



Defence Support Strategy

Questions: Industry Event with Team Defence Information (10 December 2020)

Warehousing	
Question	Response
Can we have an update on the data-capture activity within WDO and the likely route to market for potential outsourcing of some or all of the MOD's UK warehousing capability?	The Logistics Delivery Operating Centre (LDOC) within DE&S hosted a virtual Industry Day in October 2020 to provide an update on all activity within the Warehouse Distribution Optimisation (WDO) element of the Supply Chain Transformation and Expansion [SCT(X)]. The work continues and further industry engagement will be arranged once we are in a position to do so. Whilst outsourcing some or all of the MOD's UK warehousing capability is one of the many options that will be considered, we are not at the point of considering a 'likely route to market'
The desire for globally positioned forward stores has been constrained in the last few years (particularly with Munitions) due to the fear of 'hard charging' being imposed - i.e. industry (DE&S) charging Defence holding units for stocks that have been issued but not yet consumed. Has this concept now been abandoned in favour of a more resilient support base?	Global Basing is still under-development within the Integrated Review and no decisions have yet been made on the type and amount of equipment that could be forward-positioned.

Strategy Format	
Question	Response
A huge challenge when we talk at a Support Level is that we can lose sight of the fact that it is Logistics, Engineering and Contract Management which need to be optimised and future proofed. I think retaining this focus is key to success. Will we produce. A Defence Logistics Strategy, including the viable elements that can be outsourced whilst ensuring resilience. Same for Warehousing, Engineering etc.	The Defence Support Strategy will drive the Support Transformation programmes to identify the optimum solution to the central challenges facing support; more widely, the same strategic framework drives coherent decision-making wherever Support-related capability decisions need to be made.

Digital Transformation	
Question	Response
Thank you for a great presentation, it chimed so much with what we have been saying about using data predictively and adaptively using AI and Machine Learning. We have been doing this for years at Brookes to improve demand forecasting and data driven decision support. Can you confirm that this type of COTS technology will at least be considered as part of the toolkit in building a resilient and optimised strategic base (including Forward Basing) to provide multi-echelon inventory optimisation?	The Engineering Support Transformation (EST) has a predictive sustainment workstream and will be exploring how best to achieve the outcome. EST is planned to commence in Apr 2021, but will learn from a NAVY pilot programme, exploiting data generated by not previously exploited from T45 diesel generators as a use case. This pilot has only recently started, and uses Commercial off the Shelf (COTS) technology, including Artificial Intelligence (AI) capabilities, to demonstrate the benefit that can be realised.
Digital Advantage is a great focus. Have you yet considered the risks that the commercial market will	All future support systems should/will be contracted on a Secure by Design basis. This



not solve? Cyber Resilience from the Advanced Persistent Threats. Is it worth baking in DevSecOps early, as well as exploring other cyber mitigations for support systems (we are and will be more vulnerable than the high threat club opposition)?	ensures that Cyber mitigations are baked in at the design phase. It also ensures that certain deliverables (detailed network design, interfaces, 2 and 3rd party suppliers etc) are mandated as part of the contract. All suppliers will be required to undertake a Cyber audit and demonstrate compliance. The details of Secure by Design are being finalised now and should shortly be released to industry.
Surely if FLIS is to be modernised over the next few years, as has just been stated, i.e. scope of FLIS changes, then this should be re-competed?	A significantly reduced FLIS portfolio will be sustained under new contractual terms, known as 'Bridging the Gap' (BtG) with a focus on further consolidated of applications and retirements to prepare for transition to a future set of competed new integrated core Support information services
Paul stated BMfS was 'on hold' until April, could this please be clarified by CDLS?	The wider Defence Integrated Review (IR) and multi-year Spending Review (SR) which includes Support Transformation have impacted the original timelines for progressing some complex programmes like BMfS.
General, given the serious procurement difficulties in delivering the operational and tactical information services programmes (OpNET and TacCIS), how concerned are you that your dependency on these delayed programmes will affect SpTx, and specifically BMfS, and BMfS' capacity to deliver regardless of critical dependency issues?	BMfS has an absolute dependency on the Defence Digital Backbone and some core programmes like OpNET and LE TacCIS. These dependencies are managed within the programme and whilst we have built in limited mitigations, (primarily the ability to fund and deliver 'pockets' of capability aligned to the technology those programmes are planning to deliver) we are not seeking to replicate them, so we recognise they are key to successful transformation.
Gold-plated IT projects rarely deliver to time/scope/budget. How will you temper ambition with realism?	The programme team are absolutely alive to this point. Lessons learnt from previous attempts by Defence to deliver large scaled business transformation which have a large ICT delivery aligned have been identified and built into the programme, the introduction and proposed use of Enterprise architecture, industry business frameworks, user story capture, Dev Ops, workflow management, COTS as the norm, etc and a realistic cost model and timeline for true transition to new business processes have all been built into the programme plan. But we still absolutely recognise the challenge from users to deliver faster.
Thank you for your sharing both your strategy and thoughts with us. 'Bridging the Gap' will be a difficult and critical programme. Does CDLS have any functional guidance, key principles and words of comfort for his military colleagues as that journey is undertaken?	The strategic guidance provided for bridging the gap (BtG) was as follows: a. preserve, throughout the transition, the continuity of service and high availability of Log IS systems that are business critical to UK Defence outputs; b. generate commercial efficiencies to allow re-investment to build resilience and to reduce the risk to the transition to BMfS; and c. to provide a flexible commercial mechanism that allows services to be retired or incrementally transitioned as BMfS replacement services become available;



Data	
Question	Response
Sir, with regards to Strategic Outcome 2 - historically our data collection has been focussed on the actual supply chain, on demand and supply. How will we be changing this to better understand how the operating environment affects the supply chain to better predict support requirements. And how will we increase fidelity, so that we are not just considering the OE as High Intensity, Routine intensity etc?	There is a discovery project in place to understand how the use of collectable data could inform the supply chain decisions in a dynamic way. As suggested, this includes downstream activity that may affect demand and network design, sharpening the ability to react and reprofile as the environment changes. However, the same thinking and analysis can be used to understand how world events could create volatility in the supplier base upstream and used to influence procurement decisions.
Is the intent for a common data classification standard for trusted sharing of data with NATO?	NATO standards have long been a cornerstone of Defence Support work as exemplified by the codification of Items of Supply (NCS). STANAGE 4774/8, as recently defined, provide that data classification and labelling for data sharing but this has wider applicability of course than just Support and we will be bound to follow the guidance from our colleagues in Defence Digital.
What impact do you believe the recent decision to extend the FLIS contract between now and 2027 will have on the support strategy and how does it match the MOD's stated ambition for the digital transformation of its supply chain?	The strategic guidance provided for BtG (bridging the gap) was as follows: a. pPreserve, throughout the transition, the continuity of service and high availability of Log IS systems that are business critical to UK Defence outputs; b. generate commercial efficiencies to allow re-investment to build resilience and to reduce the risk to the transition to BMfS; and c. to provide a flexible commercial mechanism that allows services to be retired or incrementally transitioned as BMfS replacement services become available.
How do you see the use of hyper scale public cloud extending to the use of Software as a Service on these platforms provided by the large enterprise software vendors? James Langley – Leidos	Having Software as a Service deliver some of Defence Support's Information System needs is a good model if a number of parameters, e.g. if security and guarantees of service, can be met. Hyperscale vendors are not necessarily the only providers in the market who would suit Defence Support's needs and, in this area, we will be guided by Defence Digital.
In order to exploit data across multiple legacy and future systems, how will Defence and suppliers define and hold all parties to account? Historically this has been difficult to defend without a defined funding stream when balancing competing delivery priorities.	Governance of data has in the past often been an afterthought of contractual and project relationships between MOD and its suppliers and left to the purview of an individual project team. That will definitely change as the centralising authority of the CDO, the more coherent effect of programmes such as BMfS and the greater interest of the Functions in data manifest themselves. All of these parallel streams represent significant funding into data.
General, what activity is currently in train to realise your ambition of widely accessible data, given IP-driven constraints?	Intellectual Property (IP) issues with data are mainly concerned with location and structure of datastores rather than their contents (that are or should be MOD owned). The first initiatives already underway will ensure that data is extracted (both periodically and in real time) from those operational sources to data stores where we can be



	guaranteed to be able to combine and share data without any access issues. There are undoubtedly specific contracts where IP extends to or is ambiguous about ownership of the data itself; this will be avoided in the future with appropriate interventions by Defence Support into the acquisition process.
How are you approach the "data" gap? or get you to that "data" fluency?	Data fluency inside an enterprise embraces the idea that many rather than few can have access to information and the competence to interpret, spreading knowledge and, as a result, improving decision-making for everyone. In Defence Support we are starting from both the top of the organisation with data-driven performance boards, and lower down collating and modelling all data in our domain.
I note that Paul Casson raises the issue of clean data being essential to digital twin, but in our experience, AI and ML can not only highlight data anomalies but in many cases, 'fix' data cleansing issues as autonomously as you dare to let it. Are we unnecessarily demonising data quality?	It is appropriate for us to recognise that poor data quality will undermine any effort at effective business analysis and performance improvement. The issue is sufficiently pervasive that it is going to require automation for the identification and correction of quality issues. At scale ML techniques can indeed be of significant help but at the same time some fundamentals around user behaviours, common data definitions and system validations do also need to be addressed.
Thank you for a well organised, inspiring and informative session. Will the data and information systems uplift be phased so that MOD start by understanding the value to MOD of different data. Where the value includes its role in managing equipment availability and equipment support.	Understanding the value of data will be key to successful transformation. We have already established a dedicated data management team and have plans to introduce federated data management. Longer term plans for Defence to take a 'Strategic Asset Management' approach will need strong data governance.
Very exciting to hear about the ambition for a digital backbone. Success and value of a digital backbone is wholly reliant on data. What is the plan for data management and compliance?	It is generally accepted that without a strong data management and governance regime, MOD's wider ambitions to cohere and exploit its assets will founder. To tackle this, a new 3* pan-Defence senior oversight forum responsible for Defence's data outcomes, priorities and requirements has been constituted that CDLS attends. This provides oversight for the work of the Chief Data Officer who is establishing governance and controls over all data related activity and investment across Defence. The UK Defence Data Strategy will establish that formal tenet against which local data strategies will be held accountable. Defence Support are fully engaged with this initiative.
The data challenges are something we have already discussed with BAE and other partners, feels as if we are talking at a contract level but not a strategic one and that knowledge is not being leveraged effectively	It is clearly recognised that any contracts for Support need to be formulated against common principles and standards. The introduction of a cohering function in Defence Support represents an opportunity to introduce this consistency across contracts, projects, platforms and the Services.
To follow on from Guy, the use of data, access and sharing is the wild west now, it's a massive risk and it's a) going to be a challenge to reign it in b) provide a robust and agile replacement	Defence Support suffers from both an inability to share data with its customers easily in some areas, and unrestrained data sharing in others. It is recognised that both ends of this spectrum need to be better managed. We do recognise the risk and will



be seeking to move to a better understood and regulated regime, again with a strong aspect of central control.

Culture/People

Question	Response
I note the General is promoting a more savvy workforce underpinned by professional recognition and qualifications. This recognition is in place in the engineering space, but there is no recognition or stated intention to recognise logistics competency - either with competent practitioner or chartered professional requirements for roles and levels of authority. Will this happen in future, or will we continue to have enthusiastic amateurs 'doing' logistics?	The notion of enthusiastic amateurs is not recognised, and Defence's response to COVID19 has shown the level of leadership, expertise and delivery by logistic professionals. Recognition for our logistics professionals is being driven by an understanding that the logistics profession in Defence is part of the Critical National Infrastructure of the UK. Defence Support are working very closely with various Industry professional bodies with an aim to use, where possible, Industry Standards of Competency in our Defence training. This work will allow our personnel to easily recognise their levels of competence against new professional designations being brought in by the Chartered Institute of Logistics and Transport (CILT). Our close working relationship with CILT will allow us to analysis the new professional designations and make considered use of them to the benefit of Defence. The range of roles and specialisations within the Logistics Profession does not allow a one size fits all approach so we are also engaging with professional bodies which will support roles not covered by CILT e.g. the Institute of Hospitality and the Energy Institute.

Commercial Engagement

Question	Response
Does the "Defence Support Enterprise" on strategic outcome 1 also include Industry?	The Defence Support Enterprise (DSE) encompasses those over-arching functions which direct the strategic conceptual ambition for Defence Support and therein the Defence Support Network (DSN), sets common policy and performance standards to be applied across the DSN, shapes the development and delivery of the capabilities that are both supported by the DSN and required by it and interfaces with the significant industrial and stakeholder landscape required to effect its operation.
"Computers are incredibly fast, accurate and stupid. Humans are incredibly slow, inaccurate and brilliant. Together they are powerful beyond imagination" [a quote from Albert Einstein]. The new Support Strategy is spot on regarding the need for a people centric approach supported by key enablers (training, technology, commercial etc). How would MOD like Industry and its experts to engage on the transformation activities described in the Strategy?	For people aspects of transformation, Industry can engage with joint activities through the Professional Body forums or the neutral trade bodies (eg TD Info).



In terms of recognising people as a capability, is the future appetite more aligned with contracting out for expertise where it already exists or in contracting the force out in order to strengthen expertise through experience in industry?	The alignment of competences with Industry standards will allow a greater transferability of people in and out to maintain expertise across a balanced whole force against the demand signals placed by Defence.
<p>The commitment to partnering is very welcome. How do you envisage industry engaging collaboratively in experimentation and exploration before you invite responses to tenders?</p> <p>AND</p> <p>With the constant pace of innovation and the opportunity through data-driven insights do you intend to improve the mechanisms to be kept up to date in more real-time and understand more of what Industry has to offer today?</p>	<p>The established mechanism for liaison between DefSp and industry is through the SupportNET (previously LOGNET) brand/process. SupportNET draws its governance from the Defence Support Force Development Board – which ensures the coherency of Support activity with CDLS's Defence Support Strategy, the Functional Plan that delivers the strategy and with the overall headmark of delivering Support Advantage. Specific thematic liaison between the DefSp community and industry is within four sub-working groups (SWG), and this is enabled by the relationship DefSp has with TD Info. The SWGs meet termly and cover: Data, Distribution, Supply Chain and Sustainable Support. These groups act as a community of interest to cohere and/or deconflict activity, highlight military case studies of areas requiring solutions and industry examples showing latest innovation and how similar case studies have been addressed. Gap analysis from this work informs future R&D activity. There is an annual SupportNET conference in addition as a set-piece event, as well as many and regular TD Info events to which DefSp attend and contribute.</p>
General, is Defence Commercial part of the Transformation team recognising that new ways of working may well require new commercial models?	The requirement for new commercial models is recognised, and there is an Acquisition and Approvals Transformation Programme that is looking to implement and embed the flexibility and agility that we wish to see available to us. The full freedom we would wish to have will, inevitably, continue to be constrained by the need to safeguard spending of public money, and propriety and fairness in competition for Government contracts.
Are you expecting Industry to provide a lot more data ahead of contract award as part of the tender process to enable better TLC and sustainability information? How do you see Industry being able to cover this and provide that level of information within the bidding timeframes?	The intent will be to only seek that information which is necessary to properly inform the competition and to enable evaluation of relevant factors. Additional criteria are being added to all Government commercial activity, including the need to evaluate the 'social value' contribution (for example against the levelling-up agenda). You will also be aware that the Government's NZ50 commitments will mean that carbon-impact of any acquisition programme will need to be articulated and evaluated as part of the investment process. The concern in respect of timeframes is acknowledged, and this will need to be balanced by the Department asking only for that which is necessary, and of course affording sufficient time for those wishing to bid to respond in a measured and accurate way.
John mentioned the challenge in companies contacting MOD, Team Defence is obviously an option but if companies are starting in Defence and lack the budgets for membership can I ask for some other examples of ways to engage to offer value added advice as many requests on LinkedIn are ignored.	<p>In February 2021 the MOD will launch the Defence Sourcing Portal (https://www.contracts.mod.uk/web/login.html) which will be a one stop shop for all defence contract opportunities, there is no requirement for membership, just a simple registration. The website contains useful info on being a supplier to defence.</p> <p>Events such as DSEI are good opportunities to engage on an informal basis.</p>
This is refreshing, we are a key team in extracting data and delivering to IPs in support of contracts; and	Acknowledged. Forums enabled by TD Info supported by Def Digital and DefSp are starting to get after this. For example, last week DD generated signatories to a shared Code of Practise.



challenged daily but the disparate MoD systems, lack of policy, external costs and feeling our voice is not heard. There is huge hunger to be agile and collaborative throughout the data journey but there are huge hurdles - how do we get more involved?	Other initiatives will gather signatories to a set of Common Operating Principles.
Contract performance management has been a recurring theme today, but what are the plans to change commercial engagement so that the MOD and industry can engage early commercially, collaboratively and with a joint and partnering willingness to create winning outcomes for 'UK plc'?	Def Commercial are leading for Defence on changes to the Green Book which, in turn, may lead to measures for earlier engagement, whilst mindful of avoiding the perception of favouritism.

Other	
Question	Response
Strategic outcome 3 talks about a greater consideration of whole life cost and sustainability in the design and development phases of new assets? John Lawson also mentioned this. What do you think the biggest challenges are in achieving this? Does the MOD Acquisition model need to change to give the agility and collaboration needed?	Acquisition reform will be critical to incentivising investment sustainability. There is an acquisition review accompanies the DSIS and will be conclude following the publication of the IR.
How do we balance the need for a globally "optimised" support chain against the continual pressure to reduce the value of the inventory balance sheet?	The key here is the word optimised which seeks to achieve the balance between efficiency and effectiveness. The end-to-end coherence that JtSp will deliver allows judgement to be made on where that balance lies. A data driven approach to modelling inventory against commitments allows for a risk-based approach and, with the right analysis, will provide increasing precision in the forecast of demand.
There must be enormous benefits in driving a transformation of equipment support into legacy platforms along the lines of the MIV video that you presented. For example, how should we drive maintaining by condition into a Culture/People used to calendar based work?	This will form part of the EST programme, by providing the tools to enable predictive sustainment, with the additional business aspects and impacts being addressed within the F&RP transformation programme, currently underway. These programmes are also focusing on the cultural aspects of major change.