support base. Our Industry-MOD governance ensures we set priorities to address the most compelling and mutually beneficial issues, as defined and supported by our members. TD-Info champions issues that can be complex and difficult to address by any single organisation; where the need is for cross-cutting activities, access to diverse expertise and employment of qualities that include resilience and tenacity, continuity and coherence. Our members encompass Prime contractors through to Small-to-Medium Enterprises (SMEs), suppliers of materiel and through-life support; ICT specialists, systems integrators and providers of niche skills– all needing to collaborate securely, using friction-free information sharing amongst themselves and with the MOD. We represent the interests of both Industry users of ICT services supplied via MOD (Digital Defence) – with 120,000 Industry users of MOD services/infrastructure – and Industry suppliers of ICT services. Our ‘People, Process and Technology’ approach means solutions are grounded. Our JIG-V group brings involvement and professional development of graduates and apprentices, recognised as beneficial for recruitment and retention of staff. Meet JIG-V on our Stand and in the Sustainability Challenge, 18:30 on Day 1. Kevin Atkins, Defence Customer Relationship Executive, kevin.atkins@teamdefence.info

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TECH Data

<https://techdataworld.com/web/>

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TNA Consulting

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TVS Supply Chain Solutions

www.tvsscsc.com



TVS Supply Chain Solutions is a global organisation that addresses supply chain challenges for international organisations, government departments, large and medium sized businesses and trades on an ability to reduce our clients operating costs and improve their performance through efficient and transformative solutions. To underpin the ongoing deployment of practical supply chain solutions for automotive, beverage, utility, rail and

defence sectors, TVS has a technology focus where innovation, research and experimentation are nurtured so technologies such as Artificial Intelligence, Data Analytics, Additive Manufacturing and Image Capture can be progressively introduced to our market leading supply chain solutions. A good example is the digitally enabled 'In-service support' capability which now has over 4000 field service engineers connected to the TVS Msys Information System, where they can exploit real time technical and commercial information, enabling them to go about their work in providing efficient 24/7 365 day support to a whole range of assets and equipment. In Defence, TVS manage in excess of 350,000 items (NATO Stock Numbers) across a wide range of military equipment including; armoured fighting vehicles, construction vehicles, workshop spares, warships, clothing, food, fuel, medical equipment, field catering, pharmaceuticals and general engineering hardware. The progressive utilisation of the TVS Msys IS architecture, including the mobilisation of our 'Digitally enabled In-Service support' capability, demonstrates TVS' commitment to the UK Ministry of Defence.
Paul Kettle , Business Development and Marketing Director, Paul.Kettle@tvsscs.com

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TWI

<https://www.twi-global.com/>



TWI is a member based research and technology company providing expertise in joining, materials engineering, non-destructive testing and structural health monitoring. Our core research programme includes pioneering work in metal spray repair and additive manufacturing, providing sustainability and resilience to our members via innovative engineering solutions. TWI is a world leading independent research and technology organisation. Established in 1946 with headquarters at Granta Park near Cambridge, TWI provides industry with engineering and manufacturing solutions with joining and associated technologies through information and technology transfer; consultancy and project support; generic research, contract R&D; training, qualification and professional society membership. TWI is a non-profit distributing company and is owned by its Members. It can therefore offer independent advice and is internationally renowned for employing multidisciplinary teams to support materials properties and applications (ferrous and non-ferrous metals, polymers, ceramics, advanced composites, NDT), joining, fabricating and assembling technologies (welding and cutting processes, surface engineering, brazing, soldering, adhesive bonding, additive manufacture, electronic packaging) and manufacturing support. TWI has around 800 Members, operating from over 4500 locations in 70 plus countries around the globe. TWI also houses a professional institution, The Welding Institute, with a separate membership of 6000 individuals. An international training and examinations programme sees around 25,000 students trained each year in welding and inspection technologies. TWI assists in the production of standards in the interest of its Member companies. It has representatives on more than 60 International, American and European committees and over 50 British Standard drafting groups.
James Smith, Defence Manager, james.smith@twi.co.uk

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UK National Codification Bureau

<https://www.ncb.mod.uk/ncbportal/>

UKNCB

United Kingdom National Codification Bureau

The United Kingdom National Codification Bureau (UKNCB) are the sole authority within the UK for NATO Codification. We manage and maintain the UK's approved NATO Codification system. The NATO Codification System is currently used by 63 different countries. Codification creates a detailed catalogue of everything our Armed Forces use, not just weapons systems and hardware, but spares, clothing, medical items, food and anything else the services need to operate. It identifies each item by a unique number called a NATO Stock Number (NSN), which becomes the key identifier within logistic information systems. Codification can reduce the amount of inventory held and therefore a reduction in associated warehouse costs and a lower purchase price through bulk purchasing. It enhances interoperability through cross service supply to the Army, Air Force and Royal Navy and provides the ability for different nations to share inventory and supply chains. Codification is also free for all MOD equipment. The MOD Codification Policy can be found in the Defence Logistic Framework (DLF). However, the important aspect is that all inventory on the MOD's balance sheet must be NATO codified. The UK National Codification Bureau logs every item used by the 3 services. Suppliers can find out here what they need to do to be included. **UKNCB Enquiries** – Email: DESSpDir-SCG-NCB-CodiEnquiry@mod.gov.uk; Phone: 0141 224 2613

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Ultimaker

www.ultimaker.com

Ultimaker

Since 2011, Ultimaker has built an open and easy-to-use solution of 3D printers, software, and materials that enable professional designers and engineers to innovate every day. Today, Ultimaker is the market leader in desktop 3D printing. From offices in the Netherlands, New York, Boston, and Singapore – plus production facilities in Europe and the US – its global team of over 450 employees work together to accelerate the world's transition to digital distribution and local manufacturing. We have been closely involved with the defence sector on a global basis during that time including as an approved supplier to the DOD, MOD and various commercial organisations including Airbus and Leonardo. More information can be found here: <https://ultimaker.com/learn/royal-netherlands-air-force-speeding-up-maintenance-with-3d-printed-tools>
Jane Gibbons, Business Development Manager UK and Ireland j.gibbons@ultimaker.com

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VRAI

www.vrai.ie



VRAI create data driven VR simulation training for high hazard environments. Their customers include leading global organisations such as IAG Cargo in Heathrow Airport, Pfizer in Singapore and the United Nations in Somalia. VRAI have created HEAT, a Hazardous Environment Awareness Trainer which combines authentic virtual training environments with cutting edge data capture and analytics to improve performance, safety and training outcomes. **Sustainability** - By reducing the need to travel to collective training environments, HEAT allows you to train together virtually while reducing your carbon footprint. **Resilience** – Better training leads to better outcomes. HEAT's machine learning algorithms can identify the key predictors of operational success to better prepare your people to deliver. **Interoperability** – HEAT allows you to train virtually with your allies and partners, while providing benchmarked training assurance through the HEAT training profiles. **Digital Transformation** – HEAT provides virtual simulation training at scale while leveraging the data driven insights

from VR training to iteratively improve performance. **Innovation** - Google have identified VRAI as one of the top 5 early stage SMEs in Ireland, VRAI are part of Horizon2020 research consortia and are submitting two DASA proposals. RD&I is part of how VRAI competes and delivers value to our customers. Pat O'Connor, Managing Director, pat@vrai.ie

Wincanton

<https://www.wincanton.co.uk/>



Wincanton is the largest British third-party logistics (3PL) company, providing supply chain solutions to some of the world's most admired companies across a wide range of industries, including defence. With over 60 years' experience delivering supply chain logistics solutions to support the defence industry, both domestically and overseas, we ensure that equipment availability is maximised to support military operations. We fully understand the rigours and complexity of supply chains within the defence sector, and operate in these environments day in, day out. Through its W² programme, Wincanton has been putting innovation, digital transformation and sustainability at the centre of everything it does. At LOGNET 20, the Wincanton team will demonstrate some of the most exciting initiatives from across the business; covering warehousing, fleet management, and health and safety. Come and see how it's using virtual reality and live muscular-skeletal monitoring to deliver interactive health and safety training. Find out about how Wincanton uses fleet telematics to significantly improve driver safety and efficiency. Or get a demo of its new online warehouse marketplace, oneVASTwarehouse, which is already providing on-demand access to more than 45m sqft of space. Wincanton will also be bringing a telematics-equipped vehicle to provide demonstrations of how the technology is supporting its drivers. Charlie Clarke, Marketing Executive, charlie.clarke@wincanton.co.uk

World Fuel Services Europe Limited

<https://www.wfscorp.com/en/content/world-fuel-services-europe-ltd-tramp-oil-germany-gmbh>



Operating in over 3,000 airports, 1,200 sea ports and 1,000 fuel stations in 200 countries and territories equals one million barrels of liquid products supplied daily, World Fuel Services (A Fortune 100 Company – NYSE INT: 83) is a leading energy solutions provider for industries, militaries and governments around the globe. With expertise in: energy and fuel supply, logistics, operations, technology and finance, World Fuel Services provides end-to-end solutions allowing our customers to focus on their core business. Carefully orchestrated growth allows development to suit particular markets; importantly retaining the local feel yet bringing the strength and stability of a truly global company. World Fuel Services not only specialises in all the key areas highlighted by LOGNET, but also through our renowned subsidiary NCS Fuel, we have developed a ability to be able to support the military is austere and remote locations. For more information visit www.wfscorp.com and www.ncsfuel.com Graham Grice, Military Account Director World Fuel Services Europe Limited, ggrice@wfscorp.com

MOD AI & ML Working Group

The Ministry of Defence has established a Working Group alongside equipment prime contractors and data science companies to explore the applicability of Artificial Intelligence and Machine Learning in the Defence Support (engineering and logistics) environment. The Working Group has developed a number of hypotheses on where AI&ML could bring most benefit to Defence, including inventory scaling and optimisation, maintenance prognostics, resource and asset optimisation and improved decision support. A number of use cases have been proposed to test these hypotheses ranging from optimisation of operational vehicle fuel requirements to forecasting and proactive rectification of ship corrosion. With representation from each of the single Services, Defence Equipment & Support and dstl, the Working Group provides a consolidated Defence perspective through which technical investigations and trials are agreed; it has also provided an understanding of the Strengths, Weaknesses, Opportunities and Threats for Defence as a customer of these fast-moving data science technologies. Alongside the conference presentation, delegates will be able to visit concept demonstrator and use case stands and discuss opportunities with the joint MoD/industry chairs of the AI&ML Working Group.

About Team Defence Information

Collaborating and optimising the value from business information in the Supply Chain and Support Network across Team Defence

As a trusted, membership organisation, funded by Industry and with MOD as a partner, Team Defence Information (TD-Info) organises and supports forums and projects where Industry and MOD collaborate purposefully on a regular basis. Not-for-profit, our members set the agenda, share output for the 'common good' and gain mutual and multiplier benefit from their hands-on participation.



Our Industry-MOD governance ensures we set priorities to address the most compelling and mutually beneficial issues, as defined and supported by our members, using an appropriate agenda of activities. We help members to keep abreast of what's happening and knowing 'who to ask'. Our focus is on business information - the 'lifblood' of collaboration across both the Supply Chain and Support Network in the defence enterprise.

TD-Info champions issues that can be complex and difficult to address by any single organisation; where the need is for cross-cutting activities, access to diverse expertise and employment of qualities that include resilience and tenacity, continuity and coherence. At a strategic level, Industry and MOD engagement helps to align ICT investment decisions, to the benefit of defence enterprise coherence and interoperability. Corporate knowledge is captured and shared via our member website.

MOD's Whole Force construct includes its partnership with Industry and TD-Info provides a useful single Point of Contact for MOD. TD-Info facilitates opportunities for pre-competitive, collaborative work that helps improve efficiency and effectiveness, reduces cost and elevates collective defence capabilities. Some of this work assists with early shaping of complex requirements, while other activities raise awareness of the 'art of the possible' from the work of specialists. Exploration of innovation and agility are key to providing a winning edge and we use practitioner experiences and case studies as well as projects to showcase instances.

At the operational level, working with MOD, our forums open the way to sharing Industry experience. This clarifies processes between Industry in its collaborations and in those with the MOD. And where MOD intends to make changes that may impact Industry, for example, the latter can provide information about the potential risks and scope of impacts, and contribute on pilots to de-risk rollouts, all to mutual benefit, maintaining the "fabric" between MOD and its Industrial support base.

Participation in TD-Info delivers strong 'multiplier' benefits, where outputs are shared for the 'common good' and added to our website knowledge-base. We draw on the 'wisdom of crowds' where TD-Info projects and communities 'reach-back' into their organisations to tap into a deep fund of expertise and experience.

Who are our Industry members? They encompass Prime contractors through to Small-to-Medium Enterprises (SMEs), suppliers of materiel and through-life support; ICT specialists, systems integrators and providers of niche skills – all needing to collaborate securely, using friction-free information sharing amongst themselves and with the MOD.

On international standards committees, e.g. the pan European/USA Integrated Product Support Council, TD-Info champions the interests of the UK defence sector. We help shape and promote interoperable ways of working designed to increase efficiency and effectiveness. We support opportunities for professional recognition of staff who work in the defence sector. Members can network through participation in TD-Info communities, projects and annual events, the latter jointly planned by Industry and MOD; annual Awards celebrate achievements and showcase capabilities. Through initiatives, such as JIG-V and secondments, we promote the involvement and professional development of graduates and apprentices, recognised as beneficial for recruitment and retention of staff.

TD-Info represents the interests of both Industry *users* of ICT services supplied via MOD (Digital Defence) – and there are approximately 120,000 Industry customers using MOD services and infrastructure – and Industry *suppliers* of ICT services. We act as a catalyst and facilitator and our approach is holistic and pragmatic – taking in people, process and technology – so that the solutions are grounded.

We are what it says on the tin - **Team Defence Information**. Please contact us to learn how we can assist you.

Harmonic MAXIMISES the success of delivering challenging programmes and transforming support chains using our unique **Win, Deliver, Transform** approach



Harmonic has been supporting Defence on detailed supply chain analysis, asset tracking and codification for the last 7 years

To find out more about how we can help

**MAXIMISE
YOUR SUCCESS**

email us at:

enquiries@harmonic.co.uk

Sustainability in the supply chain is a key consideration both for the MOD and Harmonic's social value agenda, which is why we are excited to sponsor the 2020 LOGNET Sustainability Challenge.

Leidos is helping the MOD to transform the UK's defence supply chain.

We are providing our expertise to deliver a 21st Century, state of the art logistics support network. One that is capable of providing the UK Armed Forces with what they need, when and where they need it.

This is what we do best, delivering innovation and experience to provide solutions to defence's unique challenges.



Modernising the UK
Defence supply chain

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Delegate Participation

Delegates can contribute to the conference using the Mentimeter application, through www.menti.com (access code **65 00 07**)

or by scanning the QR code below:

